

Technical Sessions

Tuesday , June 24th

Track1-1 Cold source reliability of nuclear power plant

8:30 am – 10 am, C-101AB

Session Chair:

Session Co-Chair:

Improvement design of open channel interception facilities for nuclear power plant

Technical Paper Publication: ICONE32-0056

Yujia MAO - China Nuclear Power Engineering Co.,Ltd.

Liyuan SHENG - China Nuclear Power Engineering Co.,Ltd.

Ruobing YANG - China Nuclear Power Engineering Co.,Ltd.

Wei BAI - China Nuclear Power Engineering Co.,Ltd.

Study on Capacity Improvement of Cooling Chain System in CPR1000 NPP in High Temperature Site

Technical Paper Publication: ICONE32-0074

Yang Ting - China Nuclear Power Engineering Co. Ltd

Peng Yue - China Nuclear Power Engineering Co. Ltd

Zeng Jianli - China Nuclear Power Engineering Co. Ltd

Ma Chao - China Nuclear Power Engineering Co. Ltd

Hu Jian - China Nuclear Power Engineering Co. Ltd

Research and Application of Key Technologies for Monitoring and Early Warning of Typical Disaster-Causing Objects (Jellyfish) in the Thermal Sink of Nuclear Power Plants

Technical Paper Publication: ICONE32-0098

Zhang Wenjie - China Nuclear Power Engineering Co., Ltd.

Chen Hongyi - China Nuclear Power Engineering Co., Ltd.

Zhang Rongyong - China Nuclear Power Engineering Co., Ltd.

Li Yushan - China Nuclear Power Engineering Co., Ltd.

Zhao Yazhuo - China Nuclear Power Engineering Co., Ltd.

Lin Yuting - Third Institute Of Oceanography,MNR

Li Qi - China Nuclear Power Engineering Co., Ltd.

Research on the Effect of High Temperature of Seawater on the Cooling of Spent Fuel Pool

Technical Paper Publication: ICONE32-0458

Dingfang XU - Suzhou Nuclear Power Research Institute Co., Ltd.

Yan ZHOU - Yangjiang Nuclear Power Co., Ltd.

Fang LIU - Suzhou Nuclear Power Research Institute Co., Ltd.

Yanyu YANG - Yangjiang Nuclear Power Co., Ltd.

Chihua HE - Yangjiang Nuclear Power Co., Ltd.

ANALYSIS OF SEA WATER TEMPERATURE RISE IMPACT ON THE PERFORMANCE OF REACTOR COOLANT PUMP THERMAL BARRIER IN NUCLEAR POWER PLANT

Technical Paper Publication: ICONE32-0660

Lala Yang - Suzhou Nuclear Power Research Institute Co., Ltd.

Yangyu Yang - Yangjiang Nuclear Power Co.,Ltd.

Qiuyang Chen - Suzhou Nuclear Power Research Institute Co., Ltd.

Hui Shao - Suzhou Nuclear Power Research Institute Co., Ltd.

Jian Zhang - Suzhou Nuclear Power Research Institute Co., Ltd.

Analysis on the effect of ultimate heat sink temperature rise in nuclear power plant at the coastal site and its solution

Technical Paper Publication: ICONE32-1095

Ziyi Xu - CNNC Nuclear Power Operation Research Institute

Sheng Zhu - CNNC Nuclear Power Operation Research Institute

Fuhai Zhang - CNNC Nuclear Power Operation Research Institute

Jianjun Wang - CNNC Nuclear Power Operation Research Institute

Track2-1 Nuclear Reactor Materials (I)

8:30 am – 10 am, C-102

Session Chair:

Session Co-Chair:

Experimental Study on Irradiation Hardening of Nickel-based Alloy

Technical Paper Publication: ICONE32-1328

Wen-dong Cui - Institute of Nuclear and New Energy Technology, Key Laboratory of Advanced Reactor Engineering and Safety of Ministry of Education, Tsinghua University, China

Jun-feng Nie - Institute of Nuclear and New Energy Technology, Key Laboratory of Advanced Reactor Engineering and Safety of Ministry of Education, Tsinghua University, China

Lei He - Institute of Nuclear and New Energy Technology, Key Laboratory of Advanced Reactor Engineering and Safety of Ministry of Education, Tsinghua University, China

Jun-yu Chen - Institute of Nuclear and New Energy Technology, Key Laboratory of Advanced Reactor Engineering and Safety of Ministry of Education, Tsinghua University, China

Pan-dong Lin - Ministry of Education, Key Laboratory for Liquid-Solid Structural Evolution and Processing of Materials, School of Materials Science and Engineering, Shandong University, China

Impact of Aluminium in High-Temperature and High-Pressure Water on the Oxide Films of 304L Stainless Steel for Nuclear Power Plants

Technical Paper Publication: ICONE32-1389

Xiangyu Cai - Huaneng Xiapu Nuclear Power Co., Ltd

Yongxing Chen - Huaneng Xiapu Nuclear Power Co., Ltd

Jun Chen - Huaneng Xiapu Nuclear Power Co., Ltd

Shengli Cai - Huaneng Xiapu Nuclear Power Co., Ltd

Hongjie Chen - Huaneng Xiapu Nuclear Power Co., Ltd

Yangcong Dai - Huaneng Xiapu Nuclear Power Co., Ltd

Peng Zhao - Huaneng Xiapu Nuclear Power Co., Ltd

He Zhao - Huaneng Xiapu Nuclear Power Co., Ltd

Wei Tian - Huaneng Xiapu Nuclear Power Co., Ltd

Performance Evaluation of Oxygen Sensors with Cu/Cu₂O and Ni/NiO Reference Electrodes in Lead-Bismuth Eutectic

Technical Paper Publication: ICONE32-1684

Tengjun Geng - North China Electric Power University

Zhenhua Sheng - North China Electric Power University

Jianing Zhao - North China Electric Power University

Fang Liu - North China Electric Power University

Shengfei Wang - North China Electric Power University

Haicai Lyu - North China Electric Power University

γ - Scattering Evaluation of the Impact of Internal and External of the Building under the Scene of Lack of Top Shielding in Radioactive Waste Buckets of NPP

Technical Paper Publication: ICONE32-1823

Zhenyu JIANG - State Key Laboratory of Nuclear Power Safety Technology and Equipment, China Nuclear Power Engineering Co., Ltd.

Shuhua YIN - China Nuclear Power Design Co., Ltd.

Jie LIU - China Nuclear Power Design Co., Ltd.

Yujia CHEN - China Nuclear Power Design Co., Ltd.

Shielding Design Method for Radioactive Compartments in Nuclear Power Plants Coupled with the Effect of γ Scattering from Wall Holes

Technical Paper Publication: ICONE32-1841

Liang ZHAO - China Nuclear Power Design Co., Ltd.

Quan GONG - China Nuclear Power Design Co., Ltd.

Zhenyu JIANG - State Key Laboratory of Nuclear Power Safety Technology and Equipment, China Nuclear Power Engineering Co., Ltd.

Nanfeng CAO - China Nuclear Power Design Co., Ltd.

INVESTIGATION OF ELECTRON STOPPING POWER OF LOW-ENERGY PARTICLES IN SILICON CARBIDE: A DYNAMICS SIMULATION BASED ON TIME-DEPENDENT DENSITY FUNCTIONAL THEORY

Technical Paper Publication: ICONE32-1876

ligang wang - North China Electric Power University

qiang zhao - North China Electric Power University
yangyang li - North China Electric Power University
guanxiang yang - North China Electric Power University
xiaoping ouyang - North China Electric Power University

Track 7-1 Thermal-hydraulic experiments and measurement methods (I)

8:30 am – 10 am, C-103

Session Chair:

Session Co-Chair:

EXPERIMENTAL STUDY ON VOID FRACTION MEASUREMENT OF AIR-WATER TWO-PHASE DOWNWARD FLOW IN ROD BUNDLE CHANNELS

Technical Paper Publication: ICONE32-1664

Huihui Li - Science and Technology Research Institute of State Power Investment Group

Wendi Huang - North China Electric Power University

Jianfu Du - North China Electric Power University

Pucheng Fan - Science and Technology Research Institute of State Power Investment Group

Fuming Yang - Science and Technology Research Institute of State Power Investment Group

Shengfei Wang - North China Electric Power University

EXPERIMENTAL STUDY ON THE FILM FORMATION CHARACTERISTICS OF NOZZLES IN JET-TYPE CONDENSERS

Technical Paper Publication: ICONE32-1678

Yinghua Chai - Wuhan Second Ship Design and Research Institute, China

Qi Xiao - Wuhan Second Ship Design and Research Institute, China

Chonghai Huang - Wuhan Second Ship Design and Research Institute, China

Bangminig Li - Wuhan Second Ship Design and Research Institute, China

Hanbing Ke - Wuhan Second Ship Design and Research Institute, China

EXPERIMENTAL RESEARCH OF NATURAL CIRCULATION CHARACTERISTICS OF LEAD-BISMUTH EUTECTIC UNDER VERTICAL AND INCLINATION CONDITIONS

Technical Paper Publication: ICONE32-1808

Zhipeng Liu - Chongqing University

Qinglong Wen - Chongqing University

Chenglong Wang - Xi'an Jiaotong University

Zhongkai Mei - Chongqing University

Zhengang Duan - Chongqing University

Wenxi Tian - Xi'an Jiaotong University

EXPERIMENTAL DESIGN OF HEAT EXCHANGER FAILURE AND ALGORITHM VALIDATION

Technical Paper Publication: ICONE32-1986

Jiajun Li - Harbin Engineering University

Hengyuan Wei - Harbin Engineering University

Dongyang Li - Harbin Engineering University

Sichao Tan - Harbin Engineering University

Ruifeng Tian - Harbin Engineering University

Detection of Boiling in Fuel Assembly Components using the Pressure Noise Correlation Technique

Technical Paper Publication: ICONE32-2191

William Byers - Westinghouse Electric LLC

Yiban Xu - Westinghouse Electric LLC

Track 8-1 Multiphase Flow

8:30 am – 10 am, C-104A

Session Chair:

Session Co-Chair:

FLUID MECHANICS OF PNEUMATIC CONVEYING FOR SPHERICAL FUEL ELEMENTS IN HTR: A REVIEW OF THEORY AND APPLICATIONS

Technical Paper Publication: ICONE32-0049

Yunmeng Mu - Tsinghua University

Xin Wang - Tsinghua University

Bin Wu - Tsinghua University

Jinhua Wang - Tsinghua University

Lihua Gao - Tsinghua University

Haitao Wang - Tsinghua University

TRANSIENT SIMULATION STUDY ON THE FLOW OF AIR AND NITROGEN OXIDES IN CHUTE PIPELINE OF DISSOVLER IN HEAD-END PROCESS

Technical Paper Publication: ICONE32-0575

Jian Zhou - CNNC 404 Co., Ltd

Jian Wang - CNNC 404 Co., Ltd

Caibing Liu - CNNC 404 Co., Ltd

Qin Chen - CNNC 404 Co., Ltd

Xilin Xi - CNNC 404 Co., Ltd

Quanming Liang - CNNC 404 Co., Ltd

Yajun Bi - CNNC 404 Co., Ltd

Xiyuan Gao - CNNC 404 Co., Ltd

Bingzheng Ke - CNNC 404 Co., Ltd

Research on the internal instability of Gas-Liquid Two-Phase Swirling Flow

Technical Paper Publication: ICONE32-0722

Jiaming Li - Harbin Engineering University

Yicheng Ou - Harbin Engineering University

Guangming Fan - Harbin Engineering University

Xiaobo Zeng - Harbin Engineering University

NUMERICAL STUDY OF BOILING TWO-PHASE FLOW IN THE SUBCHANNEL UNDER INCLINED CONDITION

Technical Paper Publication: ICONE32-0867

Yaru Li - China Nuclear Power Engineering Co.,Ltd.

Chenshi Yang - China Nuclear Power Engineering Co.,Ltd.

Numerical simulation of gas-liquid swirling flow based on OpenFOAM

Technical Paper Publication: ICONE32-1514

Haiyang Yang - Harbin Engineering University

Xiaobo Zeng - Harbin Engineering University

Guangming Fan - Harbin Engineering University

Yinyuan Tang - Harbin Engineering University

CFD STUDY OF GAS-LIQUID TWO-PHASE INTERFACE FLUCTUATION AND ANTI-SHAKING IN WATER TANKS WITHIN PORTABLE NUCLEAR POWER PLATFORMS

Technical Paper Publication: ICONE32-2046

Ruohan Chen - CGN Research Institute Co., LTD.

Bin Yang - CGN Research Institute Co., LTD.

Feng Chen - CGN Research Institute Co., LTD.

Junfeng Li - CGN Research Institute Co., LTD.

Track 9-1 Radioactive Waste Treatment Technology (I) -Gaseous Effluents

8:30 am – 10 am, C-104B

Session Chair:

Session Co-Chair:

MONTE CARLO SIMULATION OF GAMMA DOSE DISTRIBUTION OF NATURALLY OCCURRING RATIONUCLIDES IN NON-STANDARD ROOMS

Technical Paper Publication: ICONE32-0804

Shang Geng - School of Energy and Power Engineering, Chongqing University, China

Feng Wang - School of Energy and Power Engineering, Chongqing University, China

Chuncen Wu - School of Energy and Power Engineering, Chongqing University, China

Hengyan Du - Chongqing Radiation Environment Supervision and Management Station, China

Xiuqin Zhang - School of Energy and Power Engineering, Chongqing University, China

Yifan Song - School of Energy and Power Engineering, Chongqing University, China

Yang Chen - Chongqing Radiation Environment Supervision and Management Station, China

Mingxiao Wang - Chongqing Radiation Environment Supervision and Management Station, China

Guoqiang Wang - School of Energy and Power Engineering,

Chongqing University, China

Tianya Huang - Chongqing Radiation Environment Supervision and Management Station, China

Xue Zhao - Chongqing Radiation Environment Supervision and Management Station, China

Fei Li - Chongqing Radiation Environment Supervision and Management Station, China

Guang Li - Chongqing Radiation Environment Supervision and Management Station, China

NUMERICAL STUDY OF A SUPERCRITICAL WATER OXIDATION REACTOR FOR ION EXCHANGE RESIN CONTAINING RADIOACTIVE CONTAMINANTS

Technical Paper Publication: ICONE32-0866

Yaru Li - China Nuclear Power Engineering Co.,Ltd.

Xiangyu Chi - China Nuclear Power Engineering Co.,Ltd.

THE RESEARCH OF GRAPHITE DUST DEPOSITION IN HTR-PM RADIOACTIVE PIPES AND VALVES

Technical Paper Publication: ICONE32-1236

Xiaomuzi Hu - China Institute of Atomic Energy

Xinke Cai - HuaNeng ShanDong ShiDao Bay Nuclear Power co.,ltd.

Fang Han - HuaNeng ShanDong ShiDao Bay Nuclear Power co.,ltd.

Haiqiong Li - HuaNeng ShanDong ShiDao Bay Nuclear Power co.,ltd.

Bin Qu - HuaNeng ShanDong ShiDao Bay Nuclear Power co.,ltd.

SYNTHESIS OF HIERARCHICAL POROUS ZEOLITE AS EFFICIENT ADSORBENTS FOR METHYL IODIDE REMOVAL FROM SPENT FUEL DISSOLUTION OFF-GAS

Technical Paper Publication: ICONE32-1277

Jinjie Sun - Harbin Engineering University

Caishan Jiao - Harbin Engineering University

Mengxun Liu - Harbin Engineering University

Gang Zhang - CNNC 404 Co., Ltd

Wei Gong - CNNC 404 Co., Ltd

Jian Ding - CNNC 404 Co., Ltd

Chenxi Hou - CNNC 404 Co., Ltd

Yarui Li - Harbin Engineering University

Meng Zhang - Harbin Engineering University

Research on the assessment method of graphite dust generation in high-temperature gas cooled reactor

Technical Paper Publication: ICONE32-1431

Ruonan Guo - Huaneng Nuclear Energy Technology Research Institute

Guofeng Tan - Huaneng Hainan Changjiang Nuclear Power Co., Ltd.

Jin Shi - Huaneng Nuclear Energy Technology Research Institute

Zhende Zhou - Huaneng Nuclear Energy Technology Research Institute

Songyang Liu - Huaneng Nuclear Energy Technology Research Institute

Qin Zhou - Huaneng Nuclear Energy Technology Research Institute

Yangcong Dai - Huaneng Nuclear Energy Technology Research Institute

Zhu Wang - Huaneng Nuclear Energy Technology Research Institute

Yujia Hong - Huaneng Nuclear Energy Technology Research Institute

Xingwang Tang - Huaneng Nuclear Energy Technology Research Institute

Chao Li - Huaneng Nuclear Energy Technology Research Institute

Xuelin Li - Huaneng Nuclear Energy Technology Research Institute

Lang Wang - Huaneng Nuclear Energy Technology Research Institute

Jinsong Guo - Huaneng Nuclear Energy Technology Research Institute

Zuxuan Xu - Huaneng Hainan Changjiang Nuclear Power Co., Ltd.

CALCULATION OF RADIOLYTIC PRODUCTS CONCENTRATIONS AND ECP IN PWR PRIMARY COOLANT CIRCUITS DURING SHUTDOWN

Technical Paper Publication: ICONE32-1957

Xiaoqian Zhang - China Nuclear Power Technology Research Institute Co., Ltd

Weijiang Liang - Daya Bay Nuclear Power Operations and Management Co., Ltd

Hantao Lin - China Nuclear Power Technology Research Institute Co., Ltd

Peng Xu - China Nuclear Power Technology Research Institute Co., Ltd

Pengtao Fu - China Nuclear Power Technology Research Institute Co., Ltd

Track1-10 Artificial Intelligence and Simulation Control I

8:30 am – 10 am, C-105A

Session Chair:

Session Co-Chair:

DEFECT DETECTION IN CONCRETE STRUCTURES USING MULTI-HEAD CONVOLUTIONAL NETWORK

Technical Paper Publication: ICONE32-0330

Jesua EPEQUIN - EDF China

Yiting DONG - EDF China

Qiufeng ZHENG - EDF China

Jun MA - Suzhou Nuclear Power Research Institute

Wenrang ZHANG - EDF China

Yiyang LI - EDF China

Yi LI - Suzhou Nuclear Power Research Institute

A Multi-Scale Spatial Convolutional Neural Network for Centrifugal Pumps Fault Diagnosis in Nuclear Power Plant

Technical Paper Publication: ICONE32-0370

Yushun Wang - Department of Engineering Physics, Tsinghua University, China

Jingquan Liu - Department of Engineering Physics, Tsinghua University, China

Guangyu Li - Fujian Ningde Nuclear Power Co., Ltd, China

Ming Ouyang - Department of Engineering Physics, Tsinghua University, China

Shuai Hu - Fujian Ningde Nuclear Power Co., Ltd, China

Xianghai Kong - Fujian Ningde Nuclear Power Co., Ltd, China

Hao Wang - Department of Engineering Physics, Tsinghua University, China

Yuxuan Han - Department of Engineering Physics, Tsinghua University, China

Yicong Wu - AsiaInfo Technologies Limited EBC Technology R&D Center, China

Ziyang Zhang - Department of Engineering Physics, Tsinghua University, China

RESEARCH ON MULTI OBJECTIVE LQR-SMC CONTROL OF REACTOR POWER BASED ON TWO-POINT MODEL

Technical Paper Publication: ICONE32-0695

Yukun Liu - Harbin Engineering University, China

Yongkuo Liu - Harbin Engineering University, China

Junling Wang - Harbin Engineering University, China

Ji Liu - Harbin Engineering University, China

FUZZY PID SLIDING MODE SELF-TUNED ADAPTIVE CORE POWER CONTROL OF VVER-1000 NUCLEAR REACTOR USING NONLINEAR MULTIPOINT KINETIC MODEL DURING LOAD-FOLLOWING OPERATIONS

Technical Paper Publication: ICONE32-0751

Hailemichael Guadie Mengistu - Harbin Engineering University

Xiuchun Luan - Harbin Engineering University

Hetao Sun - Harbin Engineering University

Fabiano Gibson Daud Thulu - Virginia Commonwealth University

Cedrick Shema - Harbin Engineering University

Research on the LOCA Diagnosis Technology in PWR based on Recurrent Neural Network (RNN)

Technical Paper Publication: ICONE32-0770

Ke Yi - China Nuclear Power Engineering Co., Ltd.

Time series forecasting framework based on autocorrelation feature and Transformer architecture

Technical Paper Publication: ICONE32-1175

xuan zhang - College of Smart Energy, Shanghai Jiao Tong University

fan wang - State Nuclear Power Automation System Engineering Company, China

meiqi song - College of Smart Energy, Shanghai Jiao Tong University

yunwei wang - State Nuclear Power Automation System Engineering Company, China

xiaojing liu - School of Mechanical Engineering, Shanghai Jiao Tong University

Track2-10 Fast Reactor Physics (V)

8:30 am – 10 am, C-105B

Session Chair:

Session Co-Chair:

Surrogate Machine Learning Model for Multi objective Simulated Annealing-based Core Reloading Pattern Optimization

Technical Paper Publication: ICONE32-0614

Omar Almaleki - Technology Innovation Institute

Khurram Saleem Chaudri - Khalifa University of Science and Technology

Mohamed Lahdour - Khalifa University of Science and Technology

mohammad Alrwashdeh - Khalifa University of Science and Technology

Saeed A. Alameri - Khalifa University of Science and Technology

SNPT-U A PARALLEL SN TRANSPORT SOLVER BASED ON SWEEPING OF UNSTRUCTURED MESHES

Technical Paper Publication: ICONE32-0627

Shengcheng Zhou-CAEP Software Center for High Performance Numerical Simulation, Institute of Applied Physics and Computational Mathematics, China

Mingrui Yang - CAEP Software Center for High Performance Numerical Simulation, China

Zhipeng Li - CAEP Software Center for High Performance Numerical Simulation, Institute of Applied Physics and Computational Mathematics, China

Study on optimization of low enriched uranium core arrangement of MNSR

Technical Paper Publication: ICONE32-0771

Qian Hao -China Institute of Atomic Energy

XiaoBo Wu - China Institute of Atomic Energy

JingYan Hong - China Institute of Atomic Energy

JinHua Zhang - China Institute of Atomic Energy

Dan Peng - China Institute of Atomic Energy

YiGuo Li - China Institute of Atomic Energy

QUANTIFYING THE IMPACT OF PARTICLE SIZE DISTRIBUTION ON PLATE-TYPE DISPERSED PARTICLE FUEL NEUTRONICS

Technical Paper Publication: ICONE32-0832

Anmin Yuan - Research Institute of Nuclear Power Operations

Sicong Fang - Research Institute of Nuclear Power Operations

Yuxia Wu - Wuhan 2nd Ship Design and Research Institute

Tong Zhu - Research Institute of Nuclear Power Operations

Binyue Yu - Research Institute of Nuclear Power Operations

Xiaolong Ran - Research Institute of Nuclear Power Operations

Ming Qu - Research Institute of Nuclear Power Operations

RELATIVE MEASUREMENT AND CALCULATION ANALYSIS OF NEUTRON FLUX BASED ON GOLD FOIL ACTIVATION METHOD IN CARR

Technical Paper Publication: ICONE32-0844

binhe hu -China Institute of Atomic Energy

zheng lv -China Institute of Atomic Energy

jianlong li - China Institute of Atomic Energy

SIMULATION OF PASSIVE START-UP OF MODULAR HIGH TEMPERATURE GAS COOLED REACTOR

Technical Paper Publication: ICONE32-1169

Yangyang Dai - Lanzhou University

Yong Luo - HUANENG Nuclear Energy Technology Research Institute

Zuoye Liu - Lanzhou University

Track 8-10 Safety and Accident Analysis

8:30 am – 10 am, C-106A

Session Chair:

Session Co-Chair:

Numerical Simulation on Hydrogen Distribution and Risk Mitigation within the Isotope Finished Source Products Building of Qinshan

Technical Paper Publication: ICONE32-0058

Yuxiang Shen - CNNC Qinshan Isotope Co., Ltd

Yunlong Li - China Nuclear Power Engineering co.,Ltd.
Zhengzhou Branch

Zhe Lyu - China Nuclear Power Engineering co.,Ltd. Zhengzhou Branch

DEVELOPMENT OF A CFD-BASED ACCIDENT ANALYSIS TOOL AND ITS APPLICATIONS FOR A PRISMATIC GAS-COOLED MICRO REACTOR

Technical Paper Publication: ICONE32-0149

ZHENG HUANG - China Nuclear Power Engineering Co., Ltd.
(CNPE)

SHUOTING ZHANG - China Nuclear Power Engineering Co., Ltd.
(CNPE)

JIANHUA DONG - China Nuclear Power Engineering Co., Ltd.
(CNPE)

Simulation Study on the Impact of Floating Disaster-Causing Agent Migration to Water Intake Project of Coastal Nuclear Power Plant

Technical Paper Publication: ICONE32-0527

Puyue Ma - China Nuclear Power Engineering Co., Ltd.

Xinshu Jiang - China Nuclear Power Engineering Co., Ltd.

Yu Zhang - Hainan Nuclear Power Co., Ltd.

Jianxin Chen - Hainan Nuclear Power Co., Ltd.

Rongyong Zhang - China Nuclear Power Engineering Co., Ltd.

Qi Li - China Nuclear Power Engineering Co., Ltd.

COMPARATIVE VERIFICATION OF SIMULATION SOFTWARE FOR INTERNAL FLOODING IN NUCLEAR ISLAND

Technical Paper Publication: ICONE32-0690

Huicui Chen - China Nuclear Power Engineering Co., LTD

Yuxuan Fan - China Nuclear Power Engineering Co., LTD

Rui Zhang - China Nuclear Power Engineering Co., LTD

RESEARCH ON HYDRAULIC TRANSIENT AND PREVENTION STRATEGY AT THE INLET OF DEAERATOR IN NPP

Technical Paper Publication: ICONE32-1913

Jiaming Zhao - China Nuclear Power Engineering Co.,Ltd

Rui Zhang - China Nuclear Power Engineering Co.,Ltd

Wentao Guo - North China Electric Power University

Shengfei wang - North China Electric Power University

ANALYSIS OF STEEL PLATE CONCRETE MODULE'S THERMAL RESPONSE UNDER FIRE CONDITION IN REACTOR BUILDING BASED ON FDS-ABAQUS

Technical Paper Publication: ICONE32-1936

Lu Zhang - China Nuclear Power Engineering Co., Ltd.

Lan Liu - China Nuclear Power Engineering Co., Ltd.

Xiaomeng Xiong - China Nuclear Power Engineering Co., Ltd.

Yanli Li - China Nuclear Power Engineering Co., Ltd.

Le Wang - China Nuclear Power Engineering Co., Ltd.

Track 7-10 Nuclear reactor safety analysis (II)

8:30 am – 10 am, C-106B

Session Chair:

Session Co-Chair:

FLOW PATTERN EVOLUTION CHARACTERISTICS OF NARROW CHANNEL REFLOODING PROCESS

Technical Paper Publication: ICONE32-1079

Qianlong Zuo - Chongqing university

Erlei Zhao - Nuclear Power Institute of China

Haidong Liu - Chongqing University of Technology

Deqi Chen - Chongqing university

Jian Deng - Nuclear Power Institute of China

Hanzhou Liu - Chongqing university

Junchen Wu - Chongqing university

NUMERICAL SIMULATION OF FLOODING PATHWAYS IN NUCLEAR POWER PLANTS BY COUPLING A POROUS MEDIA MODEL WITH LSMPS

Technical Paper Publication: ICONE32-1099

Xinkai Wang - Xi'an Jiaotong University

Xinkun Xiao - Xi'an Jiaotong University

Wen Ding - Xi'an Jiaotong University

Ronghua Chen - Xi'an Jiaotong University

Wenxi Tian - Xi'an Jiaotong University

Suizheng Qiu - Xi'an Jiaotong University

Guanghai Su - Xi'an Jiaotong University

Numerical investigation on pressure wave in steam generator tube rupture accident of liquid metal cooled fast reactor

Technical Paper Publication: ICONE32-1295

Di Wang - China Nuclear Power Technology Research Institute

Ren Liang - China Nuclear Power Technology Research Institute

Huo Liang - China Nuclear Power Technology Research Institute

Zhikang Lin - China Nuclear Power Technology Research Institute

Study on The Single Failure of Steam Generator Tube Rupture Accident

Technical Paper Publication: ICONE32-1300

Xiaoshuang Zhao - China Nuclear Power Design Co., Ltd.

Diyan Zhang - China Nuclear Power Design Co., Ltd.

Yijun Lv - China Nuclear Power Design Co., Ltd.

WATER HAMMER ANALYSIS OF ESSENTIAL SERVICE WATER SYSTEM IN NUCLEAR POWER PLANT

Technical Paper Publication: ICONE32-1383

Sheng Yan - Sun Yat-Sen University

Jiayue Chen - Sun Yat-Sen University

Yanyu Yang - Yangjiang Nuclear Power Co., Ltd.

Lv Li - Sun Yat-Sen University

Xiaolong He - Yangjiang Nuclear Power Co., Ltd.

Xinming Huang - Sun Yat-Sen University

Rongyan Huang - Yangjiang Nuclear Power Co., Ltd.

Hong Xu - Sun Yat-Sen University

Analysis of Anticipated Operational Occurrences with Loss of Offsite Power for Hualong Nuclear Power Plants

Technical Paper Publication: ICONE32-1507

Yanhua Cheng - China Nuclear Power Design Co., Ltd.

Danjing Wei - China Nuclear Power Design Co., Ltd.

Fangqing Yang - China Nuclear Power Design Co., Ltd.

Yousen Hu - China Nuclear Power Design Co., Ltd.

track 9-11 Digital research and applications (I)

8:30 am – 10 am, C-107A

Session Chair:

Session Co-Chair:

DEVELOPMENT OF AN α MACHINE LEARNING TECHNIQUES FOR THE DEVELOPMENT OF β & γ RADIATION SOURCES DISCRIMINATION SOFTWARE USING A 2D-IMAGING RADIATION DETECTOR

Technical Paper Publication: ICONE32-0160

Hugo Laffolley - Japan Atomic Energy Agency

Youichi Tsubota - Japan Atomic Energy Agency

Tomoya Tsuji - Japan Atomic Energy Agency

Fumiya Honda - Japan Atomic Energy Agency

Ayako Nitta - Japan Atomic Energy Agency

Riku Kikuchi - Japan Atomic Energy Agency

Performance Evaluation of Silicon-Tungsten Composites for Gamma Radiation Shielding Using Geant4 Simulations

Technical Paper Publication: ICONE32-0792

Bashir Garba Aminu - Fundamental Science on Nuclear Safety and Simulation Technology Laboratory, Harbin Engineering University, China

Yong-Kuo Liu - Fundamental Science on Nuclear Safety and Simulation Technology Laboratory, Harbin Engineering University, China

Hanan Akhdar - Imam Mohammad bin Saud Islamic University (IMSIU), Saudi Arabia

Munyense Terence Kashiba - Fundamental Science on

Nuclear Safety and Simulation Technology Laboratory, Harbin Engineering University, China

Musa Abdulhamid - University of Science and Technology of China

Simulation of dose distribution of radioactive equipment in nuclear power plant based on three-dimensional radiation Dose Field Fast Computing software (DOLPHINS)

Technical Paper Publication: ICONE32-0898

Chenyu Shan - China Nuclear Power Technology Research Institute Co.,Ltd.

Jia Huang - China Nuclear Power Technology Research Institute Co.,Ltd.

Wenzhang Xie - China Nuclear Power Technology Research Institute Co.,Ltd.

Qingxin Lei - China Nuclear Power Technology Research Institute Co.,Ltd.

Kang Chang - China Nuclear Power Technology Research Institute Co.,Ltd.

Hao Zhou - China Nuclear Power Technology Research Institute Co.,Ltd.

Feng Liu - China Nuclear Power Technology Research Institute Co.,Ltd.

Xiajie Liu - China Nuclear Power Technology Research Institute Co.,Ltd.

Chaoyuan Xiao - China Nuclear Power Technology Research Institute Co.,Ltd.

Yizhi Chen - China Nuclear Power Technology Research Institute Co.,Ltd.

Digital Research and Application of Radiation Protection in Pressurized Water Reactor Nuclear Power Plants

Technical Paper Publication: ICONE32-0939

Quan Gong - China Nuclear Power Engineering Co., Ltd.

Wenhua NIU - China Nuclear Power Engineering Co., Ltd.

Xiaoqiang Chen - China Nuclear Power Engineering Co., Ltd.

Weihua He - Taishan Nuclear Power Joint Venture Company Limited

Nanfeng Cao - China Nuclear Power Engineering Co., Ltd.

A GAUSSIAN CONVOLUTION AND CURVE FITTING METHOD FOR IDENTIFYING OVERLAPPING PEAKS IN GAMMA ENERGY SPECTRA

Technical Paper Publication: ICONE32-1080

Rulan Qin - Shanghai Institute of Applied Physics, Chinese Academy of Sciences

Jun Cai - Shanghai Institute of Applied Physics, Chinese Academy of Sciences

Changyuan Li - Shanghai Institute of Applied Physics, Chinese Academy of Sciences

Zhangjian Qin - Chengdu University of Technology

Bingbing Gou - Shanghai Institute of Applied Physics, Chinese Academy of Sciences

Zhihong Zhang - Shanghai Institute of Applied Physics, Chinese Academy of Sciences

Zhicheng Qian - Shanghai Institute of Applied Physics, Chinese Academy of Sciences

Verifying the accuracy of two-dimensional ocean nuclide migration model using statistical parameters and machine learning method

Technical Paper Publication: ICONE32-1875

Chenrui Fan- Weiyang College, Tsinghua University

Zhengzhe Qu -Institute of Nuclear and New Energy Technology, Collaborative Innovation Center of Advanced Nuclear Energy Technology, Key Laboratory of Advanced Reactor Engineering and Safety of Ministry of Education, Tsinghua University

Yu Wang-Institute of Nuclear and New Energy Technology, Collaborative Innovation Center of Advanced Nuclear Energy Technology, Key Laboratory of Advanced Reactor Engineering and Safety of Ministry of Education, Tsinghua University

Feng Xie- Institute of Nuclear and New Energy Technology, Collaborative Innovation Center of Advanced Nuclear Energy Technology, Key Laboratory of Advanced Reactor Engineering and Safety of Ministry of Education, Tsinghua University

Yongye Liu - Nuclear and Radiation Safety Center, MEE, China

Ping Wang - Nuclear and Radiation Safety Center, MEE, China

Xinhua Liu - Nuclear and Radiation Safety Center, MEE, China

Track 16-1 Reactor Physics and Coupling Analysis I

8:30 am – 10 am, C-107B

Session Chair:

Session Co-Chair:

STUDY ON NEUTRONIC AND THERMAL-HYDRAULIC COUPLING OF A MOLTEN SALT REACTOR BASED ON GEN-FOAM

Technical Paper Publication: ICONE32-0147

Wenqiang Wu - Xi'an Jiaotong University

Dalin Zhang - Xi'an Jiaotong University

Xingguang Zhou - Xi'an Jiaotong University

Wenxi Tian - Xi'an Jiaotong University

Suizheng Qiu - Xi'an Jiaotong University

Guanghui Su - Xi'an Jiaotong University

High-fidelity Neutronic-Thermohydraulic Coupling Method in Plate-Type PWR with High Local Void Fraction

Technical Paper Publication: ICONE32-0550

Guodong Liu - Tsinghua University

Ying He - Tsinghua University

Junren Hou - Tsinghua University

Meiming Qiu - Tsinghua University

Xingyu Zhao - Tsinghua University

Shanfang Huang - Tsinghua University

Kan Wang - Tsinghua University

Zhigang Li - Nuclear Power Institute of China

Chuan Lu - Nuclear Power Institute of China

Diffusion based pin-resolved neutronics simulation of a hexagonal lead-cooled fast reactor with L-BFGS optimization of superhomogenization factors

Technical Paper Publication: ICONE32-0610

Fredrik Dehlin - KTH

High-Fidelity CRUD Coupling Simulation for PWR Power Shift

Technical Paper Publication: ICONE32-0810

chaoyuan zhang - School of Nuclear Science and Engineering, Shanghai Jiao Tong University, China

tengfei zhang - School of Nuclear Science and Engineering, Shanghai Jiao Tong University, China

han yin - School of Nuclear Science and Engineering, Shanghai Jiao Tong University, China

yan liu - School of Nuclear Science and Engineering, Shanghai Jiao Tong University, China

hui he - School of Nuclear Science and Engineering, Shanghai Jiao Tong University, China

xiaojing liu - School of Nuclear Science and Engineering, Shanghai Jiao Tong University, China

Initial calculations of neutronics, neutron energy and neutron flux spectrum at Joyo fast reactor MK-IV core for radioisotope production purposes 「常陽」

Technical Paper Publication: ICONE32-1665

Luis Fernando Salas Tapia - The University of Tokyo

Shuichi Hasegawa - The University of Tokyo

Track 3-1 Instrumentation and Measurement Technology

8:30 am – 10 am, C-108A

Session Chair:

Session Co-Chair:

RANDOM SIGNAL GENERATION METHOD FOR TESTING EX-CORE NUCLEAR MEASUREMENT SYSTEMS

Technical Paper Publication: ICONE32-0557

Qichang Huang - National Key Laboratory of Nuclear Reactor Technology, Nuclear Power Institute of China

Wenbin Wei - National Key Laboratory of Nuclear Reactor Technology, Nuclear Power Institute of China

Yuan Xia - National Key Laboratory of Nuclear Reactor Technology, Nuclear Power Institute of China

Bo Wan - National Key Laboratory of Nuclear Reactor Technology, Nuclear Power Institute of China

Bangping Xiong - National Key Laboratory of Nuclear Reactor Technology, Nuclear Power Institute of China

Miao Wang - National Key Laboratory of Nuclear Reactor Technology, Nuclear Power Institute of China

Shangqing Sun - National Key Laboratory of Nuclear Reactor Technology, Nuclear Power Institute of China

Naixin Zhang - National Key Laboratory of Nuclear Reactor Technology, Nuclear Power Institute of China

Application Introduction and Measurement Difference Analysis of Bend Flow Meter in Helium Flow Measurement of High Temperature Gas Cooled Reactor Primary Loop

Technical Paper Publication: ICONE32-1094

Zhongshu Zhang - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd

Lei Jiang - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd

Baokun Liu - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd

Zengtian Ru - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd

Feng Wang - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd

Feng Jiang - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd

Na Song - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd

Response Current Delay-Effect Elimination for SPND in PWR-Core

Technical Paper Publication: ICONE32-1200

Hangqi Zhang - Xi'an Jiaotong University, China

Yunzhao Li - Xi'an Jiaotong University, China

Liangzhi Cao - Xi'an Jiaotong University, China

A STUDY ON THE SPATIAL EFFECT OF EMITTER BURNUP IN RHODIUM SELF-POWERED NEUTRON DETECTORS

Technical Paper Publication: ICONE32-1408

Bite Qiu - Xi'an Jiaotong University

Shiyu Liu - Xi'an Jiaotong University

Yaodong Sang - Xi'an Jiaotong University

Qingmin Zhang - Xi'an Jiaotong University

RESEARCH ON ADVANCED MEASUREMENT TECHNOLOGY APPLIED TO RADIATION MONITORING SYSTEM IN NUCLEAR POWER PLANT

Technical Paper Publication: ICONE32-1500

Tianzhi JIANG - Nuclear Power Institute of China

Jin LI - Nuclear Power Institute of China

Xianglin ZHUO - Nuclear Power Institute of China

Research and Development of The Long-life Class 1E Dewpoint meter and Portable Comparison Device for HTR-PM

Technical Paper Publication: ICONE32-2041

Qiangqiang yang - Huaneng Nuclear Energy Technology Research Institute Co., Ltd

Huimin Sun - Huaneng Nuclear Energy Technology Research Institute Co., Ltd

Wei wang - Huaneng Nuclear Energy Technology Research Institute Co., Ltd

Weijun Lei - Huaneng Nuclear Energy Technology Research Institute Co., Ltd

Jie Xu - Huaneng Nuclear Energy Technology Research Institute Co., Ltd

Ping Liu - Huaneng Nuclear Energy Technology Research Institute Co., Ltd

Ying Sun - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd

Chen Wang - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd

Track 16-7 Reactor Physics and Coupling Analysis II

8:30 am – 10 am, C-108B

Session Chair:

Session Co-Chair:

Design of extraction system of ECR ion source for associated particle neutron generator

Technical Paper Publication: ICONE32-0103

Yingying Cao - Northeast Normal University
Pingwei Sun - Northeast Normal University
Shangrui Jiang - Northeast Normal University
Jiayu Li - Northeast Normal University
Sijia Zhou - Northeast Normal University
Jia Song - Northeast Normal University
Shengduo Liu - Northeast Normal University
Weiyang Zhang - Northeast Normal University
Siqi Liu - Northeast Normal University
Zebin Li - Northeast Normal University
Yuxuan Gu - Northeast Normal University
Yue Sun - Northeast Normal University
Hailong Xu - Northeast Normal University
Shiwei Jing - Northeast Normal University

Neutron Ionization Chamber Based on Multi-Layer Boron-Coated Cylinders

Technical Paper Publication: ICONE32-0864

Peng Tang - Institute of Nuclear and New Energy Technology
Jiahao Chang1 - Institute of Nuclear and New Energy Technology
Hongyin Zhang1 - Institute of Nuclear and New Energy Technology
Jintao Fu - Institute of Nuclear and New Energy Technology
Xincheng Xiang - Institute of Nuclear and New Energy Technology

STUDY OF REFINED EVENT PARALLEL ALGORITHM FOR GPU-BASED MONTE CARLO PARTICLE TRANSPORT

Technical Paper Publication: ICONE32-0928

Yushuo Ren - Tsinghua University, China
Zeguang Li - Tsinghua University, China
Henglong Lin - Tsinghua University, China
Zilin Su - Tsinghua University, China
Haochun Ding - Tianjin Normal University, China
Kan Wang - Tsinghua University, China

A BOUNDARY-TYPE ALGORITHM BASED ON NONLINEAR ITERATION FOR NEUTRON DIFFUSION EQUATION

Technical Paper Publication: ICONE32-0992

yanting cheng - North China Electric Power University
mei huang - North China Electric Power University
xiaoping ouyang - North China Electric Power University

Research on Scanning Trajectories and Reconstruction Algorithms for Industrial CT Inspection of Large Components

Technical Paper Publication: ICONE32-1037

Jintao Fu - Tsinghua University
Zirou Jiang - Tsinghua University
Tianchen Zeng - Tsinghua University
Yuewen Sun - Tsinghua University
Bo Zhao - Tsinghua University
Peng Tang - Tsinghua University
Peng Cong - Tsinghua University

Research on Uncertainty in Online Nuclide Measurement for Pebble Bed High-Temperature Reactors

Technical Paper Publication: ICONE32-1329

Zhang Hongjian - Tsinghua University
Yu Chenyue - East China University of Technology
Wen Yanlong - Tsinghua University
Zhu Qin - Tsinghua University
Xiao Haiyan - Tsinghua University
Zhang Liguu - Tsinghua University
Ma Tao - Tsinghua University

Neutron physical performance analysis of helical cruciform fuel rods based on Direct Accelerated Geometry Monte Carlo

Technical Paper Publication: ICONE32-1456

Jiejun Cai - South China University of Technology
Jingqi He - South China University of Technology

Track13-1 PSA-I

8:30 am – 10 am, C-109A

Session Chair:

Session Co-Chair:

Research on uncertainty analysis and evaluation of cosCONT software

Technical Paper Publication: ICONE32-0399

YICHUN WANG - North China Electric Power University

QILONG WANG - North China Electric Power University

YU YU - North China Electric Power University

PSA Application for High Energy Line Breaks in Nuclear Power Plant

Technical Paper Publication: ICONE32-0417

Yulong WU - China Nuclear Power Engineering Co., Ltd.

Huina SANG - China Nuclear Power Engineering Co., Ltd.

Chunju YANG - China Nuclear Power Engineering Co., Ltd.

Jinkai WANG - China Nuclear Power Engineering Co., Ltd.

Zhiwen WANG - China Nuclear Power Engineering Co., Ltd.

Xiaoming TANG - China Nuclear Power Engineering Co., Ltd.

Risk-informed DEC-B Sequence Determination

Technical Paper Publication: ICONE32-0795

Wenjing LI - CNPE

Kunxiu LIU - CNPE

Jing LIU - CNPE

Wei WEI - CNPE

A RISK CLASSIFICATION METHOD OF NUCLEAR POWER SMALL BRANCH PIPING FOR PREVENTIVE MAINTENANCE PURPOSES

Technical Paper Publication: ICONE32-1432

Dan Wang - Xi'an Thermal power research institute CO.,LTD

Peiyao Qi - Xi'an Thermal power research institute CO.,LTD

Boyuan Wang - Xi'an Thermal power research institute CO.,LTD

Bo Zhao - Xi'an Thermal power research institute CO.,LTD

Dawei Wei - Xi'an Thermal power research institute CO.,LTD

Heng Zhang - Xi'an Thermal power research institute CO.,LTD

Qilong Hu - Xi'an Thermal power research institute CO.,LTD

Xinhui Yang - Huaneng Hainan Changjiang Nuclear Power CO., LTD

Ke Ren - Huaneng Hainan Changjiang Nuclear Power CO., LTD

Youxing Wang - Huaneng Hainan Changjiang Nuclear Power CO., LTD

ANALYSIS OF SEVERE ACCIDENT RISK OF GEN II NUCLEAR POWER PLANTS BASED ON INTERNAL EVENT LEVEL 2 PROBABILISTIC SAFETY ASSESSMENT

Technical Paper Publication: ICONE32-1602

Shujie Guo - CNPE

Yun Yu - CNPE

Jingyi Liang - CNPE

Wenjing Li - CNPE

Wei Wei - CNPE

Xinli Yu - CNPE

Risk Assessment of the Large Release for Hainan SMR

Technical Paper Publication: ICONE32-1760

Jing Liu - CNPE

Yu Liu - CNPE

Jingyi Liang - CNPE

Wei Wei - CNPE

Xinli Yu - CNPE

Track 13-2 PSA-II

8:30 am – 10 am, C-109B

Session Chair:

Session Co-Chair:

Research of the Risk of Interfacing-System Loss-of-Coolant Accident for HPR1000

Technical Paper Publication: ICONE32-0019

Jian Yang - china nuclear power engineering co. ltd

Chu Ran Feng - china nuclear power engineering co. ltd

Research on the Key Parameters of the Natural Cooling Process in Lead-Bismuth Fast Reactor Based on Analytic Hierarchy Process

Technical Paper Publication: ICONE32-0402

Qilong Wang - North China Electric Power University

Yichun Wang - North China Electric Power University

Yu Yu - North China Electric Power University

An Adaptive Artificial Neural Network for Functional Failure Identification of Passive Safety Systems

Technical Paper Publication: ICONE32-0423

Xiaowei Jiao - Nuclear Power Operations Research Institute

Shanpu Wang - Nuclear Power Operations Research Institute

Jianhua Xia - Nuclear Power Operations Research Institute

Jiajian Wang - Nuclear Power Operations Research Institute

Yue Li - Nuclear Power Operations Research Institute

Chaoquan Shi - Nuclear Power Operations Research Institute

Liwen He - Nuclear Power Operations Research Institute

Study on Risk-Informed Single Failure Criterion

Technical Paper Publication: ICONE32-0492

Qianwen Liu - China Nuclear Power Engineering Co., Ltd

Yuxiang Wang - China Nuclear Power Engineering Co., Ltd

Lifeng Song - China Institute of Nuclear Industry Strategy

Guangfei Wang - China Nuclear Power Engineering Co., Ltd

Jian Yang - China Nuclear Power Engineering Co., Ltd

Theoretical Investigation of F-C Curves for Non-Light Water Reactors and Comparison with Probabilistic Safety Objectives of HTGRs

Technical Paper Publication: ICONE32-0889

Jie He - Sichuan University

Guofeng Tan - Huaneng Hainan Changjiang Nuclear Power Co., Ltd.

Jin Shi - Huaneng Nuclear Energy Technology Research Institute

Ning Huang - Sichuan University

Zhende Zhou - Huaneng Nuclear Energy Technology Research Institute

Ruonan Guo - Huaneng Nuclear Energy Technology Research Institute

Qin Zhou - Huaneng Nuclear Energy Technology Research Institute

Zuxuan Xu - Huaneng Hainan Changjiang Nuclear Power Co., Ltd.

Yujia Hong - Huaneng Nuclear Energy Technology Research

Institute

XingWang Tang - Huaneng Nuclear Energy Technology Research Institute

Yangcong Dai - Huaneng Nuclear Energy Technology Research Institute

Chao Li - Huaneng Nuclear Energy Technology Research Institute

Junjie Chen - Huaneng Nuclear Energy Technology Research Institute

Sanping Xiao - Huaneng Nuclear Energy Technology Research Institute

Study on Relay Desensitization of Main Feed Water Regulating Valves in A Nuclear Power Plant

Technical Paper Publication: ICONE32-1613

YUEHUA HU - Shanghai Nuclear Engineering Research & Design Institute CO.LTD

JINGJING LIU - Shanghai Nuclear Engineering Research & Design Institute CO.LTD

JIAQING CHEN - CNNP Nuclear Power Operation and Management CO., LTD.

Ming ZHAO - CNNP Operation and Maintain Technology CO., LTD

Yong LIU - Shanghai Nuclear Engineering Research & Design Institute CO.LTD

THE RESULTS AND INSIGHTS OF LEVEL 1 PROBABILISTIC SAFETY ANALYSIS FOR SODIUM COOLED FAST REACTOR

Technical Paper Publication: ICONE32-1712

jing WANG - China Institute of Atomic Energy

Han YAN - China Institute of Atomic Energy

Ting WANG - China Institute of Atomic Energy

Track15-1 Nuclear Education

8:30 am – 10 am, C-112

Session Chair:

Session Co-Chair:

Research on project-driven “nuclear+X” graduate training mechanism

Technical Paper Publication: ICONE32-0745

Feng Wang - Chongqing University

Zhongqing Yang - Chongqing University

Zhaolei Zheng - Chongqing University

Hong Gao - Chongqing University

Guoqiang Wang - Chongqing University

Lizha BIEKEEN - Chongqing University

Shang Geng - Chongqing University

Yifan Song - Chongqing University

DIFFERENCES IN RISK PERCEPTION BETWEEN NUCLEAR TECHNOLOGY EXPERTS AND THE PUBLIC: AN ANALYSIS OF DECISION-MAKING MODELS BASED ON DUAL PROCESS THEORY

Technical Paper Publication: ICONE32-0767

Wenjie Zhu - Sun Yat-sen University

Dawei Pan - Sun Yat-sen University

A NUCLEAR PROFESSIONAL LLM-BASED AI AND ITS TEACHING APPLICATION

Technical Paper Publication: ICONE32-0828

Yanwei Wu - Department of Engineering Physics, Tsinghua University China

Miao Yan - Department of Engineering Physics, Tsinghua University China

Wenrui Hao - Department of Engineering Physics, Tsinghua University China

Nanzhi Wang - Department of Engineering Physics, Tsinghua University China

Yang Chang - Department of Engineering Physics, Tsinghua University China

Chong Liu - Department of Engineering Physics, Tsinghua University China

Zan Zhai - Department of Engineering Physics, Tsinghua University China

Shanfang Huang - Department of Engineering Physics, Tsinghua University China

Wei Wei - CNNC Key Laboratory on Nuclear Industry Simulation Wuhan, China

Yuxi Liu - CNNC Key Laboratory on Nuclear Industry Simulation Wuhan, China

Xiong Huang - CNNC Key Laboratory on Nuclear Industry Simulation Wuhan, China

Kan Wang - Department of Engineering Physics, Tsinghua University China

Rad-Sim: Radiation-field-simulation Software Used for Teaching

Technical Paper Publication: ICONE32-0900

Wenrui Hao - Tsinghua University, China

Miao Yan - Tsinghua University, China

Yanwei Wu - Tsinghua University, China

Nanzhi Wang - Tsinghua University, China

Yang Chang - Department of Engineering Physics, Tsinghua University, China

Shanfang Huang - Tsinghua University, China

Kan Wang - Department of Engineering Physics, Tsinghua University, China

Wei Wei - CNNC Key Laboratory on Nuclear Industry Simulation, China

Xiong Huang - CNNC Key Laboratory on Nuclear Industry Simulation, China

CLIMATE CHANGE AND THE ROLE OF NUCLEAR ENERGY

Technical Paper Publication: ICONE32-1830

Zafar Koreshi - Solved Engineering Technologies (SMC-Pvt) Ltd.

Track6-1 Research on the Engineering Cost

8:30 am – 10 am, C-113

Session Chair:

Session Co-Chair:

Research on Construction Management Costs of Civil Engineering in Nuclear Chemical Construction Projects

Technical Paper Publication: ICONE32-0233

Jianbin Niu - China Nuclear Power Engineering Corporation

Hongying Yu - China Nuclear Power Engineering Corporation

Dong Zhao - China Nuclear Power Engineering Corporation

Research on the Labor Costs Related to the Fixed Budget for the Construction of a Nuclear Chemical Reprocessing Plant

Technical Paper Publication: ICONE32-0349

Lei Cao - China Nuclear Power Engineering Co.,LTD

Dong Zhao - China Nuclear Power Engineering Co.,LTD

The Practice of Compilation of Budgetary Quotas for Steel Structure Works in Civil Construction of Nuclear Chemical Construction Projects

Technical Paper Publication: ICONE32-0763

Hong-Ying Yu - China Nuclear Power Engineering Co., Ltd.

Jian-Bin Niu - China Nuclear Power Engineering Co., Ltd.

Dong Zhao - China Nuclear Power Engineering Co., Ltd.

Research on the calculation of safety and civilized construction cost standard of nuclear chemical construction project

Technical Paper Publication: ICONE32-1274

Hong Gao - Nuclear Power Engineering Co., Ltd.,China

Jian-bin Niu - Nuclear Power Engineering Co., Ltd.,China

Dong Zhao - Nuclear Power Engineering Co., Ltd.,China

Research on the Evaluation System for the Implementation of Nuclear Power Standards and Construction of a Feedback System

Technical Paper Publication: ICONE32-2151

Ruilin Dong - Institute for Standardization of Nuclear Industry

Shaolin Zhang - Institute for Standardization of Nuclear Industry

Yang Liu - Institute for Standardization of Nuclear Industry

Dengxiao Wang - Institute for Standardization of Nuclear Industry

Inspiration and Reference of the Power Industry Engineering Quota Standards Management System to Quota Standards and Cost Management in the Nuclear Engineering Field

Technical Paper Publication: ICONE32-2156

Yang Liu - Institute for Standardization of Nuclear Industry

Ruilin Dong - Institute for Standardization of Nuclear Industry

Shaolin Zhang - Institute for Standardization of Nuclear Industry

Track6-4 Standardization of nuclear power plants

8:30 am – 10 am, C-114

Session Chair:

Session Co-Chair:

RESERCH ON EQUIPMENT QUALIFICATION STANDARDS FOR AUTOMATIC FIRE ALARM SYSTEM IN NUCLEAR POWER PLANT

Technical Paper Publication: ICONE32-0038

Chen Zhang - China Nuclear Power Engineering Co., Ltd

Linna Zhang - China Nuclear Power Engineering Co., Ltd.

A Brief Discussion on the Standardization Management of Material Master Data in Nuclear Power Projects

Technical Paper Publication: ICONE32-0131

Chen Shi - China Nuclear Power Engineering Co., Ltd.

Xiao Yuan - China Nuclear Power Engineering Co., Ltd.

Studies on J-integral estimation of pipeline with circumferential surface crack based on finite element analysis

Technical Paper Publication: ICONE32-0868

Yingke Li - China Productivity Center for Machinery Co., Ltd

Xiaomin Tan - Nuclear Power Operations Research Institute, China

Yuhan Wang - Nuclear Power Operations Research Institute, China

Jun Pan - China Productivity Center for Machinery Co., Ltd

Zhangxing Chen - China Productivity Center for Machinery Co., Ltd

Chang Liu - China Productivity Center for Machinery Co., Ltd

Xihui Su - China Productivity Center for Machinery Co., Ltd

Analysis of fusion reactors design safety requirements

Technical Paper Publication: ICONE32-0891

Qiwei TIAN - China Nuclear Power Engineering Co., Ltd

Xiangyi WANG - China Nuclear Power Engineering Co., Ltd

Yijie QIAN - China Nuclear Power Engineering Co., Ltd

Haifu SHI - China Nuclear Power Engineering Co., Ltd

Chong LI - China Nuclear Power Engineering Co., Ltd

MATERIAL RELOCATION TEST STUDY OF PELLET TO CLADDING INTERACTION IN FAST REACTOR DESIGN

Technical Paper Publication: ICONE32-2033

Yan PENG - China Institute of Atomic Energy

Track1-2 Material fatigue effect

10:30 am – 12 pm, C-101AB

Session Chair:

Session Co-Chair:

DIAGNOSIS OF WORN LABYRINTH IN A 16 MW STEAM TURBINE BEARING

Technical Paper Publication: ICONE32-2194

KAMORUDEEN ABIDOGUN- Lead Engineer, Saudi Aramco

RESEARCH ON THE THERMAL AGING BEHAVIOR OF SMAW WELDED JOINTS FOR PRIMARY COOLANT PIPING

Technical Paper Publication: ICONE32-0488

Shuang Qi - Materials Engineering Research Center, Suzhou Nuclear Power Research Institute

Wangjie Qian - Materials Engineering Research Center, Suzhou Nuclear Power Research Institute

Guannan Jiang - Daya Bay Nuclear Power Operations and Management Co.,Ltd

Yinghui An - Daya Bay Nuclear Power Operations and

Management Co.,Ltd

Minyu Fan - Materials Engineering Research Center, Suzhou Nuclear Power Research Institute

Weiwei Yu - Materials Engineering Research Center, Suzhou Nuclear Power Research Institute

Kuiyuan Fang - Daya Bay Nuclear Power Operations and Management Co.,Ltd

Ping Huang - Materials Engineering Research Center, Suzhou Nuclear Power Research Institute

Kexin Cai - Materials Engineering Research Center, Suzhou Nuclear Power Research Institute

Thermal Stress and Fatigue Analyses of RRA Heat Exchanger Under The condition of Increasing The Preheating Rate of RRA System

Technical Paper Publication: ICONE32-1375

Feifei TANG - Suzhou Nuclear Power Research Institute Co.,Ltd.

Yongjun Gao - Suzhou Nuclear Power Research Institute Co.,Ltd.

Research Progress of Creep Life Prediction Methods for High-Temperature Structural Materials

Technical Paper Publication: ICONE32-1761

Xu Li - Huaneng Nuclear Energy Technology Research Institute Co., Ltd.

Qingwu Wang - Huaneng Nuclear Energy Technology Research Institute Co., Ltd.

Yingjie Zhan - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd.

A COMPARATIVE STUDY OF NUMERICAL ANALYSIS METHODS FOR THE STRAIN RATE OF PWR ENVIRONMENTAL FATIGUE CORRECTION FACTOR

Technical Paper Publication: ICONE32-1853

xuejiao shao - National Key Laboratory of Nuclear Reactor Technology , Nuclear Power Institute of China

hai xie - National Key Laboratory of Nuclear Reactor Technology , Nuclear Power Institute of China

xiaoming bai - National Key Laboratory of Nuclear Reactor

Technology, Nuclear Power Institute of China

hui li - National Key Laboratory of Nuclear Reactor Technology
, Nuclear Power Institute of China

jianhao zhang - National Key Laboratory of Nuclear Reactor
Technology, Nuclear Power Institute of China

shuai liu - National Key Laboratory of Nuclear Reactor
Technology, Nuclear Power Institute of China

daoping liu - National Key Laboratory of Nuclear Reactor
Technology, Nuclear Power Institute of China

AN APPROACH TO PREDICT THE LONG-TERM CREEP LIFE OF METAL MATERIALS BASED ON AN IMPROVED LM PARAMETER METHOD

Technical Paper Publication: ICONE32-1882

Hui Li - National Key Laboratory of Nuclear Reactor
Technology, Nuclear Power Institute of China

Xiaoming Bai - National Key Laboratory of Nuclear Reactor
Technolog, Nuclear Power Institute of China

Xuejiao Shao - National Key Laboratory of Nuclear Reactor
Technology, Nuclear Power Institute of China

Jianhao Zhang - National Key Laboratory of Nuclear Reactor
Technology, Nuclear Power Institute of China

Jun Tian - National Key Laboratory of Nuclear Reactor
Technology, Nuclear Power Institute of China

Binyang Wu - National Key Laboratory of Nuclear Reactor
Technology, Nuclear Power Institute of China

Research on Key Technologies for Nuclear Power Plant Life Extension Based on Fatigue Monitoring and Transient Statistics

Technical Paper Publication: ICONE32-2111

Fengxian Zhu - Huaneng Hainan Changjiang Nuclear Power
Co., Ltd

Jilan Zhang - Huaneng Hainan Changjiang Nuclear Power Co., Ltd

Ke Ren - Huaneng Hainan Changjiang Nuclear Power Co., Ltd

Xinhui Yang - Huaneng Hainan Changjiang Nuclear Power Co., Ltd

Shan Xue - Hainan University

Track2-2 Nuclear Reactor Materials (II)

10:30 am – 12 pm, C-102

Session Chair:

Session Co-Chair:

HIGH TEMPERATURE CORROSION BEHAVIORS OF INCONEL 617 IN HELIUM CONTAINING TRACE IMPURITIES

Technical Paper Publication: ICONE32-0066

Wei Zheng - Nuclear Power Institute of China

Haoxiang Li - Nuclear Power Institute of China

Tiebo Liang - Nuclear Power Institute of China

Lei Li - Nuclear Power Institute of China

Jingwei Yi - Nuclear Power Institute of China

Huaqiang Yin - Tsinghua University

Tao Ma - Tsinghua University

FORMATION AND EVOLUTION OF MICROSTRUCTURE IN DISSIMILAR MATERIAL JOINTS OF NUCLEAR POWER PLANTS

Technical Paper Publication: ICONE32-0259

Xiaogang Li - Tsinghua University

Xuelan Yan - Gansu Academy of Sciences

Xu Zhang - Beijing Institute of Astronautical Systems
Engineering

Haiquan Zhang - Tsinghua University

Study on Microstructure and Mechanical Properties Evaluation of Additive Manufacturing Materials for Nuclear Power Applications

Technical Paper Publication: ICONE32-0354

Jian-hui Shi - Yangjiang Nuclear Power Co.,Ltd.

Hui-qiang Liu - Suzhou Nuclear Power Research Institute
Co.,Ltd.

Zheng-ping Liu - Yangjiang Nuclear Power Co.,Ltd.

Rong-cheng Wang - Sino-French Institute of Nuclear
Engineering and Technology, Sun Yat-sen University

Hai-tao Dong - Suzhou Nuclear Power Research Institute
Co.,Ltd.

Huan-chun Wu - Suzhou Nuclear Power Research Institute Co.,Ltd.

ANALYSIS OF NITROGEN CONTENT IN CARBON MATERIALS OF HIGH-TEMPERATURE GAS-COOLED REACTOR

Technical Paper Publication: ICONE32-0605

Bin Du - Tsinghua University

Xuedong He - Tsinghua University

Tao Ma - Tsinghua University

Wei Zheng - Nuclear Power Institute

Study on oxidation kinetics of Incoloy 800H in He-ppmO₂ atmosphere

Technical Paper Publication: ICONE32-0628

Haoxiang Li - Nuclear Power Institute of China

Dapeng Yan - Nuclear Power Institute of China

Zihao Zhu - Nuclear Power Institute of China

Jintao Mo - Nuclear Power Institute of China

Xiaotong Wang - Nuclear Power Institute of China

Wei Zheng - Nuclear Power Institute of China

Bin Du - Tsinghua University

Huaqiang Yin - Tsinghua University

THREE-DIMENSIONAL PHASE-FIELD SIMULATION OF ISOTHERMAL $\beta \rightarrow \omega$ PHASE TRANSFORMATION IN TI-V ALLOYS

Technical Paper Publication: ICONE32-0659

Shisen Gao - School of Nuclear Science and Technology, Xi'an Jiaotong University

Xvxi Liu - School of Nuclear Science and Technology, Xi'an Jiaotong University

Wenbo Liu - School of Nuclear Science and Technology, Xi'an Jiaotong University, Shaanxi Key Laboratory of Advanced Nuclear Energy and Technology

The sliding wear behavior and model of plasma nitrided precipitation hardening stainless steel in high temperature water

Technical Paper Publication: ICONE32-1294

Zhongli Han - China Nuclear Power Technology Research Institute

Wenhua Zhuang - Chengdu University

Xu Wang - China Nuclear Power Technology Research Institute

Liutao Chen - China Nuclear Power Technology Research Institute

Lefu Zhang - Shanghai Jiao Tong University

Track 7-2 Thermal-hydraulic experiments and measurement methods (II)

10:30 am – 12 pm, C-103

Session Chair:

Session Co-Chair:

EXPERIMENTAL STUDY ON THE EROSION OF HELIUM STRATIFICATION BY VERTICAL AIR JET ON CABLE TEST FACILITY

Technical Paper Publication: ICONE32-1065

Xiaochuan Wang - China Nuclear Power Engineering Co.,Ltd

Ningxi Jia - China Nuclear Power Engineering Co.,Ltd

Zhuo Liu - China Nuclear Power Engineering Co.,Ltd

Mingrui Yu - China Nuclear Power Engineering Co.,Ltd

Yidan Yuan - China Nuclear Power Engineering Co.,Ltd

Simple understanding of natural circulation thermal-hydraulic characteristics through experimental observations

Technical Paper Publication: ICONE32-1131

Nisrene M.Ahmed - Harbin Engineering University/Sudanese nuclear and Radiological Regulatory Authority

Puzhen Gao - Harbin Engineering University

Oke Samuel OLAOLUWA - Harbin Engineering University

Abdelgadir Eltayeb - Sudanese Nuclear and Radiological Regulatory Authority

Verification and application of Reynolds similarity criterion for pressure drop experiments of complex structure in advanced reactor using alternative fluids

Technical Paper Publication: ICONE32-1288

Wentao SHI - China General Nuclear Research Institute

Xiangyu YUN - China General Nuclear Research Institute

Lei ZHANG - China General Nuclear Research Institute

Xiaohang WU - China General Nuclear Research Institute

Huiyong ZHANG - China General Nuclear Research Institute

Junying XU - China General Nuclear Research Institute

Yuzhou LU - China General Nuclear Research Institute

Bing DU - China General Nuclear Research Institute

Peng TANG - China General Nuclear Research Institute

Chengtao LI - Harbin Engineering University

Xiaochang LI - Harbin Engineering University

Ruifeng TIAN - Harbin Engineering University

Experimental Study on Flow Instability in Parallel Multi-Helical Tubes

Technical Paper Publication: ICONE32-1501

Xiong Zheng - China Nuclear Power Technology Research Institute

Yaxin Gao - China Nuclear Power Technology Research Institute

Jiming Lin - China Nuclear Power Technology Research Institute

Yisong Hu - China Nuclear Power Technology Research Institute

Dechang Cai - China Nuclear Power Technology Research Institute

Zhaojun Yuan - China Nuclear Power Technology Research Institute

An Experimental Investigation on the Effect of Condensate Water Volume on Condensation-Induced Water Hammer

Technical Paper Publication: ICONE32-1632

Minchao Liang - North China Electric Power University

Jiaming Zhao - China Nuclear Power Engineering Co.,Ltd

Rongyong Xue - North China Electric Power University

Jiarui Zhang - North China Electric Power University

Wentao GUO - North China Electric Power University

Shengfei Wang - North China Electric Power University

EXPERIMENTAL INVESTIGATION OF IODINE REMOVAL EFFICIENCY DURING THE POOL SCRUBBING

Technical Paper Publication: ICONE32-1652

Shumiao Zhao - Tsinghua University

Yiyang Zhang - Tsinghua University

Yating Wang - Tsinghua University

Zhikai You - Tsinghua University

Track 8-2 Flow-induced Vibration

10:30 am – 12 pm, C-104A

Session Chair:

Session Co-Chair:

Numerical Study of Pressure Oscillations of Jets in a Pressurized Containment System

Technical Paper Publication: ICONE32-0050

Facheng Chen - China Nuclear Power Technology Research Institute

Zhihong Tang - China Nuclear Power Technology Research Institute

Junfeng Li - China Nuclear Power Technology Research Institute

Flow-induced vibration analysis of large-scale Steam generator in integrated Sodium-cooled Fast Reactor

Technical Paper Publication: ICONE32-0665

Shan He - CIAE

Shuai Xing - CIAE

Lina Zhu - CIAE

Zhiguang Wu - CIAE

CFD FOR STRUCTURAL STABILITY OF CROSSFLOW OVER TANDEM CYLINDERS

Technical Paper Publication: ICONE32-1101

Ahmed Abuelyamen - Khalifa University

Ahmed Alkaabi - Khalifa University

Saeed Alameri - Khalifa University

Imran Afgan - Khalifa University

Numerical Simulation Study on Flow-Induced Vibration Characteristics of Single-Row and Multi-Row Helical Tube Bundles under Lead-Bismuth Fluid Flow

Technical Paper Publication: ICONE32-1218

Zhong Xu - Harbin Engineering University

Ruifeng Tian - Harbin Engineering University

Xiaochang Li - Harbin Engineering University
Haisong Wang - Nuclear Power Institute of China
Sichao Tan - Harbin Engineering University

.....
NUMERICAL STUDY ON FLOW-INDUCED VIBRATION CHARACTERISTICS OF WIRE-WRAPPED FUEL ASSEMBLIES IN LEAD-BISMUTH ENVIRONMENT

Technical Paper Publication: ICONE32-1256

Shusheng Dai - Harbin Engineering University
Xiaochang Li - Harbin Engineering University
Ruifeng Tian - Harbin Engineering University
Yu Zhang - Nuclear Power Institute of China
Hai Zhao - Sichuan University of Science & Engineering
Sichao Tan - Harbin Engineering University

.....
NUMERICAL SIMULATION STUDY ON FLOW-INDUCED VIBRATION OF STEAM COIL HEAT EXCHANGER IN METAL REACTOR

Technical Paper Publication: ICONE32-2047

Xinming Zhu - CGN Research Institute Co., LTD.
Guangyu Jiang - CGN Research Institute Co., LTD.
Xiang Li - CGN Research Institute Co., LTD.
Qianwen Wei - CGN Research Institute Co., LTD.

.....
Track 9-2 Radioactive Waste Treatment Technology (II)
-Solid Waste

10:30 am – 12 pm, C-104B

Session Chair:

Session Co-Chair:

A brief discussion of intercrystalline corrosion and its influence factors on nickel alloy metal materials for radioactive waste treatment usage

Technical Paper Publication: ICONE32-0379

Ninghui HAN - China Nuclear Power Engineering Co., Ltd.
Xiao FAN - China Nuclear Power Engineering Co., Ltd.

LONG-TERM CONSTRAINT OF 129-I: A REVIEW OF IMMOBILIZATION OF WASTE SILVER ADSORBENTS FROM SPENT FUEL REPROCESSING FACILITIES

Technical Paper Publication: ICONE32-0434

Yumeng Hou - CNNC Long'an Co., Ltd.
Meng Wei - CNNC Long'an Co., Ltd.

.....
A REVIEW: TREATMENT TECHNOLOGIES OF RADIOACTIVE SPENT ION EXCHANGE RESINS BASED ON BIBLIOMETRIC ANALYSIS

Technical Paper Publication: ICONE32-0860

Mengying Lyu - Chongqing Electric Power College
Xianghong Fang - Chongqing Electric Power College
Han Zeng - Chongqing Electric Power College
Beixi Tang - CQJianAn Instrument Co., Ltd

.....
SUBCRITICAL WATER TREATMENT OF SPENT TANNIN-BASED URANIUM RECOVERY ADSORBENT

Technical Paper Publication: ICONE32-1152

Toshihiro Iwamoto - Japan Atomic Energy Agency
Kohei Ohmori - Japan Atomic Energy Agency
Yoichi Arai - Japan Atomic Energy Agency
Tomomasa Funakoshi - Japan Atomic Energy Agency
Sou Watanabe - Japan Atomic Energy Agency
Masahiro Nakamura - Japan Atomic Energy Agency
Masaru Watanabe - Tohoku University

.....
RESEARCH ON THE POTENTIAL APPLICATION OF NOVEL ZEOLITE MATERIALS IN THE TREATMENT OF RADIOACTIVE LIQUID, GAS AND SOLID WASTE

Technical Paper Publication: ICONE32-1301

Yarui Li - Harbin Engineering University

.....
Research on the Optimization of High-Dose Rate Radioactive Waste Filter Cartridges Volume Reduction and Compaction Capacity

Technical Paper Publication: ICONE32-1939

Dong Li - China Nuclear Power Engineering Co.,Ltd

Xueling Zhang - China Nuclear Power Engineering Co.,Ltd

Chaoping Xiao - China Nuclear Power Engineering Co.,Ltd

Houshun Huang - TNPJVC, Taishan City, China

Xinghuan Luo - China Nuclear Power Engineering Co.,Ltd

Track1-11 Chemistry and Water Quality Control (Primary) I

10:30 am – 12 pm, C-105A

Session Chair:

Session Co-Chair:

Study on aluminum removal during Hot Functional Test of primary circuit at PWR Nuclear Power Plant

Technical Paper Publication: ICONE32-0037

Zhaohui Tian - Suzhou Nuclear Power Research Institute Co., Ltd.

Yun Sun - Suzhou Nuclear Power Research Institute Co., Ltd.

Zefeng Yu - Fujian Ningde Nuclear Power Co., Ltd., China

Lijun Song - Suzhou Nuclear Power Research Institute Co., Ltd.

Zhipeng Wang - Suzhou Nuclear Power Research Institute Co., Ltd.

Canshuai Liu - Suzhou Nuclear Power Research Institute Co., Ltd.

Xiacong Zhan - Fujian Ningde Nuclear Power Co., Ltd., China

Jing Cao - Fujian Ningde Nuclear Power Co., Ltd., China

Fuping Li - Fujian Ningde Nuclear Power Co., Ltd., China

Yicai Liang - Fujian Ningde Nuclear Power Co., Ltd., China

Application Practice of Zinc Injection Technology in the Primary Circuit of Hualong Nuclear Power Plants Units

Technical Paper Publication: ICONE32-0220

Yanyan Zhang - CGN Huizhou Nuclear Power CO.,Ltd

Wei Zou - Suzhou Nuclear Power Research Institute Co.,Ltd

Zhaohui Tian - Suzhou Nuclear Power Research Institute Co.,Ltd

Zhipeng Wang - Suzhou Nuclear Power Research Institute Co.,Ltd

Genxian Lin - Suzhou Nuclear Power Research Institute Co.,Ltd

Yun Sun - Suzhou Nuclear Power Research Institute Co.,Ltd

Fuhai Li - Suzhou Nuclear Power Research Institute Co.,Ltd

HIGH-PRECISION BORON CONCENTRATION DETECTION IN THE PRIMARY CIRCUIT OF PRESSURIZED WATER REACTOR BASED ON RAMAN SPECTROSCOPY

Technical Paper Publication: ICONE32-0313

Shi-Tao Hu - China Jiliang University

Bo Xu - China Nuclear Power Operation Management Co., Ltd.

Peng-Fan Xiong - China Nuclear Power Operation Management Co., Ltd.

Gang Wu - China Nuclear Power Operation Management Co., Ltd.

Yan-Long Meng - China Jiliang University

Wen-Jie Li - China Jiliang University

Shu Wang - China Jiliang University

Chun-Lian Zhan - China Jiliang University

Zheng-Ye Zhou - China Nuclear Power Operation Management Co., Ltd.

Study On The High-Coincidence De-Baseline Method Of Boric Acid Raman Spectroscopy

Technical Paper Publication: ICONE32-0343

Wen-jie Li - China Jiliang University

Shi-Tao Hu - China Jiliang University

Bo Xu - China Nuclear Power Operation Management Co., Ltd

Peng-Fan Xiong - China Nuclear Power Operation Management Co., Ltd

Gang Wu - China Nuclear Power Operation Management Co., Ltd

Yan-Long Meng - China Jiliang University

Shu Wang - China Jiliang University

Chun-Lian Zhan - China Jiliang University

Zheng-Ye Zhou - China Nuclear Power Operation Management Co., Ltd

Release and burnup analysis of soluble fission products during transient power reduction in fuel rod failure

Technical Paper Publication: ICONE32-0362

Shengyi Zhang - Harbin Engineering University

Yushou Song - Harbin Engineering University

Jiawen Hu - Harbin Engineering University
Chenchen Li - Harbin Engineering University
Haikuan Jia - Harbin Engineering University
Chunzhi Zhou - State Key Laboratory of NBC Protection for Civilian, China
Jing Du - China Kunlun Contracting & Engineering Corporation

Application of Primary Circuit Zinc Addition in Technology and Design of Zinc Adding Device

Technical Paper Publication: ICONE32-2193

Deqi Chen - Chongqing University
Yi Li - Nuclear Power Institute of China

Track2-11 Fast Reactor Physics (VI)

10:30 am – 12 pm, C-105B

Session Chair:

Session Co-Chair:

Integrated Fast Reactor Transport-Burnup Coupled Calculation and Analysis

Technical Paper Publication: ICONE32-0223

Kangkang Yang - China Institute of Atomic Energy
Mingyu Wu - China Institute of Atomic Energy

Analysis of Hydrogen Isotopes in Helium by Gas Chromatograph with Coated Cryogenic Column of Fusion Reactors

Technical Paper Publication: ICONE32-0301

Liling Yang - China Institute of Atomic Energy

Self-development and Online Verification of Trace Components Analysis in Process Gas by Chromatography

Technical Paper Publication: ICONE32-0302

Liling Yang - China Institute of Atomic Energy
Qin Zhan - China Institute of Atomic Energy

Monte Carlo Variance Reduction Method Based on Adjoint Weight Window Method

Technical Paper Publication: ICONE32-0498

Xiaodi Ma - CHINA INSTITUTE OF ATOMIC ENERGY
Jianping Xu - CHINA INSTITUTE OF ATOMIC ENERGY
Feng Liu - CHINA INSTITUTE OF ATOMIC ENERGY
Mingze Sun - CHINA INSTITUTE OF ATOMIC ENERGY

GASEOUS FISSION PRODUCTS MIGRATION BEHAVIOR MODELING AND SENSITIVITY ANALYSIS FOR A MOLTEN SALT REACTOR

Technical Paper Publication: ICONE32-0544

Bolin Fu - State Key Laboratory of Thorium Energy, Shanghai Institute of Applied Physics, CAS

Jianhui Wu - State Key Laboratory of Thorium Energy, Shanghai Institute of Applied Physics, CAS

Xiangzhou Cai - State Key Laboratory of Thorium Energy, Shanghai Institute of Applied Physics, CAS

Jun Zhou - State Key Laboratory of Thorium Energy, Shanghai Institute of Applied Physics, CAS

Jingen Chen - State Key Laboratory of Thorium Energy, Shanghai Institute of Applied Physics, CAS

Kinetic model of solid fission products in Molten Salt Reactors based on Lattice Boltzmann Method

Technical Paper Publication: ICONE32-0561

Haotian Bao - Shanghai Institute of Applied Physics

Jianhui Wu - Shanghai Institute of Applied Physics

Chaoyue Wang - Shanghai Institute of Applied Physics

Jingen Chen - Shanghai Institute of Applied Physics

Xiangzhou Cai - Shanghai Institute of Applied Physics

Track 8-11 Enhancement of Condensation Heat Transfer

10:30 am – 12 pm, C-106A

Session Chair:

Session Co-Chair:

Numerical research on the heat transfer enhancement of steam-air condensation under various tube bundle arrangements

Technical Paper Publication: ICONE32-0727

Daiyong Song - Harbin Engineering University

Ruihan Jing - Harbin Engineering University

Xu Zhang - Harbin Engineering University

Xinyi Shen - Harbin Engineering University

Zhongning Sun - Harbin Engineering University

Haozhi Bian - Harbin Engineering University

**NUMERICAL INVESTIGATION ON THE
ENHANCEMENT OF STEAM-AIR CONDENSATION
HEAT TRANSFER OUTSIDE TUBES WITHIN GUIDE
SLEEVES**

Technical Paper Publication: ICONE32-0761

Liang Ding - Harbin Engineering University

Xu Zhang - Harbin Engineering University

Ruihan Jing - Harbin Engineering University

Xinyi Shen - Harbin Engineering University

Zhongning Sun - Harbin Engineering University

Haozhi Bian - Harbin Engineering University

**SENSITIVITY ANALYSIS OF DIFFUSION BOUNDARY
LAYER CONDENSATION MODEL WITH VARIOUS
TURBULENCE MODELS AND WALL FUNCTIONS**

Technical Paper Publication: ICONE32-0969

Ruihan Jing - Harbin Engineering University

Xu Zhang - Harbin Engineering University

Xinyi Shen - Harbin Engineering University

Chao Jiang - Harbin Engineering University

Haozhi Bian - Harbin Engineering University

Jianjun Wang - Harbin Engineering University

**Sensitivity analysis of new variants of partitioned
convection system**

Technical Paper Publication: ICONE32-1234

Siwei Wang - College of Nuclear Science and Technology,
Harbin Engineering University

Xiang Wang - College of Nuclear Science and Technology,
Harbin Engineering University

Study on Cavitation Phenomenon at DVI Nozzle

Technical Paper Publication: ICONE32-1463

GuoGang Bao - China Nuclear Power Technology Research
Institute, CO., Ltd.

JingZhi Chen - SJTU Paris Elite Institute of Technology,
Shanghai Jiao Tong University

ZhiKang Lin - China Nuclear Power Technology Research
Institute, CO., Ltd.

JianHua Cao - China Nuclear Power Technology Research
Institute, CO., Ltd.

Liang Chen - SJTU Paris Elite Institute of Technology, Shanghai
Jiao Tong University

**PRESSURE PULSATION CHARACTERISTICS OF
NUCLEAR SLEEVE CONTROL VALVE UNDER
CAVITATING FLOW CONDITIONS**

Technical Paper Publication: ICONE32-1806

Xuan-jie Gu - Zhejiang University

An-qi Guan - Zhejiang University

Ling-feng Hang - Zhejiang University

Jin-yuan Qian - Zhejiang University

Zhi-jiang Jin - Zhejiang University; Institute of Wenzhou,
Zhejiang University

Track 7-11 Nuclear reactor safety analysis (III)

10:30 am – 12 pm, C-106B

Session Chair:

Session Co-Chair:

**Analysis and research on long-term safety and stability
state of VVER-1200 after FLB accident**

Technical Paper Publication: ICONE32-0007

Chenshi Yang - China Nuclear Power Engineering Co., Ltd.

Yaru Li - China Nuclear Power Engineering Co., Ltd.

**Study of the effect of different decay heat on accident
progression during mid-Loop operation for CPR1000**

Technical Paper Publication: ICONE32-0464

Xiaofeng Ju - Suzhou Nuclear Power Research Institute Co., Ltd
Yongxiang Wang - Suzhou Nuclear Power Research Institute Co., Ltd

Yong Zhang - Suzhou Nuclear Power Research Institute Co., Ltd
Liangwang Xu - Suzhou Nuclear Power Research Institute Co., Ltd
Jian Zhang - Suzhou Nuclear Power Research Institute Co., Ltd
Xu Yang - Suzhou Nuclear Power Research Institute Co., Ltd
Jun Wei - Suzhou Nuclear Power Research Institute Co., Ltd
Dingfang Xu - Suzhou Nuclear Power Research Institute Co., Ltd

The analysis on the large break loss of coolant accident under the impacts of stretch-out operation of the third-generation pressurized water reactor nuclear power plant
 Technical Paper Publication: ICONE32-0487

Yuan HU - China Nuclear Power Engineering Co., Ltd
Yijun LV - China Nuclear Power Engineering Co., Ltd
Fangqing YANG - China Nuclear Power Engineering Co., Ltd

Thermal safety analysis of brazed water-cooled beam window under extreme operating conditions
 Technical Paper Publication: ICONE32-0664

Zhang Hao - Institute of Advanced Light Source Facilities, Shenzhen, China

DYNAMIC RESPONSE OF VCT OUTLET CONCENTRATION IN BORATION OPERATION
 Technical Paper Publication: ICONE32-0829

Xiangyu Chi - China Nuclear Power Engineering Co.,Ltd.
Yaru Li - China Nuclear Power Engineering Co.,Ltd.
Liang Ding - China Nuclear Power Engineering Co.,Ltd.
Pei Yu - China Nuclear Power Engineering Co.,Ltd.
Jiazhi Liu - China Nuclear Power Engineering Co.,Ltd.

THERMAL ANALYSIS OF FRESH FUEL TRANSPORT CASK UNDER ACCIDENT TRANSPORT CONDITIONS
 Technical Paper Publication: ICONE32-0985

Youxin Zhou - China Nuclear Power Technology Research Institute Co.Ltd.

Wei Yao - China Nuclear Power Technology Research Institute Co.Ltd.

Xin Wang - China Nuclear Power Technology Research Institute Co.Ltd.

Jie Ye - China Nuclear Power Technology Research Institute Co.Ltd.

Yiran Liu - China Nuclear Power Technology Research Institute Co.Ltd.

Track 9-12 Digital research and applications (II) 10:30 am – 12 pm, C-107A

Session Chair:

Session Co-Chair:

RESEARCH ON OPTIMIZATION OF WAVELET DENOISING THRESHOLD FUNCTION IN PGNAA BASED ON EMPIRICAL MODE DECOMPOSITION TECHNOLOGY

Technical Paper Publication: ICONE32-0363

Hailong Xu - Northeast Normal University
Ke Gong - Northeast Normal University
Yingying Cao - Northeast Normal University
Pingwei Sun - Northeast Normal University
Shangrui Jiang - Northeast Normal University
Jiayu Li - Northeast Normal University
Sijia Zhou - Northeast Normal University
Jia Song - Northeast Normal University
Shengduo Liu - Northeast Normal University
Weiyang Zhang - Northeast Normal University
Siqi Liu - Northeast Normal University
Zebin Li - Northeast Normal University
Yuxuan Gu - Northeast Normal University
Yue Sun - Northeast Normal University
Shiwei Jing - Northeast Normal University

A compressed-sensing-based unfolding algorithm for neutron spectrum using method of optimal directions
 Technical Paper Publication: ICONE32-0420

Qimeng Fan - Rocket Force University of Engineering

Jialin Chen - Rocket Force University of Engineering

Ning Lv - Rocket Force University of Engineering

Study of the Solid Radiation Effects on the Electrode Plates of a Gas Ionization Chamber Based on the Monte Carlo Method

Technical Paper Publication: ICONE32-0620

Zhang Hongyin - Institute of Nuclear and New Energy Technology, Tsinghua University

Chang Jiahao - Institute of Nuclear and New Energy Technology, Tsinghua University

Zhang Helin - Fujian Ningde Nuclear Power Co.,Ltd

Jiang Zirou - Institute of Nuclear and New Energy Technology, Tsinghua University

Wang Zhentao - Institute of Nuclear and New Energy Technology, Tsinghua University

Tang Peng - Institute of Nuclear and New Energy Technology, Tsinghua University

Liu Xinjun - Fujian Ningde Nuclear Power Co.,Ltd

Research on Complex 2D Radiation Field Reconstruction Based on Improved Convolutional Neural Network

Technical Paper Publication: ICONE32-0894

hao hu - Tsinghua University

sheng fang - Tsinghua University

yuhan xu - Tsinghua University

jjiali wang - Tsinghua University

Tritium permeation models and their engineering applications in nuclear reactors

Technical Paper Publication: ICONE32-1075

Mengjie Wu - Tsinghua University

Jing Chen - CHINERGY CO., LTD, Beijing

Tirui Xia - CHINERGY CO., LTD, Beijing

Ziling Zhou - Tsinghua University

Yu Wang - Tsinghua University

Zhaowen Zhu - Nuclear and Radiation Safety Center, MEE, China

Liqiang Wei - Tsinghua University

Feng Xie - Tsinghua University

Jiejuan Tong - Tsinghua University

Scale Assessment of Emergency Decontamination Station for Nuclear Power Plants Based on Population Distribution

Technical Paper Publication: ICONE32-1177

Zhijie Tian - China Institute for Radiation Protection, Taiyuan, China

Bing Lian - China Institute for Radiation Protection, Taiyuan, China

Xingzhen Lyu - National Nuclear Emergency Response Technical Assistance Center, China

Anchang Deng - National Nuclear Emergency Response Technical Assistance Center, China

Qingjian Yang - Nanjing University of Information Science & Technology

Monte Carlo Computational and Experimental Study of Explosive Detection System Based on D-D Sealed Neutron Generator

Technical Paper Publication: ICONE32-1676

Yipin Jing - Jilin University, China

Dedong He - Zhenneng School, China

Track 16-3 Artificial Intelligence Application

10:30 am – 12 pm, C-107B

Session Chair:

Session Co-Chair:

Accelerated determination of entry conditions for faulty procedures via large language models and knowledge graphs

Technical Paper Publication: ICONE32-0853

Ben Qi - Tsinghua University

Xingyu Xiao - Tsinghua University

Jingang Liang - Tsinghua University

SUPER-RESOLUTION RECONSTRUCTION OF BUBBLE DISTRIBUTION BASED ON NEURAL NETWORKS

Technical Paper Publication: ICONE32-1233

Zhiyuan Sun - Tsinghua University

Deyang Gao - Tsinghua University

Jinyu Han - Tsinghua University

Wen He - Tsinghua University

Yanlin Li - Tsinghua University

Hanliang Bo - Tsinghua University

A MULTI-PHYSICS INFORMED MACHINE LEARNING MODEL TO PREDICT CRITICAL HEAT FLUX (CHF)

Technical Paper Publication: ICONE32-1240

Abdullah Al Mahmud - Department of Applied Quantum Physics & Nuclear Engineering, Graduate School of Engineering, Kyushu University, 744 Motoooka, Nishi-ku, Fukuoka 819-0395, Japan

Asao Kanta - Department of Applied Quantum Physics & Nuclear Engineering, Graduate School of Engineering, Kyushu University, 744 Motoooka, Nishi-ku, Fukuoka 819-0395, Japan

Koji Morita - Department of Applied Quantum Physics & Nuclear Engineering, Graduate School of Engineering, Kyushu University, 744 Motoooka, Nishi-ku, Fukuoka 819-0395, Japan

Wei Liu - Department of Applied Quantum Physics & Nuclear Engineering, Graduate School of Engineering, Kyushu University, 744 Motoooka, Nishi-ku, Fukuoka 819-0395, Japan

Augmented Reality in Nuclear Facilities: Insights from Experiments in the Mont Terri Underground Rock Laboratory, Switzerland

Technical Paper Publication: ICONE32-1462

Pascal Mosler - Institute of Numerical Methods and Informatics in Civil Engineering, Technical University of Darmstadt

Ole Christian Woock - Technical University of Darmstadt

Theo Kastner-Guhl - Technical University of Darmstadt

Martin Ziegler - Swiss Federal Office of Topography (swisstopo), Mont Terri URL

Uwe Rüppel - Institute of Numerical Methods and Informatics in Civil Engineering, Technical University of Darmstadt

Visualization of void fraction of Gas-liquid Two-phase Flow by Fuzzy Phase Classification Implemented in Electrical Impedance Tomography (fEIT)

Technical Paper Publication: ICONE32-1484

Fuyang Yang - Chiba university

Songshi Li - Chiba university

Asmara Sejati Prima - Chiba university

Shuichiro Miwa - Tokyo university

Masahiro Takei - Chiba university

Development of Drift Flux Correlations in Vertical Rod Bundle Flow Channels: Knowledge-Informed Artificial Neural Network Approaches (KINN-SHAP and KINN-DN)

Technical Paper Publication: ICONE32-1817

Mohamed Salem Taaryet - Harbin Engineering University

Xu Han - Harbin Engineering University

Jianjun Wang - Harbin Engineering University

Track 3-2 Instrumentation, Measurement and General Technology

10:30 am – 12 pm, C-108A

Session Chair:

Session Co-Chair:

DESIGN OF A MULTI-MRAD RADIATION-HARDENED AC-DC LED DRIVER

Technical Paper Publication: ICONE32-0421

Apeng Zhao - China Nuclear Power Technology Research Institute Co., Ltd.

Enlong Wang - Shaoxing Heshijie Technology Co., Ltd.

Guofeng Zhou - China General Nuclear Power Co., Ltd.

A NEW METHOD TO RECOGNIZE CONTROL RODS POSITION BASED ARRAY-CONTINUITY CAPACITOR

Technical Paper Publication: ICONE32-0739

Benke Qin - Tsinghua University

Wen He - Tsinghua University

.....
**Review on The Mechanism of Performance Degradation
of Pressure Sensors Under Mechanical Factors**

Technical Paper Publication: ICONE32-1005

Xuanyu Shen - Tsinghua University

Yunlong Zhu - Tsinghua University

Pengcheng Li - Tsinghua University

Xiaojin Huang - Tsinghua University

.....
**Review on the degradation of FBG sensors in humid
environment**

Technical Paper Publication: ICONE32-1134

Feier Zhao - Tsinghua University

Yunlong Zhu - Tsinghua University Institute of Nuclear and
New Energy Technology

Xuanyu Shen - Tsinghua University

Shuqiao Zhou - Tsinghua University Institute of Nuclear and
New Energy Technology

.....
**DESIGN AND TESTING OF RADIATION-HARDENED
TEMPERATURE SENSORS**

Technical Paper Publication: ICONE32-1145

Hong Ying - Suzhou Nuclear Power Research Institute

Tianyu Hui - Suzhou Nuclear Power Research Institute

Tao Zhang - Suzhou Nuclear Power Research Institute

Tao Liu - Suzhou Nuclear Power Research Institute

Binfeng Wang - Suzhou Nuclear Power Research Institute

Tang Tang - Suzhou Nuclear Power Research Institute

Yingjie Wang - Suzhou Nuclear Power Research Institute

Nan Lin - Suzhou Nuclear Power Research Institute

Qiang Wang - Suzhou Nuclear Power Research Institute

.....
**Design of Universal Servo Control Module Based on
Three-dimensional lamination process Technology**

Technical Paper Publication: ICONE32-1898

Mengying He - Xi 'an Institute of Microelectronics, China

Aerospace Industry Corp

Hui Wang - Xi 'an Institute of Microelectronics, China
Aerospace Industry Corp.

Lianqiang Ma - Xi 'an Institute of Microelectronics, China
Aerospace Industry Corp.

Guojun Chai - Naval University of Engineering

Mo Yang - Xi 'an Institute of Microelectronics, China Aerospace
Industry Corp.

Qiaoling He - Xi 'an Institute of Microelectronics, China
Aerospace Industry Corp.

Jinliang He - Wuhan Second Ship Design and Research Institute

Mo Tao - State Key Laboratory of Marine Thermal Energy and
Power, Wuhan Second Ship Design and Research Institute

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Track 16-8 Reactor Materials and Multiphysics Analysis

10:30 am – 12:00 pm, C-108B

Session Chair:

Session Co-Chair:

**Cellular Automaton Model of Stainless Steel Corrosion/
Oxidation in Oxygenated LBE**

Technical Paper Publication: ICONE32-0170

Junyao Chen - North China Electric Power University

Zimeng Qin - North China Electric Power University

Chenxi Yang - North China Electric Power University

Xuefeng Lyu - North China Electric Power University

Fang Liu - North China Electric Power University

Yongqi Huang - Huaneng Clean Energy Research Institute Co., Ltd.

Yu Yu - North China Electric Power University

Shengfei Wang - North China Electric Power University

.....
**Effect of gas flow rate on the corrosion behavior of
Inconel 617 superalloy in helium gas containing traces of
oxygen or methane**

Technical Paper Publication: ICONE32-0621

Bin Du - Tsinghua University

Penghui Xiao - Tsinghua University

Huaqiang Yin - Tsinghua University

Xuedong He - Tsinghua University

Tao Ma - Tsinghua University

Wei Zheng - Nuclear Power Institute

CONSTRUCTION OF CATION-MODIFIED INORGANIC MATERIALS FOR THE ADSORPTION OF CESIUM

Technical Paper Publication: ICONE32-0630

Hongji Sang - Shanghai Jiao Tong University

Jiawei Zheng - Shanghai Jiao Tong University

Zhennan Wu - Shanghai Jiao Tong University

Jianing Xing - Shanghai Jiao Tong University

Yan Wu - Shanghai Jiao Tong University

Yuezhou Wei - Shanghai Jiao Tong University

A multi-fidelity data fusion method for prediction of nuclear power plant operation parameters

Technical Paper Publication: ICONE32-1352

Ke Pu - Shanghai Jiao Tong University

Houde Song - Shanghai Jiao Tong University

Meiqi Song - Shanghai Jiao Tong University

Xiaojing Liu - Shanghai Jiao Tong University

Multiphysics Analysis of the Burst Behavior of Chromium Coating Zr-4 Cladding Under LOCA Condition

Technical Paper Publication: ICONE32-1406

Zefeng Zhuang - South China University of Technology

Rong Liu - South China University of Technology

Atomic modelling of irradiation-induced microstructure evolution and swelling in uranium nitride

Technical Paper Publication: ICONE32-1977

Qiuguo Yang - KTH Royal Institute of Technology, Nuclear Science and Engineering, Stockholm, Sweden

Ida Andersson Neretnieks - KTH Royal Institute of Technology

Jonas Planck - KTH Royal Institute of Technology

Ebrahim Mansouri - KTH Royal Institute of Technology

Aymeric Le Harivel de Gonneville - École polytechnique

Pär Olsson - KTH Royal Institute of Technology

MECHANICAL PROPERTIES OF FECOCRNI-BASED QUINARY HEAS BY MOLECULAR DYNAMICS SIMULATION

Technical Paper Publication: ICONE32-1979

Ding Wenli - Harbin Institute of Technology

Zhang Haochun - Harbin Institute of Technology

Huo Enbo - Harbin Institute of Technology

Track13-3 Hazard PSA-I

10:30 am – 12 pm, C-109A

Session Chair:

Session Co-Chair:

Risk-informed fire protection method and its application in nuclear power plants

Technical Paper Publication: ICONE32-0026

Wang Chao - China Nuclear Power Technology Research Institute

Zhang Xiaoming - China Nuclear Power Technology Research Institute

APPLICATION OF DETAILED CIRCUIT FAILURE AND SPURIOUS OPERATION ANALYSIS IN INTERNAL FIRE PSA IN NUCLEAR POWER PLANT

Technical Paper Publication: ICONE32-0263

Xianwen zeng - State Key Laboratory of Nuclear Power Safety Technology and Equipment, China Nuclear Power Engineering Co., Ltd.

Modi Lin - State Key Laboratory of Nuclear Power Safety Technology and Equipment, China Nuclear Power Engineering Co., Ltd.

Jinhui Li - State Key Laboratory of Nuclear Power Safety Technology and Equipment, China Nuclear Power Engineering Co., Ltd.

Haiqing Deng - State Key Laboratory of Nuclear Power Safety Technology and Equipment, China Nuclear Power Engineering Co., Ltd.

APPLICATION OF FIRE SIMULATION IN INTERNAL FIRE PSA IN NUCLEAR POWER PLANT

Technical Paper Publication: ICONE32-0291

Yulong Wu - China Nuclear Power Engineering Co., Ltd.

Jinhui Li - China Nuclear Power Engineering Co., Ltd.

Xianwen Zeng - China Nuclear Power Engineering Co., Ltd.

Guanghua Yang - China Nuclear Power Engineering Co., Ltd.

SIMPLIFIED METHOD OF THE FIRE PRA MODEL AT THE PRELIMINARY DESIGN STAGE

Technical Paper Publication: ICONE32-0463

Meiru LIU - China Nuclear Power Engineering Co., LTD

Fengjun LI - China Nuclear Power Engineering Co., LTD

Qingqing XU - China Nuclear Power Engineering Co., LTD

Jian YANG - China Nuclear Power Engineering Co., LTD

Churan FENG - China Nuclear Power Engineering Co., LTD

Rui ZHANG - China Nuclear Power Engineering Co., LTD

ANALYSIS OF EVACUATION TIME OF MAIN CONTROL ROOM IN NUCLEAR POWER PLANT UNDER FIRE CONDITION

Technical Paper Publication: ICONE32-0935

Lu Zhang - China Nuclear Power Engineering Co., Ltd.

Lan Liu - China Nuclear Power Engineering Co., Ltd.

Yue Liu - China Nuclear Power Engineering Co., Ltd.

Yanli Li - China Nuclear Power Engineering Co., Ltd.

Track13-4 Hazard PSA-II

10:30 am – 12 pm, C-109B

Session Chair:

Session Co-Chair:

Research on the Application of hazard Probability Safety Analysis in the design of nuclear power plant

Technical Paper Publication: ICONE32-0017

Jian Yang - china nuclear power engineering co. ltd

Mei Ru Liu - china nuclear power engineering co. ltd

Ling Zhi Li - china nuclear power engineering co. ltd

RESEARCH ON SEISMIC REQUIREMENTS OF SSCS UNDER DEC-A OPERATING CONDITIONS IN NUCLEAR POWER PLANTS

Technical Paper Publication: ICONE32-0274

Lingzhi Li - China Nuclear Power Engineering Co., LTD

churan feng - China Nuclear Power Engineering Co., LTD

jian yang - China Nuclear Power Engineering Co., LTD

lin yan - China Nuclear Power Engineering Co., LTD

wei deng - China Nuclear Power Engineering Co., LTD

Research on Correlation Analysis Methods for Equipment Seismic Failure in Seismic PSA

Technical Paper Publication: ICONE32-0404

Jianfeng Yang - Suzhou Nuclear Power Research Institute

Qian Huang - Suzhou Nuclear Power Research Institute

Long Li - Suzhou Nuclear Power Research Institute

Xipeng Yu - Suzhou Nuclear Power Research Institute

Research on the Method of Internal Flooding Safety Assessment for Small Modular Reactor

Technical Paper Publication: ICONE32-0426

Bo Liang - CGN Clear Energy Technology (Shanghai) Co., Ltd

Fuyu Wu - CGN Clear Energy Technology (Shanghai) Co., Ltd

Quantitative method for seismic PSA optimization based on binary decision diagrams

Technical Paper Publication: ICONE32-1479

Jiayu Yan - Chinergy

Zhuo Zhang - Chinergy

Jinyang Song - Chinergy

Qi Shi - Chinergy

Bin Qu - Huaneng Shandong Shidao Bay Nuclear Power Co.,Ltd.

Track15-2 Public Acceptance

10:30 am – 12 pm, C-112

Session Chair:

Session Co-Chair:

Research on Social Stability Risk Identification and Response Based on Public Communication of New Nuclear Power Projects

Technical Paper Publication: ICONE32-1161

Rongxu Zhu - Suzhou Nuclear Power Research Institute Co.,Ltd

Feng Zhao - Suzhou Nuclear Power Research Institute Co.,Ltd

Xiaofeng Zhang - Suzhou Nuclear Power Research Institute Co.,Ltd

Ye Yang - Suzhou Nuclear Power Research Institute Co.,Ltd

Study on Social Stability Risk Grade of Nuclear Power Project

Technical Paper Publication: ICONE32-1235

Rongxu Zhu - Suzhou Nuclear Power Research Institute Co.,Ltd.

Qunyang Peng - CGN Huizhou Nuclear Power Co.,Ltd.

Feng Zhao - Suzhou Nuclear Power Research Institute Co.,Ltd.

Xiaofeng Zhang - Suzhou Nuclear Power Research Institute Co.,Ltd.

Ye Yang - Suzhou Nuclear Power Research Institute Co.,Ltd.

A Review on Nuclear Power Policy in Major Nuclear Power Countries over the Past Five Years

Technical Paper Publication: ICONE32-1542

Lifeng Deng - Sun Yat-sen University

Suoni Qi - China Nuclear Power Engineering Co., Ltd.

Yiwen Zhang - Sun Yat-sen University

Research on public communication strategies before local government approval phase of new nuclear power projects

Technical Paper Publication: ICONE32-1545

Bo Lan - China General Nuclear Power Corporation

Pengfei Cai - Yangjiang Nuclear Power Co., Ltd.

Exploring into the Antecedents and Cultivation of Social Trust in Nuclear Power Public Communication in China

Technical Paper Publication: ICONE32-1547

Lifeng Deng - Sun Yat-sen University

Suoni Qi - China Nuclear Power Engineering Co., Ltd.

Xin Wang - Sun Yat-sen University

NUCLEAR PUBLIC ACCEPTANCE ACTIVITIES AND BATTERIES EVALUATION RESEARCH IN FUKUSHIMA REVITALIZICS FOR NUCLEAR DECOMMISSIONING

Technical Paper Publication: ICONE32-1762

Weichen Zhang - Laboratory for Zero-Carbon Energy, Institute of Integrated Research, Institute of Science Tokyo

Yutaka Tamaura - Tamaura Labo

Tadashi Kawamoto - Tamaura Labo

Hiroshige Kikura - Laboratory for Zero-Carbon Energy, Institute of Integrated Research, Institute of Science Tokyo

Hideharu Takahashi - Department of Mechanical Engineering, School of Engineering, Institute of Science Tokyo

Track6-2 International Standardization Research

10:30 am – 12 pm, C-113

Session Chair:

Session Co-Chair:

A Comparison Study on the Failure Probability of Nuclear Graphite Based on Tensile Tests by KTA 3232, ASME 2015, and ASME 2023

Technical Paper Publication: ICONE32-0039

Teng SHENG - China Nuclear Power Engineering Co., Ltd

Tianyou Feng - China Nuclear Power Engineering Co., Ltd

Research on International Standardization Cooperation Analysis on Nuclear Field, Taking the U.S. and France as Examples

Technical Paper Publication: ICONE32-0884

Shangyuan LIU - China Institute of Nuclear Industry Strategy

Jiang LI - China Institute of Nuclear Industry Strategy

Ranxu WANG - China Institute of Nuclear Industry Strategy

Research on the regulation-standard system and regulatory mechanism of the nuclear energy field in Japan

Technical Paper Publication: ICONE32-0886

Shangyuan LIU - China Institute of Nuclear Industry Strategy

Ruiyuan DENG - China Institute of Nuclear Industry Strategy

Ruilin DONG - China Institute of Nuclear Industry Strategy

A brief analysis on the inspiration of the United States government national standards strategy on the standardization development of developing country's nuclear industry

Technical Paper Publication: ICONE32-1400

Jiang Li - China Institute of Nuclear Industry Strategy

Shangyuan Liu - China Institute of Nuclear Industry Strategy

Ranxu Wang - China Institute of Nuclear Industry Strategy

Xueting Ni - China Institute of Nuclear Industry Strategy

Shaolin Zhang - China Institute of Nuclear Industry Strategy

The Competition of International Technical Standards: Causes, Policies and Reflections on International Standardization in the Nuclear Field

Technical Paper Publication: ICONE32-1515

Ranxu Wang - China Institute of Nuclear Industry Strategy

Zhenbang Dong - China Institute of Nuclear Industry Strategy

Jing Li - China Institute of Nuclear Industry Strategy

Yun Liang - China Institute of Nuclear Industry Strategy

Feifei Wu - China Institute of Nuclear Industry Strategy

Shangyuan Liu - China Institute of Nuclear Industry Strategy

PROGRESS ON BREE ISSUES AND STRUCTURAL SUITABILITY STUDIES OF ASME CODE TEST B-1

Technical Paper Publication: ICONE32-1556

Xu Wang - Tsinghua University

Haitao Wang - Tsinghua University

Fuhai Gao - China Institute of Atomic Energy Science and Technology

Lubo Wang - China Institute of Atomic Energy Science and

Technology

Track6-5 Research on Standardization Theory

10:30 am – 12 pm, C-114

Session Chair:

Session Co-Chair:

China's Utility Requirements Document for Advanced PWR

Technical Paper Publication: ICONE32-0047

Guo-cai CHEN, Sanmen Nuclear Power Co., Ltd, China

Jiejuan TONG - Tsinghua University

STUDY ON THE APPLICABILITY OF COMMERCIAL GRADE DEDICATION REGULATIONS AND STANDARDS

Technical Paper Publication: ICONE32-0762

xun liu - China Nuclear Power Engineering Co., Ltd

tingru yin - China Nuclear Power Engineering Co., Ltd

xichen li - China Nuclear Power Engineering Co., Ltd

pengfei hao - China Nuclear Power Engineering Co., Ltd

tao yu - China Nuclear Power Engineering Co., Ltd

yufeng zhang - China Nuclear Power Engineering Co., Ltd

shaochuang song - China Nuclear Power Engineering Co., Ltd

duo dong - China Nuclear Power Engineering Co., Ltd

Feasibility study on international standard proposals based on fuzzy comprehensive evaluation method

Technical Paper Publication: ICONE32-1250

Jiang Li - China Institute of Nuclear Industry Strategy

Shangyuan Liu - China Institute of Nuclear Industry Strategy

Wei Wei - China National Nuclear Corporation

Zhenbang Dong - China Institute of Nuclear Industry Strategy

Ruilin Dong - China Institute of Nuclear Industry Strategy

Research on standard system of nuclear robots

Technical Paper Publication: ICONE32-1990

Fugui Liu - Harbin Engineering University

Lipo Liu - China Institute of Nuclear Industry Strategy Co., Ltd.
Fangfang Dong - China Institute of Nuclear Industry Strategy Co., Ltd.

Jijia Zheng - China Institute of Nuclear Industry Strategy Co., Ltd.
Liqliang Jin - China Institute of Nuclear Industry Strategy Co., Ltd.
Meng Zhang - Harbin Engineering University

APPLICATION OF DESIGN LIFE CONCEPT IN LICENSING AND LIFE EXTENSION OF CANDU REACTORS

Technical Paper Publication: ICONE32-2236

Nick Brekel - Kinectrics

Steven Xu - Kinectrics

Doug Scarth - Kinectrics

Tanya Hunt - Kinectrics

Track1-3 Vibration and Structural Mechanics

3:30 pm –5:00 pm, C-101AB

Session Chair:

Session Co-Chair:

THE RESEARCH ON THE CAUSE OF GSS PUMP VIBRATION IN UNCLEAR POWER STATION

Technical Paper Publication: ICONE32-0191

LingYi You - CGN liaoning hongyanhe nuclear power co.,ltd,
Lei Lin - CGN Suzhou nuclear power research institute co.,ltd
Decheng Xu - CGN Suzhou nuclear power research institute co.,ltd
Hongbo Gao - CGN Suzhou nuclear power research institute co.,ltd
Qian Wu - CGN Suzhou nuclear power research institute co.,ltd
Shuai zhou - CGN Suzhou nuclear power research institute co.,ltd

Analysis on the oscillation causes and modifications of a globe control valve in a nuclear power plant

Technical Paper Publication: ICONE32-0325

Yinli LIU - Suzhou Nuclear Power Research Institute Co., Ltd
Shuai ZHOU - Suzhou Nuclear Power Research Institute Co., Ltd
Hongke WANG - Suzhou Nuclear Power Research Institute Co., Ltd
Lei LIN - Suzhou Nuclear Power Research Institute Co., Ltd

Changning LI - Suzhou Nuclear Power Research Institute Co., Ltd
Jianlong KANG - Taishan Nuclear Power Joint Venture Co., Ltd
Meng GAN - Taishan Nuclear Power Joint Venture Co., Ltd

ANALYSIS OF THE INFLUENCE OF THE RIGID SUPPORT STRUCTURE OF THE MAIN STEAM PIPELINE IN NUCLEAR POWER PLANTS ON THE PIPING STRESS

Technical Paper Publication: ICONE32-1695

BO ZHAO - Xi'an Thermal Power Research Institute Co., Ltd.
XIANYUAN DAI - Fujian Fuqing Nuclear Power Co., Ltd.
DAN ZHAO - CNNP Operation Maintenance Technology Co.,Ltd
WENCHAO LIU - Jiangsu Nuclear Power Co., Ltd.
BOYUAN WANG - Xi'an Thermal Power Research Institute Co., Ltd.

DAWEI WEI - Xi'an Thermal Power Research Institute Co., Ltd.
DAN WANG - Xi'an Thermal Power Research Institute Co., Ltd.
PEIYAO QI - Xi'an Thermal Power Research Institute Co., Ltd.
TONG WANG - Xi'an Thermal Power Research Institute Co., Ltd.

A New Heat Transfer Tube Stabilizer For Steam Generator Based on Shape Memory Alloy

Technical Paper Publication: ICONE32-1766

Mengke Chao - Shanghai Nuclear Engineering Research & Design Institute Co.,LTD
Quan Zhou - Shanghai Nuclear Engineering Research & Design Institute Co.,LTD
Qiming Men - Shanghai Nuclear Engineering Research & Design Institute Co.,LTD
Zhenxin Gong - Shanghai Nuclear Engineering Research & Design Institute Co.,LTD

RESEARCH ON VISUAL-TESTING PIPELINE FOR VIBRATION EXTRACTION AND CHARACTERIZATION TECHNOLOGY

Technical Paper Publication: ICONE32-1828

Shuai Liu - The nuclear power institute of china
Wanyou Li - Harbin Engineering University

Furui Xiong - The nuclear power institute of china
Yixiong Zhang - The nuclear power institute of china
Xiaoming Bai - The nuclear power institute of china
Xuan Huang - The nuclear power institute of china
Zhipeng Feng - The nuclear power institute of china

Study on Vibration Reduction Characteristics of Power Plant Pipelines Using Nonlinear shock absorber

Technical Paper Publication: ICONE32-2076

Xinhui yang - Huaneng Hainan Changjiang Nuclear Power Co., Ltd
Chuanlong Tao - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd

Bo Zhao - XI'AN THERMAL POWER RESEARCH INSTITUTE CO..LTD

Xudong Chen - XI'AN THERMAL POWER RESEARCH INSTITUTE CO..LTD

Dawei Wei - XI'AN THERMAL POWER RESEARCH INSTITUTE CO..LTD

Dan Wang - XI'AN THERMAL POWER RESEARCH INSTITUTE CO..LTD

Boyuan Wang - XI'AN THERMAL POWER RESEARCH INSTITUTE CO..LTD

Heng Zhang - XI'AN THERMAL POWER RESEARCH INSTITUTE CO..LTD

Qilong Hu - XI'AN THERMAL POWER RESEARCH INSTITUTE CO..LTD

Peiyao Qi - XI'AN THERMAL POWER RESEARCH INSTITUTE CO..LTD

Track2-3 Nuclear Fuel and Claddings (II)

3:30 pm –5:00 pm, C-102

Session Chair:

Session Co-Chair:

Study of corrosion resistance of CZ2 alloy cladding in deaeration and dissolved oxygen environment

Technical Paper Publication: ICONE32-1442

Jianyu HUANG - China Nuclear Power Technology Research Institute

Guoliang ZHANG - China Nuclear Power Technology Research Institute

Changyuan GAO - China Nuclear Power Technology Research Institute

Liutao CHEN - China Nuclear Power Technology Research Institute

Xinger Weng - China Nuclear Power Technology Research Institute

Xu Wang - China Nuclear Power Technology Research Institute

Lin SHI - China Nuclear Power Technology Research Institute

Yang XU - China Nuclear Power Technology Research Institute

The Effect of Ion Irradiation on the Microstructure and Hydrogen Permeation Properties of FeAl-Al₂O₃ Coating

Technical Paper Publication: ICONE32-1553

Changzheng Li - China Nuclear Power Technology Research Institute

Rui Shu - China Nuclear Power Technology Research Institute

Yinghong Li - China Nuclear Power Technology Research Institute

Guoliang Zhang - China Nuclear Power Technology Research Institute

Long Wang - Southwest Institute of Physics

Xiang Liu - Zhejiang University

Qisen Ren - China Nuclear Power Technology Research Institute

Lihong Nie - China Nuclear Power Technology Research Institute

Shaohong Zhang - Zhejiang University

The Primary Analysis of Flow Blockage Accident of Irradiation Device in Research Reactor

Technical Paper Publication: ICONE32-1619

Xuanting Xie - Institute of Nuclear Physics and Chemistry

Yuchuan Guo - Institute of Nuclear Physics and Chemistry

Xiaoyu Guo - Institute of Nuclear Physics and Chemistry

Guanbo Wang - Institute of Nuclear Physics and Chemistry

Simao Guo - Institute of Nuclear Physics and Chemistry

Jie Fan - Institute of Nuclear Physics and Chemistry

Yan Yang - Institute of Nuclear Physics and Chemistry

Zhenpeng Wang - Institute of Nuclear Physics and Chemistry

Bin Tang - Institute of Nuclear Physics and Chemistry

Study on abrasion damage behavior of fuel element rod bundle in pressurized water reactor

Technical Paper Publication: ICONE32-1620

Ze Li - Xi'an Jiaotong University

Jing Zhang - Xi'an Jiaotong University

Yingwei Wu - Xi'an Jiaotong University

Yanan He - Xi'an Jiaotong University

Wenxi Tian - Xi'an Jiaotong University

Suizheng Qiu - Xi'an Jiaotong University

Guanghui Su - Xi'an Jiaotong University

STUDY ON DEPOSITION BEHAVIOR OF SURFACE CORROSION PRODUCTS OF DIFFERENT FUEL CLADDING WITH ZINC INJECTION

Technical Paper Publication: ICONE32-1625

Yalun YAN - China Nuclear Power Technology Research Institute

Wei YAO - China Nuclear Power Technology Research Institute

Deying ZHANG - China Nuclear Power Technology Research Institute

Jie YE - China Nuclear Power Technology Research Institute

Xuefeng FU - China Nuclear Power Technology Research Institute

Zhenxun PENG - China Nuclear Power Technology Research Institute

Phase-Field Simulation of Recrystallization in High Burnup UO_2

Technical Paper Publication: ICONE32-1645

Xingyu Chen - Harbin Engineering University

Qingyu Wang - Harbin Engineering University

Tian Zhang - Harbin Engineering University

Daqing Wei - Harbin Engineering University

Yongchang Li - Harbin Engineering University

EFFECT OF SURFACE CONDITION ON THE GENERAL CORROSION RESISTANCE OF SEVERAL CANDIDATE CLADDING MATERIALS

Technical Paper Publication: ICONE32-2062

Zhu Liu - HUANENG Nuclear Energy Technology Research Institute

Wei Liu - HUANENG Nuclear Energy Technology Research Institute

Jin Shi - HUANENG Nuclear Energy Technology Research Institute

Xianglong Guo - Shanghai Jiao Tong University

Lefu Zhang - Shanghai Jiao Tong University

Track 7-3 Thermal-hydraulic experiments and measurement methods (III)

3:30 pm –5:00 pm, C-103

Session Chair:

Session Co-Chair:

EXPERIMENTAL STUDY ON LIQUID-PHASE TURBULENCE IN AIR-WATER TWO-PHASE BUBBLY FLOW IN A VERTICAL ROD BUNDLE CHANNEL

Technical Paper Publication: ICONE32-0744

Jiaying Ren - Harbin Engineering University

Shouxu Qiao - Harbin Engineering University

Shiwei Guo - Huaneng Shandong Shidaobay Nuclear Power Co., Ltd

Hao Zhang - Huaneng Shandong Shidaobay Nuclear Power Co., Ltd

Sichao Tan - Harbin Engineering University

Hongyang Wei - Harbin Engineering University

Ruifeng Tian - Harbin Engineering University

Puzhen Gao - Harbin Engineering University

A Deep Learning Modeling Approach For The Reconstruction Of Flow Field Parameter Distributions Towards Piv Fine Measurements

Technical Paper Publication: ICONE32-0836

Biao Liang - Harbin Engineering University

Sichao Tan - Harbin Engineering University

Jiangkuan Li - Harbin Engineering University

Zhen Liu - Harbin Engineering University

Shouxu Qiao - Harbin Engineering University

Ruifeng Tian - Harbin Engineering University

EXPERIMENTAL INVESTIGATION ON HIGH-PRESSURE SUBCOOLED WATER INJECTING INTO HIGH-TEMPERATURE THERMAL OIL

Technical Paper Publication: ICONE32-0923

Shuhua Zhou - Beijing University of Chemical Technology

Ruizhi Hao - Beijing University of Chemical Technology

Wenshu Jiang - Beijing University of Chemical Technology

Shuo Wang - Beijing University of Chemical Technology

Tao Lu - Beijing University of Chemical Technology

RPV DEFORMATION INFLUENCE ON ERVC FLOW CHANNEL NATURAL CIRCULATION AND CHF EXPERIMENTAL STUDY

Technical Paper Publication: ICONE32-0926

xu junying - China Nuclear Power Technology Research Institute

wei dongshan - China Nuclear Power Technology Research Institute

yun xiangyu - China Nuclear Power Technology Research Institute

zhang lei - China Nuclear Power Technology Research Institute

zhang huiyong - China Nuclear Power Technology Research Institute

THE EXPERIMENTAL STUDY ON CHF ENHANCEMENT OF RPV OUTER SURFACE

Technical Paper Publication: ICONE32-0940

yun xiangyu - China Nuclear Power Technology Research Institute

xu junying - China Nuclear Power Technology Research Institute

lin bo - China Nuclear Power Technology Research Institute

zhang lei - China Nuclear Power Technology Research Institute

zhang huiyong - China Nuclear Power Technology Research Institute

wei dongshan - China Nuclear Power Technology Research Institute

Experiments to Investigate Thermal Stratification with Different Boundary Conditions at a Pipeline-elbow

Technical Paper Publication: ICONE32-0973

Zhongkang Ma - North China Electric Power University

Mi Zhou - North China Electric Power University

Naiqiang Zhang - North China Electric Power University

Track 8-3 Heat Transfer Characteristics Analysis (I)

3:30 pm –5:00 pm, C-104A

Session Chair:

Session Co-Chair:

Temperature Characteristics of Irradiation Facility Based on Heat Pipe Regulation

Technical Paper Publication: ICONE32-0121

Yinyuan Tang - Harbin Engineering University

Xiaobo Zeng - Harbin Engineering University

Guangming Fan - Harbin Engineering University

Haiyang Yang - Harbin Engineering University

Zhanming Zhou - Harbin Engineering University

NUMERICAL SIMULATION OF THE EFFECT OF PELLET BIAS ON ANNULAR FUEL HEAT TRANSFER PERFORMANCE

Technical Paper Publication: ICONE32-0526

Songtao Ji - China Institute of Atomic Energy

Aimin Zhang - China Institute of Atomic Energy

Zhijie Han - China Institute of Atomic Energy

Tian Xing - China Institute of Atomic Energy

Baolei Shi - China Institute of Atomic Energy

Chanjuan Tang - China Institute of Atomic Energy

Sinda/Fluint-based thermal analysis of heat pipe reactors

Technical Paper Publication: ICONE32-1338

Peng Liu - China Institute of Atomic Energy

Xingmin Liu - China Institute of Atomic Energy

Chunqiu Guo - China Institute of Atomic Energy

Jinlu Huang - Xi'an Jiaotong University

Weihan Li - China Institute of Atomic Energy

Three-Dimensional CFD Simulation on PRACS Decay Heat Removal Capability under Natural Circulation Based on PLANDTL Facility

Technical Paper Publication: ICONE32-1428

Yue Liu - North China Electric Power University

Xinyue Luo - China Nuclear Power Engineering Co., Ltd. China

Ruoyu Liu - North China Electric Power University

Guodong Li - North China Electric Power University

Haijie Song - North China Electric Power University

Yuhao Zhang - North China Electric Power University

Daogang Lu - North China Electric Power University

.....
**INVESTIGATION OF THE INFLUENCE OF
 COMPOSITE CORRUGATION PROFILE ON
 CONVECTIVE HEAT TRANSFER PERFORMANCE
 OF MODIFIED PIPES**

Technical Paper Publication: ICONE32-1448

Samuel Oke - College of Nuclear Science and Technology,
 Harbin Engineering University, China

Puzhen Gao - College of Nuclear Science and Technology,
 Harbin Engineering University, China

Nan Zhang - College of Nuclear Science and Technology,
 Harbin Engineering University, China

Olatomide Fadodun - Centre for Energy Research and
 Development, Obafemi Awolowo University, Ile-Ife, Nigeria

.....
**Track 9-3 Radioactive Waste Treatment Technology (III) -
 Liquid Waste Treatment**

3:30 pm –5:00 pm, C-104B

Session Chair:

Session Co-Chair:

**SYNTHESIS OF COVALENT ORGANIC FRAMEWORK
 (COF-HSO₃) BY GAMMA-IRRADIATION METHOD
 FOR URANIUM ADSORPTION FROM WASTE WATER**

Technical Paper Publication: ICONE32-0373

Abdullah - Harbin Engineering University, China

Zhigang Li - Harbin Engineering University, China

Zhigang Li - Heilongjiang Institute of Atomic Energy,
 Heilongjiang Academy of Sciences, China

Fuqiu Ma - Yantai Research Institute of Harbin Engineering
 University, China

**Research and Design of an Automatic Welding
 Equipment for a New type High-level Radioactive Solid
 Waste Container**

Technical Paper Publication: ICONE32-0378

Xue ZHANG - China Nuclear Power Engineering Co.,LTD

Kai CUI - China Nuclear Power Engineering Co.,LTD

Yinan XIE - China Nuclear Power Engineering Co.,LTD

Xiwen HU - China Nuclear Power Engineering Co.,LTD

Zheng LI - China Nuclear Power Engineering Co.,LTD

Zhongbin Xu - China Nuclear Power Engineering Co.,LTD

Tianhao WANG - China Nuclear Power Engineering
 Co.,LTD

Zhen JIANG - Beijing Institute of Petrochemical Technology

.....
**Analysis on the Current Status of Radioactive Chemical
 Decontamination System Design of Pressurized Water
 Reactor Nuclear Power Plant**

Technical Paper Publication: ICONE32-0419

Haicheng GU - Yangjiang Nuclear Power Co., Ltd, China

Weilun LIANG - Shenzhen China Nuclear Power Design Co., Ltd

Zhennan ZHANG - Shenzhen China Nuclear Power Design
 Co., Ltd

Guocai XI - Yangjiang Nuclear Power Co., Ltd, China

Zhili ZOU - Yangjiang Nuclear Power Co., Ltd, China

Ming HUO - Shenzhen China Nuclear Power Design Co., Ltd

.....
**STUDY ON THE DESIGN OF EVAPORATION AND
 CONCENTRATION TREATMENT PROCESS FOR
 RADIOACTIVE WASTEWATER**

Technical Paper Publication: ICONE32-0910

Xiaomin Ma - CNNC NO.7 Research and Design Institute
 Co.LTD

Haitao Ma - CNNC NO.7 Research and Design Institute
 Co.LTD

Fenglin Zhao - CNNC NO.7 Research and Design Institute
 Co.LTD

Xutao Pei - CNNC NO.7 Research and Design Institute Co.LTD

URANYL ION (UO₂²⁺) AND PERRHENATE ION (ReO₄⁻) IN SOLUTION WERE CO-CRYSTALLIZED BY SUPRAMOLECULAR PSEUDOROTAXANE LIGANDS

Technical Paper Publication: ICONE32-0991

yuanyuan liang - Nuclear Power Institute of China

yang liu - Laboratory of Nuclear Energy Chemistry, Institute of High Energy Physics, Chinese Academy of Sciences

lei mei - Laboratory of Nuclear Energy Chemistry, Institute of High Energy Physics, Chinese Academy of Sciences

xuefei luan - National Nuclear Emergency Response Technical Assistance Center

feng zhao - Nuclear Power Institute of China

Effects of ultra-fast high-temperature sintering on the densification and leaching resistance of hollandite ceramics

Technical Paper Publication: ICONE32-1569

Mingyang Zhao - School of Nuclear Science and Engineering, North China Electric Power University

Xiao Chen - School of Nuclear Science and Engineering, North China Electric Power University

Tao Hong - School of Materials Science and Engineering, Hefei University of Technology

Zhenfeng Tong - School of Nuclear Science and Engineering, North China Electric Power University

Track1-12 Chemistry and Water Quality Control (Secondary) II

3:30 pm –5:00 pm, C-105A

Session Chair:

Session Co-Chair:

Research on the maintenance effect of steam generator under different chemical conditions of nuclear power plant

Technical Paper Publication: ICONE32-0089

Qiliang Sun - Daya Bay Nuclear Power Operation and Management Co., Ltd.

Yan Xiao - Suzhou Nuclear Power Research Institute Co., Ltd.

Zhaohui Tian - Suzhou Nuclear Power Research Institute Co., Ltd.

Chuanjun Lv - Daya Bay Nuclear Power Operation and Management Co., Ltd.

Yun Sun - Suzhou Nuclear Power Research Institute Co., Ltd.

Hualin Li - Daya Bay Nuclear Power Operation and Management Co., Ltd.

Canshuai Liu - Suzhou Nuclear Power Research Institute Co., Ltd.

Hao Wang - Suzhou Nuclear Power Research Institute Co., Ltd.

Adsorption Behavior of Film-forming Amines on Surface of Condenser Main Tubes of Pressurized Water Reactors based on Molecular Simulation

Technical Paper Publication: ICONE32-0475

Canshuai LIU - Suzhou Nuclear Power Research Institute Co., Ltd.

Yan XIAO - Suzhou Nuclear Power Research Institute Co., Ltd.

Zhaohui TIAN - Suzhou Nuclear Power Research Institute Co., Ltd.

Yun SUN - Suzhou Nuclear Power Research Institute Co., Ltd.

Research on water vapor quality control method of Direct flow evaporator nuclear power unit

Technical Paper Publication: ICONE32-1126

ruixiang zhang - Xi'an Thermal Engineering Research Institute Co., Ltd

yan yu - Xi'an Thermal Engineering Research Institute Co., Ltd

Feng Liu - Xi'an Thermal Engineering Research Institute Co., Ltd

Yang Hu - Xi'an Thermal Engineering Research Institute Co., Ltd

Tongtong Ling - Xi'an Thermal Engineering Research Institute Co., Ltd

Yao Yao - Xi'an Thermal Engineering Research Institute Co., Ltd

changhai li - Xi'an Thermal Engineering Research Institute Co., Ltd

Research And Application Of High Sensitivity On-Line Sipping Test Equipment

Technical Paper Publication: ICONE32-1552

Gao Zhongyu - Suzhou Nuclear Power Research Institute Co.,Ltd

Cui Meng - Liaoning Hongyanhe Nuclear Power Co.,Ltd

Zhou Fuzhi - Suzhou Nuclear Power Research Institute Co.,Ltd

Zhu Bisheng - Suzhou Nuclear Power Research Institute Co.,Ltd

Tian Zhaozhui - Suzhou Nuclear Power Research Institute Co.,Ltd

Sun Yun - Suzhou Nuclear Power Research Institute Co.,Ltd

RESEARCH ON THE SCALING BEHAVIOR OF CONCENTRATED SEAWATER IN THE RECIRCULATING COOLING SYSTEM

Technical Paper Publication: ICONE32-1739

Rui Zhang - China Nuclear Power Engineering Co., Ltd., China

Rui Wang - China Nuclear Power Engineering Co., Ltd., China

Ke Chen Xu - China Nuclear Power Engineering Co., Ltd., China

Ningsha Hu - China Nuclear Power Engineering Co., Ltd., China

Wei Bai - China Nuclear Power Engineering Co., Ltd., China

Jing Li - China Nuclear Power Engineering Co., Ltd., China

Study on the influence of feed water flow rate and PH value on the deposition of throttling hole of steam generator in high temperature gas cooled reactor

Technical Paper Publication: ICONE32-2053

Wei Wang - China Huaneng Group Co.,LTD

Ping liu - China Huaneng Group Co.,LTD

Qiangqiang Yang - China Huaneng Group Co.,LTD

Guiquan Zhang - Xi'an Thermal Power Research Institute Co., Ltd.

Jiantao Yao - Xi'an Thermal Power Research Institute Co., Ltd.

Track2-12 Accident Tolerant Fuel

3:30 pm –5:00 pm, C-105B

Session Chair:

Session Co-Chair:

THE INFLUENCE OF IMPURITY IONS ON THE CRUD BEHAVIOR OF CR COATING AND Zr ALLOY CLADDINGS

Technical Paper Publication: ICONE32-0111

Tao Huang - Shanghai Jiao Tong University

Fujie Zhou - Shanghai Jiao Tong University

Shixin Gao - Nuclear Power Institute of China

Huifang Yue - Nuclear Power Institute of China

Kun Zhang - Nuclear Power Institute of China

Kai Chen - Shanghai Jiao Tong University

Hua Pang - Nuclear Power Institute of China

Lefu Zhang - Shanghai Jiao Tong University

Impact of ATF cladding material on CR worth and coefficients of reactivity

Technical Paper Publication: ICONE32-0615

Khurram Saleem Chaudri - Khalifa University of Science and Technology/ Technology Innovation Institute

Mohammed Lahdour - Khalifa University of Science and Technology

Mohammad Alrwashdeh - Khalifa University of Science and Technology

Saeed A. Alameri - Khalifa University of Science and Technology

Preliminary economic analysis of accident tolerant fuel based on SiC cladding and high uranium density pellets

Technical Paper Publication: ICONE32-1168

Ling Ye - China Nuclear Power Technology Research Institute Co., Ltd.

Yuxiang Zhu - China Nuclear Power Technology Research Institute Co., Ltd.

Qingyu Gao - China Nuclear Power Technology Research Institute Co., Ltd.

Jiaqi Wang - China Nuclear Power Technology Research Institute Co., Ltd.

Tianze Jiang - China Nuclear Power Technology Research Institute Co., Ltd.

Jinfeng Wei - China Nuclear Power Technology Research Institute Co., Ltd.

Dechang Cai - China Nuclear Power Technology Research Institute Co., Ltd.

Changyou Zhao - China Nuclear Power Technology Research Institute Co., Ltd.

Xuefeng Fu - China Nuclear Power Technology Research Institute Co., Ltd.

Changheng Xu - China Nuclear Power Technology Research Institute Co., Ltd.

CR-COATED ZIRCALOY CLADDING MODELING UNDER LOCA CONDITION WITH OFFBEAT

Technical Paper Publication: ICONE32-1450

Junhao Xie - Harbin Engineering University

Tian Zhang - Harbin Engineering University

Qingyu Wang - Harbin Engineering University

Alessandro Scolaro - EPFL

Jiaxuan Liu - Harbin Engineering University

Antonio Cammi - Politecnico di Milano

ESTIMATION OF EFFECTIVE THERMAL CONDUCTIVITY IN U3Si2-AL DISPERSION FUELS WITH FISSION GAS BUBBLES

Technical Paper Publication: ICONE32-1807

Li Yong - China Nuclear Power Technology Research Institute
Co., Ltd

Cao Zhiwei - China Nuclear Power Technology Research
Institute Co., Ltd

Xu Miaomiao - China Nuclear Power Technology Research
Institute Co., Ltd

Li Qiang - China Nuclear Power Technology Research Institute
Co., Ltd

Wang Gang - China Nuclear Power Technology Research
Institute Co., Ltd

Lin Zhikang - China Nuclear Power Technology Research
Institute Co., Ltd

Ballooning and Burst Behavior of Cr-coated Zr Alloy Cladding under LOCA conditions

Technical Paper Publication: ICONE32-1840

Ruhao Zhong - China Nuclear Power Technology Research Institute

Haode Xu - China Nuclear Power Technology Research Institute

Dong Wang - Xi'an Jiaotong University

Yapei Zhang - Xi'an Jiaotong University

Chao Guo - China Nuclear Power Technology Research Institute

Xuefeng Fu - China Nuclear Power Technology Research Institute

Yueyang Hou - University of Science and Technology of China

Track 8-12 Data-Driven Method and Machine Learning

3:30 pm –5:00 pm, C-106A

Session Chair:

Session Co-Chair:

INTEGRATING PARTICLE METHOD SIMULATIONS AND MACHINE LEARNING FOR PREDICTING CORE MELT FLOW PATTERN

Technical Paper Publication: ICONE32-0052

Yicong Lan - Xi'an Jiaotong University

Shihao Wu - Xi'an Jiaotong University

Yapei Zhang - Xi'an Jiaotong University

Xingyu Wang - Xi'an Jiaotong University

Wenxi Tian - Xi'an Jiaotong University

G.H. Su - Xi'an Jiaotong University

Suizheng Qiu - Xi'an Jiaotong University

A GPU-Accelerated Weakly Compressible LSMPS Simulation with Phase Transition

Technical Paper Publication: ICONE32-0831

Sheng Cao - Xi'an Jiaotong University

Qianrong Ren - Xi'an Jiaotong University

Wenpeng Wang - Xi'an Jiaotong University

Bin Zhang - Xi'an Jiaotong University

Accelerated Calculation of Three-Dimensional Two-Phase Flow Field in Steam Generators Based on Reduced-Order Model

Technical Paper Publication: ICONE32-0897

Qing Yang - Shanghai Nuclear Engineering & Design Institute
Co., Ltd

Jie Liu - Yuansuan Ltd.

Xingliang Zhang - Shanghai Nuclear Engineering & Design
Institute Co., Ltd

Liu Chang - Shanghai Nuclear Engineering & Design Institute
Co., Ltd

Yicheng Zhang - Shanghai Nuclear Engineering & Design
Institute Co., Ltd

Ke Wang - Yuansuan Ltd.

Lu Zhou - Yuansuan Ltd.

Jiesheng Min - Yuansuan Ltd.

.....
Data-Driven and Physics-Informed: A Hybrid CFD-Neural Network Methodology for Critical Heat Flux Prediction

Technical Paper Publication: ICONE32-1374

Shihao Yang - Beijing Jiaotong University

Lixin Yang - Beijing Jiaotong University

Hongyuan Di - Beijing Jiaotong University

.....
Data-Driven Reduced-Order Analysis of Flow Field in 3 x 3 Fuel Rod Bundle with Spacer Grid

Technical Paper Publication: ICONE32-1831

Jixin Liu - Harbin Engineering University

Hongyang Wei - Harbin Engineering University

Zhenyang Sun - Harbin Engineering University

Sichao Tan - Harbin Engineering University

Puzhen Gao - Harbin Engineering University

.....
Neural Network-Based Optimization of RANS Simulations for Flow Field in Rod Bundle Channels

Technical Paper Publication: ICONE32-1850

Wei Xu - Shanghai Jiao Tong University

Xiaojing Liu - Shanghai Jiao Tong University

Qishi Yin - Shanghai Jiao Tong University

Hui He - Shanghai Jiao Tong University

Denggao Chen - National Key Laboratory of Nuclear Reactor Technology, Nuclear Power Institute of China

.....
Track 7-12 Nuclear reactor safety analysis (IV)

3:30 pm –5:00 pm, C-106B

Session Chair:

Session Co-Chair:

NUMERICAL SIMULATION OF AHPRI000'S THERMAL-HYDRAULIC MODEL BASED ON CITHARA CODE

Technical Paper Publication: ICONE32-0079

Yiwa Geng - China Nuclear Power Engineering Co., Ltd.

Mingjie Ma - Shanghai Jiao Tong University

Jun Fang - China Nuclear Power Engineering Co., Ltd.

Jiatai Liu - China Nuclear Power Engineering Co., Ltd.

.....
Analysis on the erosion and mixing of stable helium stratification by vertical air jet on CABLE facility using GOTHIC 3D model

Technical Paper Publication: ICONE32-0467

NINGXI JIA - China Nuclear Power Engineering Co.,Ltd.

XIAOCHUAN WANG - China Nuclear Power Engineering Co.,Ltd.

ZHUO LIU - China Nuclear Power Engineering Co.,Ltd.

MINGRUI YU - China Nuclear Power Engineering Co.,Ltd.

YIDAN YUAN - China Nuclear Power Engineering Co.,Ltd.

.....
Development of a 3D Thermal-hydraulic Analysis Code for Aqueous Homogeneous Reactor Based on GeN-Foam

Technical Paper Publication: ICONE32-0516

Zhenyu Feng - Xi'an Jiaotong University

Dalin Zhang - Xi'an Jiaotong University

Wenqiang Wu - Xi'an Jiaotong University

Lei Zhou - Xi'an Jiaotong University

Wenxi Tian - Xi'an Jiaotong University

Suizheng Qiu - Xi'an Jiaotong University

Guanghui Su - Xi'an Jiaotong University

.....
Numerical Study of Thermo-Hydraulics of Advanced Nuclear Power Plant Containment ATHROC Programme

Technical Paper Publication: ICONE32-0871

Lanyu Zhou - Nuclear Power Engineering Co. China

Yanyu Sun - Nuclear Power Engineering Co. China

Shuliang Huang - Nuclear Power Engineering Co. China

Yanfang Xue - Nuclear Power Engineering Co. China

.....
Research on Modeling and Simulation of the Thermal System in the Secondary Loop of a Pressurized Water Reactor Nuclear Power Plant

Technical Paper Publication: ICONE32-1228

Shuhang Yan - China Nuclear Power Operation Technology Corporation LTD

Kaili Xu - China Nuclear Power Operation Technology Corporation LTD

Chang Gao - China Nuclear Power Operation Technology Corporation LTD

Tianqi He - China Nuclear Power Operation Technology Corporation LTD

Yong Wang - China Nuclear Power Operation Technology Corporation LTD

Yizhou Zhang - China Nuclear Power Operation Technology Corporation LTD

VALIDATION OF GOTHIC SYSTEM CODE AGAINST EXPERIMENTAL DATA ON TWO-PHASE FLOW FROM HWAT LOOP FACILITY

Technical Paper Publication: ICONE32-1998

Aleksander Kipiela - KTH Royal Insititue of Technology

Dmitry Grishchenko - KTH Royal Insititue of Technology

Pavel Kudinov - KTH Royal Insititue of Technology

Haipeng Li - KTH Royal Insititue of Technology

Track 9-13 Others

3:30 pm –5:00 pm, C-107A

Session Chair:

Session Co-Chair:

Preliminary Study on Coolant Radiolysis of Coolant in High Flux Research Reactors

Technical Paper Publication: ICONE32-0144

Xinhe Qu - Tsinghua University

Yi Huang - Tsinghua University

Wei Peng - Tsinghua University

Heng Xie - Tsinghua University

Research in dose measurement of complex radiation fields using single crystal CVD diamond

Technical Paper Publication: ICONE32-0293

Jiutao Chen - Harbin Engineering University

Yushou Song - Harbin Engineering University

Jichao Tang - Harbin Engineering University

Sen Yang - Harbin Engineering University

Feng Xu - Harbin Engineering University

Size Chen - Institute of Nuclear Energy Safety Technology

Dan Xiao - Institute of Nuclear Energy Safety Technology

ADDITIVE ENGINEERING OF MAPBBR₃ PEROVSKITE SINGLE CRYSTALS FOR DIRECT X-RAY DETECTORS

Technical Paper Publication: ICONE32-0470

Yue Zhang - Harbin Engineering University

Yuanjie Sun - Harbin Engineering University

Zhe Liu - Heilongjiang Institute of Atomic Energy

Hongtao Zhao - Harbin Engineering University

Zhigang Li - Harbin Engineering University

RADIONUCLIDE AEROSOL CAPTURE USING ELECTROSTATIC PRECIPITATION SYSTEM IN NUCLEAR DECOMMISSIONING

Technical Paper Publication: ICONE32-0623

Anamika Das Puja - Ontario Tech University

Glenn Harvel - Ontario Tech University

STUDY ON THE RELEASE RATE OF SOLUBLE CORROSION PRODUCTS IN THE PRIMARY CIRCUIT OF PRESSURIZED WATER REACTOR

Technical Paper Publication: ICONE32-0689

Feng Yi - Nuclear Power Operations Research Institute

Yuan Shen - Nuclear Power Operations Research Institute

Bing Dong - Nuclear Power Operations Research Institute

Enwei Shen - Nuclear Power Operations Research Institute

Weimin Liang - Nuclear Power Operations Research Institute

Yikun Zang - Nuclear Power Operations Research Institute

Kouhong Xiong - Nuclear Power Operations Research Institute

High Flux Neutron Reactor 14C Production Assessment

Technical Paper Publication: ICONE32-1554

Shengqiu Huang - Beijing Nuclear Industry Hospital

Binhe Hu - China Institute of Atomic Energy

Shixi Wang - China Institute of Atomic Energy

Mingyu Wu - China Institute of Atomic Energy

Research on Axial Neutron and Photon Source and Heat Distribution Distribution of AFA-3G Spent Fuel Assembly

Technical Paper Publication: ICONE32-1693

Qiujuan Zhao - China Nuclear Power Engineering Co.,Ltd

Siyang Xie - China Nuclear Power Engineering Co.,Ltd

Zonghuan Chen - China Nuclear Power Engineering Co.,Ltd

Lin Yao - China Nuclear Power Engineering Co.,Ltd

Bingheng Wang - China Nuclear Power Engineering Co.,Ltd

Track 16-5 Advanced Nuclear Technologies

3:30 pm –5:00 pm, C-107B

Session Chair:

Session Co-Chair:

Autonomous Anomaly Response to Enhance Nuclear Safety in Nuclear Power Plants

Technical Paper Publication: ICONE32-0202

Feiyan Dong - The University of Tokyo

Kazuyuki Demachi - The University of Tokyo

Masanori Yoshikawa - Japan Atomic Energy Agency

Shigeru Takaya - Japan Atomic Energy Agency

A REVIEW ON EPOXY RESIN COMPOSITE AND SPENT COFFEE GROUND VALORIZATION FOR RADIATION SHIELDING

Technical Paper Publication: ICONE32-0358

Jia Xuan Tang - Universiti Teknologi Malaysia

Muhammad Arif Sazali - Universiti Teknologi Malaysia

Siti Madiha Muhammad Amir - Malaysian Nuclear Agency

Asyraf Arif Abu Bakar - Malaysian Nuclear Agency

Ahmad Hambali Ismail - Malaysian Nuclear Agency

Nur Syazwani Mohd Ali - Universiti Teknologi Malaysia

Muhammad Syahir Sarkawi - Universiti Teknologi Malaysia

Khairulnadzmi Jamaluddin - Universiti Teknologi Malaysia

Data Assimilation with Process Information from Plant Simulator Experiment for Estimation of PIF Impact

Technical Paper Publication: ICONE32-0843

Tomonori Sakamaki - The University of Osaka

Satoshi Takeda - The University of Osaka

Takanori Kitada - The University of Osaka

Research on Real-Time Measurement Method of Gamma Energy spectrum for Primary Loop Cooling Water of Nuclear Reactor

Technical Paper Publication: ICONE32-0944

Bin Liu - Chongqing University

Zhiwen Peng - Chongqing University

Shuo Li - Chongqing University

Liangming Pan - Chongqing University

Zaiyong Ma - Chongqing University

Luteng Zhang - Chongqing University

Design and Optimization of a Beam Shaping Assembly for Accelerator-Based Boron Neutron Capture Therapy with Adjustable Energy Spectrum

Technical Paper Publication: ICONE32-1426

Terence Munyense Kashiba - Harbin Engineering University/Fundamental Science on Nuclear Safety and Simulation Technology Laboratory

Song Yushou - Harbin Engineering University/Fundamental Science on Nuclear Safety and Simulation Technology Laboratory

Li Ziming - Harbin Engineering University/Fundamental Science on Nuclear Safety and Simulation Technology Laboratory

BASIC RESEARCH ON ULTRASONIC PULSE RECEPTION USING LIGHT DEFLECTION PHENOMENA

Technical Paper Publication: ICONE32-1867

Shuntaro Kozaka - Institute of Science Tokyo

Track 3-3 Control Strategy and Operation Optimization

3:30 pm –5:00 pm, C-108A

Session Chair:

Session Co-Chair:

Research and Application of Control Strategy of HVAC System in HPR1000

Technical Paper Publication: ICONE32-0173

Renyan Zhang - China Nuclear Power Engineering Co.,Ltd

Menyue Wang - China Nuclear Power Engineering Co.,Ltd

Chuangxin Zhou - China Nuclear Power Engineering Co.,Ltd

Time Delay Active Disturbance Rejection Control Of Pressurizer in Nuclear Reactor With Delay Robustness and Simplified Tuning

Technical Paper Publication: ICONE32-1001

Yunze He - Southeast University

Tianyang Xing - Southeast University

Mudi Jiang - Southeast University

Mengmeng Ji - Southeast University

Xinfei Yang - Southeast University

Yuxiang Ma - Southeast University

Xiaoliang Zhu - Southeast University

A Control Strategy for Control Rods in High-Temperature Gas-Cooled Reactors

Technical Paper Publication: ICONE32-1111

feng jiang - Huaneng Shandong Shidao Bay Nuclear Power

chen wang - Huaneng Shandong Shidao Bay Nuclear Power

yan liu - CNNP ShanDong Nuclear Energy Co.

zhongshu zhang - Huaneng Shandong Shidao Bay Nuclear Power

xuanqing zhou - Huaneng Shandong Shidao Bay Nuclear Power

feng wang - Huaneng Shandong Shidao Bay Nuclear Power

xiaotao xing - Huaneng Shandong Shidao Bay Nuclear Power

xueting zou - Huaneng Shandong Shidao Bay Nuclear Power

hai long - Huaneng Shandong Shidao Bay Nuclear Power

GUARANTEED COST CONTROL FOR PRESSURIZED WATER NUCLEAR REACTOR BASED ON THE CUBATURE KALMAN FILTER

Technical Paper Publication: ICONE32-1270

Yuheng Zhang - Harbin Engineering University, College of Nuclear Science and Technology

Junling Wang - Harbin Engineering University, College of Nuclear Science and Technology

Hetao Sun - Harbin Engineering University, College of Nuclear Science and Technology

Jiayu Mu - Harbin Engineering University, College of Nuclear Science and Technology

Xiuchun Luan - Harbin Engineering University, College of Nuclear Science and Technology

DESIGN OF A SAFE OPERATION CONTROL STRATEGY FOR NUCLEAR POWER PLANTS PRODUCING OVERHEATED STEAM

Technical Paper Publication: ICONE32-1618

Henglong Lin - Tsinghua University

Bowen Li - Tsinghua University

Zeguang Li - Tsinghua University

Huifu Wang - Tsinghua University

Study on improving transient margins regarding protection thresholds in stretch out operation

Technical Paper Publication: ICONE32-1686

Danjiang Wei - China Nuclear Power Engineering Co., Ltd.

Yanhua Cheng - China Nuclear Power Engineering Co., Ltd.

Fangqing Yang - China Nuclear Power Engineering Co., Ltd.

Track 16-6 Thermal-Hydraulics and Reactor System II

3:30 pm –5:00 pm, C-108B

Session Chair:

Session Co-Chair:

Evaluation and Development of Heat Transfer and Friction Factor Correlations for Zigzag Printed Circuit Heat Exchangers

Technical Paper Publication: ICONE32-0153

Zhe Li - ShanghaiTech University

Sheng Zhang - Shanghai Institute of Applied Physics, Chinese Academy of Sciences

Xiaohong Yang - Shanghai Institute of Applied Physics, Chinese Academy of Sciences

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RESEARCH ON THE PRANDTL NUMBER MODEL FOR TURBULENT THERMAL STRATIFICATION OF LIQUID SODIUM IN LARGE DOMAIN OF FAST REACTOR

Technical Paper Publication: ICONE32-0190

Jinchao Li - Harbin Engineering University

Guangliang Chen - Harbin Engineering University

Zhigang Zhang - Harbin Engineering University

Hao Qian - Harbin Engineering University

Hongwei Jiang - Harbin Engineering University

Rui Li - Harbin Engineering University

.....

Study on Transient Response of Reactor System for Floating Nuclear Power Plant under Large-Scale Fluctuations of Power Grid

Technical Paper Publication: ICONE32-0284

Guofeng Fan - Zhejiang University

Hanqing Li - Marine Design and Research Institute of China

Yuzeng Wu - Marine Design and Research Institute of China

Shengyu Shen - Zhejiang University

Chunhui Dai - Zhejiang University

Shaohong Zhang - Zhejiang University

.....

Dynamic Response Characteristics of Passive Residual Heat Removal Systems under Different Hot Standby States

Technical Paper Publication: ICONE32-1275

Ruiyang Tu - Shanghai Jiao Tong University

Xuewu Cao - Shanghai Jiao Tong University

Lily Tong - Shanghai Jiao Tong University

RESEARCH ON MODEL PREDICTIVE CONTROL METHOD FOR PRIMARY-LOOP DISCHARGE FLOW TEMPERATURE

Technical Paper Publication: ICONE32-1298

Longhao Xiao - Xi'an Jiaotong University

Yizhen Wei - Xi'an Jiaotong University

Peiwei Sun - Xi'an Jiaotong University

Xinyu Wei - Xi'an Jiaotong University

.....

Research on Time-Series Prediction of Key Parameters in Nuclear Power Plants Based on the Informer Model

Technical Paper Publication: ICONE32-1414

Linfeng Li - Shenzhen University

Anqi Xu - Shenzhen University

Ting Wen - Shenzhen University

Guoming Yin - Shenzhen University

Ziwei Weng - Shenzhen University

Zihan Zhou - Shenzhen University

Ming Yang - Shenzhen University

Xiaomeng Dong - Shenzhen University

Yong Liu - Shenzhen University

.....

Characterization of bubble motion in bottom submerged orifice under rolling conditions

Technical Paper Publication: ICONE32-1626

Shuaihe Wang - Xi'an Jiaotong University

Mingjun Wang - Xi'an Jiaotong University

Wenxi Tian - Xi'an Jiaotong University

Suizheng Qiu - Xi'an Jiaotong University

Guanghui Su - Xi'an Jiaotong University

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Track13-5 Reliability and HRA

3:30 pm –5:00 pm, C-109A

Session Chair:

Session Co-Chair:

Reliability Data Analysis and Research of Emergency Diesel Generator Sets in Nuclear Power Plants

Technical Paper Publication: ICONE32-0232

Li-hui CHEN - Suzhou Nuclear Power Research Institute Co.,Ltd.
Yong ZHANG - Suzhou Nuclear Power Research Institute Co.,Ltd.
Fen WANG - Suzhou Nuclear Power Research Institute Co.,Ltd.
Shi-jun CHEN - Suzhou Nuclear Power Research Institute Co.,Ltd.
Fei-fei TANG - Suzhou Nuclear Power Research Institute Co.,Ltd.

Reliability Analysis of the Safety Function of the Secondary Side Passive Residual Heat Removal System in HPR1000

Technical Paper Publication: ICONE32-0455

Zhenpeng Xiong - Hualong Nuclear Power Technology Co., Ltd
Shi Chen - Hualong Nuclear Power Technology Co., Ltd
Benlin Yang - Hualong Nuclear Power Technology Co., Ltd
Xinyue Zhao - Hualong Nuclear Power Technology Co., Ltd
Lingsheng Hu - Hualong Nuclear Power Technology Co., Ltd
Guanghui Zhao - Hualong Nuclear Power Technology Co., Ltd
Junming Zheng - Hualong Nuclear Power Technology Co., Ltd

RESEARCH ON SYSTEM RELIABILITY ALLOCATION METHOD BASED ON CDF INDEX

Technical Paper Publication: ICONE32-0713

Rui Zhang - China Nuclear Power Engineering Co., LTD.
Qingqing Xu - China Nuclear Power Engineering Co., LTD.
Jian Yang - China Nuclear Power Engineering Co., LTD.
Jin An - China Nuclear Power Engineering Co., LTD.
Fangyu Dong - China Nuclear Power Engineering Co., LTD.

Study of HRA data collection for nuclear power plants

Technical Paper Publication: ICONE32-0777

YONGPING QIU - SNERDI
XIAO TAN - SNERDI
WENJING LEI - SNERDI
YUCHENG ZHUO - SNERDI

Integrating Large Language Models with Retrieval-Augmented Generation for Decision Support in IDHEAS-ECA Applications

Technical Paper Publication: ICONE32-0802

Xingyu Xiao - Tsinghua University
Peng Chen - Chinese Academy of Sciences
Jingang Liang - Tsinghua University
Jiejuan Tong - Tsinghua University
Haitao Wang - Tsinghua University

Reliability Analysis of Reactor Trip Circuit Breaker in Nuclear Power Plants

Technical Paper Publication: ICONE32-1373

Qingqing Wang - Suzhou Nuclear Power Research Institute Co.,Ltd.
Hong Wei Dai - Suzhou Nuclear Power Research Institute Co.,Ltd.
Dong Yuan Guo - Suzhou Nuclear Power Research Institute Co.,Ltd.
Guodong Li - Suzhou Nuclear Power Research Institute Co.,Ltd.
Dongxiong Feng - Suzhou Nuclear Power Research Institute Co.,Ltd.

Track13-6 Risk-informed application-I

3:30 pm –5:00 pm, C-109B

Session Chair:

Session Co-Chair:

RESEARCH ON THE DEVELOPMENT METHOD OF RISK MANAGEMENT ACTIONS FOR RMTS

Technical Paper Publication: ICONE32-1477

Dongyuan Guo - Suzhou Nuclear Power Research Institute Co., Ltd
Qingqing Wang - Suzhou Nuclear Power Research Institute Co., Ltd
Qiongzhe Li - Suzhou Nuclear Power Research Institute Co., Ltd
Xin Gu - Suzhou Nuclear Power Research Institute Co., Ltd
Xiuchun Zhang - Suzhou Nuclear Power Research Institute Co., Ltd

Research and Application of Risk Analysis Method for Extending the Test Intervals of Containment Penetration Leakage Rate Tests in Nuclear Power Plant

Technical Paper Publication: ICONE32-1492

Xiaoyu Liang - suzhou nuclear power research institute
Handing Wang - suzhou nuclear power research institute
Songying Gu - suzhou nuclear power research institute
Bingchen Feng - suzhou nuclear power research institute

Research on the application of risk-informed safety classification in the field of repair-replacement

Technical Paper Publication: ICONE32-1782

Long Li - Nuclear Power Research Institute Co., Ltd.

Jianfeng Yang - Nuclear Power Research Institute Co., Ltd.

Zefeng Zhang - Nuclear Power Research Institute Co., Ltd.

Zhi Yang - Nuclear Power Research Institute Co., Ltd.

Jiajia Sun - Nuclear Power Research Institute Co., Ltd.

Kui Geng - Nuclear Power Research Institute Co., Ltd.

Application of Risk-Informed in the RPR Surveillance Test Interval Optimization of Nuclear Power Plant

Technical Paper Publication: ICONE32-1858

Zhi YANG - Suzhou Nuclear Power Research Institute

Kui Geng - Suzhou Nuclear Power Research Institute

Jiajia Sun - Suzhou Nuclear Power Research Institute

Long Li - Suzhou Nuclear Power Research Institute

Supervise Requirement SR3.0.3 Enforcement Programme Study in nuclear power plant

Technical Paper Publication: ICONE32-1877

Changsheng Cheng - Suzhou Nuclear Power Research Institute Co., Ltd. ,National Engineering Research Center for Nuclear Power Plant Safety & Reliability, Suzhou, China

Qingqing Wang - Suzhou Nuclear Power Research Institute Co., Ltd.

Shijun Chen - Suzhou Nuclear Power Research Institute Co., Ltd.

STUDY ON RISK ASSESSMENT FOR THE EXTENSION OF CONTAINMENT INTEGRATED LEAKAGE RATE TEST INTERVAL OF CPR1000 UNIT

Technical Paper Publication: ICONE32-1885

Bingchen Feng - Suzhou Nuclear Power Research Institute

Wei jin Wang - Suzhou Nuclear Power Research Institute

Xiaoyu Liang - Suzhou Nuclear Power Research Institute

Track13-7 Risk-informed application-II

3:30 pm –5:00 pm, C-112

Session Chair:

Session Co-Chair:

Methods for calculating the safety significance of nuclear power plant functions based on risk-informed approach

Technical Paper Publication: ICONE32-0062

Xiaofan Wang - CNNC Nuclear Power Operation Research Institute

Wei Gao - CNNC Nuclear Power Operation Research Institute

Xiaochun Peng - CNNC Nuclear Power Operation Research Institute

Zhen Yan - CNNC Nuclear Power Operation Research Institute

Wensheng Wang - CNNC Nuclear Power Operation Research Institute

ALARP Application in HPR1000 Hazards Protection Design

Technical Paper Publication: ICONE32-0180

Jinkai Wang - China Nuclear Power Design Company

Xuelong Li - China Nuclear Power Design Company

Peng Xu - China Nuclear Energy Association

Jinhui Li - China Nuclear Power Design Company

STUDY ON THE IDENTIFICATION OF SIGNIFICANT RISK INDICATORS FOR RISK-INFORMED ILRT INTERVALS EXTENSION

Technical Paper Publication: ICONE32-0652

Yu Liu - China Nuclear Power Engineering Co., Ltd.

Wenjing Li - China Nuclear Power Engineering Co., Ltd.

Xinli Yu - China Nuclear Power Engineering Co., Ltd.

Jing Liu - China Nuclear Power Engineering Co., Ltd.

Cong Wang - China Nuclear Power Engineering Co., Ltd.

Shipeng Niu - China Nuclear Power Engineering Co., Ltd.

Research on safety classification of implicitly modeled SSC based on risk-informed method

Technical Paper Publication: ICONE32-0781

Kui Geng - Suzhou Nuclear Power Research Institute Co.,Ltd.

Zhi Yang - Suzhou Nuclear Power Research Institute Co.,Ltd.

Zefeng Zhang - Suzhou Nuclear Power Research Institute Co.,Ltd.

Jiajia Sun - Suzhou Nuclear Power Research Institute Co.,Ltd.

Long Li - Suzhou Nuclear Power Research Institute Co.,Ltd.

Site Evaluation of Inland Nuclear Power Plant Locations Based on Risk-Informed

Technical Paper Publication: ICONE32-1048

Zhijie Tian - China Institute for Radiation Protection,Taiyuan, China

Youying Cheng - National Nuclear Emergency Response Technical Assistance Center,China

Minghua Lyu - China Institute for Radiation Protection, Taiyuan, China

Xinjian Liu - National Nuclear Emergency Response Technical Assistance Center,China

Qingjian Yang - Nanjing University of Information Science &Technology

Construction cost risk management of nuclear power projects based on the TCM framework

Technical Paper Publication: ICONE32-1951

Yi Li - China Nuclear Power Engineering Co., Ltd.;University of International Business and Economics

Peng Liu - China Nuclear Power Engineering Co.,Ltd.

Track6-3 Research on Mechanical Design Related Standards

3:30 pm –5:00 pm, C-113

Session Chair:

Session Co-Chair:

Brief Introduction and Analysis of Damping Values in Seismic Analysis of for Nuclear Power Plants

Technical Paper Publication: ICONE32-0515

Zhaoyu NIE - China Nuclear Power Engineering Co., Ltd

Xiao XU - China Nuclear Power Engineering Co., Ltd

Shijian WU - China Nuclear Power Engineering Co., Ltd

Xingang LI - Ling Dong Nuclear Power Co. Ltd

ZhiCheng LU - China Nuclear Power Engineering Co., Ltd

BingChi LIN - China Nuclear Power Engineering Co., Ltd

Research on Code Case of Evaluation Specification for Hydraulic Tube Expansion Process of Tubes and Tube Plates in Steam Generators OF CAP1400

Technical Paper Publication: ICONE32-0640

Yalan Yuan - Shanghai Electric Nuclear Power Equipment Co., Ltd

Hao Yu - SNERDI

Ming Jiao - SNERDI

Cailin Jiang - Shanghai Electric Nuclear Power Group

Xinxin Wu - Tsinghua University

Wuxi Luo - Shanghai Electric Nuclear Power Equipment Co., Ltd

Research on the Development of Load-Controlled Stress Limit Criteria for China-Specific Class 1 High-Temperature Component Design Codes

Technical Paper Publication: ICONE32-1011

Tao LUO - China Institute of Atomic Energy

Fuhai GAO - China Institute of Atomic Energy

Yafei MO - China Institute of Atomic Energy

Lubo WANG - China Institute of Atomic Energy

Evaluation Method for Defects in Cast Austenitic Stainless Steel Pipes Based on Probabilistic Fracture Mechanics

Technical Paper Publication: ICONE32-1078

Jun Pan - China Productivity Center for Machinery Co., Ltd

Xiaomin Tan - Nuclear Power Operations Research Institute

Yuhan Wang - Nuclear Power Operations Research Institute

Zhangxing Chen - China Productivity Center for Machinery Co., Ltd

Yingke Li - China Productivity Center for Machinery Co., Ltd

Chang Liu - China Productivity Center for Machinery Co., Ltd

Xihui Su - China Productivity Center for Machinery Co., Ltd

Research on the Standard Framework of Smart Manufacturing for Nuclear Instrumentation and Control Equipment Manufacturing Enterprises

Technical Paper Publication: ICONE32-1141

LI LI - China Nuclear Control System Engineering Co.,Ltd
Bing Zhao - China Nuclear Control System Engineering Co.,Ltd
Zepeng Cui - China Nuclear Control System Engineering Co.,Ltd
Wen Cai - China Nuclear Control System Engineering Co.,Ltd

APPLICATIONS OF CSA STANDARD N285.8 TO EVALUATE STRUCTURAL INTEGRITY OF CANDU REACTOR ZR-2.5NB PRESSURE TUBES

Technical Paper Publication: ICONE32-2230

Steven Xu - Kinectrics
Doug Scarth - Kinectrics
Tanya Hunt - Kinectrics

Track 3-4 Advanced Control Strategies 3:30 pm –5:00 pm, C-114

Session Chair:

Session Co-Chair:

DYNAMIC MODELING OF ONCE THROUGH STEAM GENERATORS FOR OPERATIONAL CONTROL

Technical Paper Publication: ICONE32-0138

Bowen Li - Tsinghua University
Henglong Lin - Tsinghua University
Zeguang Li - Tsinghua University
Huifu Wang - Tsinghua University

Research on autonomous control technology for nuclear-powered spacecraft

Technical Paper Publication: ICONE32-0156

Jiayi YE - China institute of atomic energy
Yuwen JIA - China institute of atomic energy

Adaptive Compensation Control of Steam Generator Water Level Based on Deep Reinforcement Learning

Technical Paper Publication: ICONE32-0172

Yihu Zhu - Harbin Engineering University
Hong Xia - Harbin Engineering University

Jiyu Zhang - Harbin Engineering University

Jinxu Pang - Harbin Engineering University

Peiqi Jiang - Harbin Engineering University

VARIABLE UNIVERSE FUZZY CONTROL FOR PWR NUCLEAR REACTORS BASED ON THE NONLINEAR FRACTIONAL NEUTRON POINT KINETICS MODEL.

Technical Paper Publication: ICONE32-0874

Hetao Sun - Harbin Engineering University
Yuheng Zhang - Harbin Engineering University
Hailemichael G. Mengistu - Harbin Engineering University
Xiuchun Luan - Harbin Engineering University

RESEARCHES ON THE CONTROL STRATEGIES OF MHTGR COGENERATION UNIT UNDER ABNORMAL WORKING CONDITIONS

Technical Paper Publication: ICONE32-0887

Congcong Li - Tsinghua University
Zhonghua Cheng - Tsinghua University
Zhe Dong - Tsinghua University
Xiaojin Huang - Tsinghua University

Research on Asymptotic Method-Based Multivariate Model Predictive Control with A Reference Trajectory for Large-Scale PWR

Technical Paper Publication: ICONE32-1417

Jinhong Mo - Xi'an Jiaotong University
Peiwei Sun - Xi'an Jiaotong University
Xinyu Wei - Xi'an Jiaotong University

Wednesday, June 25th

Track1-4 Power Upgrading and Thermal-Hydraulic

8:30 am – 10 am, C-101AB

Session Chair:

Session Co-Chair:

RESEARCH ON OPTIMIZATION OF PRESSURIZER BUBBLE COLLAPSE IN PRIMARY LOOP OF NUCLEAR POWER PLANT

Technical Paper Publication: ICONE32-0322

Zhuangzhuang Yu - China Nuclear Power Engineering Co., Ltd.

Ke Fan - CGN Huizhou Nuclear Power Co., Ltd.

Xiao Lin - China Nuclear Power Engineering Co., Ltd.

Xin Zhang - China Nuclear Power Engineering Co., Ltd.

Zongqiang Yang - China Nuclear Power Engineering Co., Ltd.

MODELING AND ANALYSIS APPLICATION OF THE SECONDARY THERMAL SYSTEM OF NUCLEAR POWER UNITS

Technical Paper Publication: ICONE32-0457

Kaili Xu - CNPO

Chang Gao - CNPO

Tianqi He - CNPO

Shuhang Yan - CNPO

The Research of Nuclear Power Plants Power Upgrade Methods and Application in China

Technical Paper Publication: ICONE32-0915

Sheng Zhu - Nuclear Power Operations Research Institute

Pengcheng Zhang - Nuclear Power Operations Research Institute

Liwen He - Nuclear Power Operations Research Institute

Qianwen Qin - Nuclear Power Operations Research Institute

Ziyi Xu - Nuclear Power Operations Research Institute

OPTIMIZATION OF EMERGENCY SHUTDOWN PLAN FOR STEAM AND POWER CONVERSION SYSTEM IN A NUCLEAR POWER PLANT

Technical Paper Publication: ICONE32-1016

huiyun ma - China Nuclear Power Engineering Co., LTD

yijun yao - China Nuclear Power Engineering Co., LTD

yanlin chen - China Nuclear Power Engineering Co., LTD

ting hou - China Nuclear Power Engineering Co., LTD

ANALYSIS OF EMERGENCY BORON INJECTION TANK THERMAL STRATIFICATION AND DESIGN OPTIMIZATION OF THE EQUIPMENT

Technical Paper Publication: ICONE32-1822

Ting Hou - China Nuclear Power Engineering CO.,LTD.

Yijun Yao - China Nuclear Power Engineering CO.,LTD.

Mengji Zhang - China Nuclear Power Engineering CO.,LTD.

Huiyun Ma - China Nuclear Power Engineering CO.,LTD.

Yanlin Chen - China Nuclear Power Engineering CO.,LTD.

Numerical simulations of temperature fluctuation due to penetration flow into a branch pipe of mixing tee

Technical Paper Publication: ICONE32-1844

Yoichi Utanohara - Komatsu University

Koji Miyoshi - Institute of Nuclear Safety System, Inc.

Track2-4 Nuclear Fuel and Claddings (III)

8:30 am – 10 am, C-102

Session Chair:

Session Co-Chair:

effects of oxygen concentration on corrosion kinetics of Fe-Cr alloys in lead bismuth eutectic: a phase-field simulation

Technical Paper Publication: ICONE32-0270

Xuxi Liu - Xi'an Jiaotong University

Shisen Gao - Xi'an Jiaotong University

Wenbo Liu - Xi'an Jiaotong University

STUDY ON LI CONCENTRATION AND PH VALUE LIMIT OF CZ ZIRCONIUM ALLOY

Technical Paper Publication: ICONE32-1239

Xin Feng Wu - China Nuclear Power Technology Research

Institute Co., Ltd

Liu Tao Chen - China Nuclear Power Technology Research Institute Co., Ltd

Xu Wang - China Nuclear Power Technology Research Institute Co., Ltd

Lin Shi - China Nuclear Power Technology Research Institute Co., Ltd

Guo Liang Zhang - China Nuclear Power Technology Research Institute Co., Ltd

Influence of power history for PWR reload analysis

Technical Paper Publication: ICONE32-1243

Zhuoting Shi - China Nuclear Power Technology Research Institute

Yuxiang Zhu - China Nuclear Power Technology Research Institute

Bo Liu - China Nuclear Power Technology Research Institute

Ruoqi Liu - China Nuclear Power Technology Research Institute

Jinfeng Wei - China Nuclear Power Technology Research Institute

Changyou Zhao - China Nuclear Power Technology Research Institute

Zhijun Li - China Nuclear Power Technology Research Institute

THE INFLUENCE OF TEMPERATURE ON THE DEFORMATION MECHANISM OF CZ1 ALLOY INVESTIGATED BY IN-SITU EBSD TECHNIQUE

Technical Paper Publication: ICONE32-1265

Qingyang Lv - China Nuclear Power Technology Research Institute

Weitong Lin - China Nuclear Power Technology Research Institute

Haixiang Hu - China Nuclear Power Technology Research Institute

Liutao Chen - China Nuclear Power Technology Research Institute

Jing Hu - China Nuclear Power Technology Research Institute

BAYESIAN UNCERTAINTY QUANTIFICATION AND SENSITIVITY ANALYSIS APPLIED TO HNGD MODEL ON THE PREDICTION OF HYDROGEN DIFFUSION AND PRECIPITATION IN ZIRCALOY CLADDING

Technical Paper Publication: ICONE32-1405

Meiqing Gan - South China University of Technology

Rong Liu - South China University of Technology

STUDY ON THE STRESS RELAXATION ANALYSIS METHOD OF THE INCONEL 718 ALLOY GRID SPRING

Technical Paper Publication: ICONE32-1435

Yingzhuo TANG - Shanghai Nuclear Engineering Research & Design Institute

Shufeng ZHAO - Shanghai Nuclear Engineering Research & Design Institute

Jingya SUN - Shanghai Nuclear Engineering Research & Design Institute

Zhenxing WANG - State Nuclear Uranium Resource Development Co., Ltd

Jingjing ZHAO - Shanghai Nuclear Engineering Research & Design Institute

Fujun GAN - Shanghai Nuclear Engineering Research & Design Institute

Fuel Washout from Defective Fuel Rod in PWR

Technical Paper Publication: ICONE32-1866

Pengtao Fu - China Nuclear Power Technology Research Institute Co., Ltd.

Mingliang Dai - China Nuclear Power Technology Research Institute Co., Ltd.

Zhijun Li - China Nuclear Power Technology Research Institute Co., Ltd.

Xiaoqian Zhang - China Nuclear Power Technology Research Institute Co., Ltd.

Track 7-4 Thermal-hydraulic experiments and measurement methods (IV)

8:30 am – 10 am, C-103

Session Chair:

Session Co-Chair:

NATURAL CIRCULATION CHARACTERISTICS ANALYSIS BASED ON THE INTEGRATED TEST FACILITY

Technical Paper Publication: ICONE32-0374

Yiwa Geng - China Nuclear Power Engineering Co., Ltd.

Jiatai Liu - China Nuclear Power Engineering Co., Ltd.

Changjiang Yang - China Nuclear Power Engineering Co., Ltd.

Jingxiang Zhan - China Nuclear Power Engineering Co., Ltd.

Experimental Study on Hydrodynamic Force of Different Types of Trash Nets

Technical Paper Publication: ICONE32-0398

Wei Bai - China Nuclear Power Engineering Co.,Ltd.

Fang Lin - China Nuclear Power Engineering Co.,Ltd.

Yu Zhang - Hainan Nuclear Power Co., Ltd

Xiaona Zhang - China Nuclear Power Engineering Co.,Ltd.

Jia Yang - China Nuclear Power Engineering Co.,Ltd.

Haitao Li - Hainan Nuclear Power Co., Ltd

Zixuan Zhu - China Nuclear Power Engineering Co.,Ltd.

TRANSIENT FLOW ANALYSIS OF NUCLEAR FACILITY PIPELINE SYSTEM WITH SURGE CHAMBER

Technical Paper Publication: ICONE32-0706

Linqing Yang - The 404 Company Limited, CNNC

Xiang Yu - The 404 Company Limited, CNNC

Bingzheng Ke - The 404 Company Limited, CNNC

Caibing Liu - The 404 Company Limited, CNNC

Jian Zhou - The 404 Company Limited, CNNC

ENERGY ANALYSIS OF INERTIAL COMPONENT IN THE WATER HAMMER PROCESS

Technical Paper Publication: ICONE32-0707

Linqing Yang - The 404 Company Limited, CNNC

Xiang Yu - The 404 Company Limited, CNNC

Bingzheng Ke - The 404 Company Limited, CNNC

Caibing Liu - The 404 Company Limited, CNNC

Jian Zhou - The 404 Company Limited, CNNC

PRELIMINARY EXPERIMENTAL INVESTIGATION ON CHF BEHAVIOR IN REVECT-3D FACILITY

Technical Paper Publication: ICONE32-0723

Junming LIANG -China Nuclear Power Technology Research Institute, Guangdong Provincial Key Laboratory of Nuclear Power Safety, China

Lei ZHANG - China Nuclear Power Technology Research Institute, Guangdong Provincial Key Laboratory of Nuclear Power Safety, China

Xiangyu YUN - China Nuclear Power Technology Research Institute, Guangdong Provincial Key Laboratory of Nuclear Power Safety, China

Dongshan WEI - China Nuclear Power Technology Research Institute, Guangdong Provincial Key Laboratory of Nuclear Power Safety, China

Junying XU - China Nuclear Power Technology Research Institute, Guangdong Provincial Key Laboratory of Nuclear Power Safety, China

Huiyong ZHANG - China Nuclear Power Technology Research Institute, Guangdong Provincial Key Laboratory of Nuclear Power Safety, China

EXPERIMENTAL STUDY ON THE CHARACTERISTICS OF STEAM LOW-VELOCITY JET UNDER SEAWATER CONDITIONS

Technical Paper Publication: ICONE32-0729

An Cao - Harbin Engineering University

Yongzhen Hua - China Nuclear Power Engineering Co., Ltd.

Xinxing Liu - Bohai Shipyard Co.,Ltd.

Jianfa Li - China Nuclear Power Engineering Co., Ltd.

Dao Zhang - Harbin Engineering University

Xin Nie - China Nuclear Power Engineering Co., Ltd.

Guangming Fan - Harbin Engineering University

Zhaoming Meng - Harbin Engineering University

Track 8-4 Heat Transfer Characteristics Analysis (II)

8:30 am – 10 am, C-104A

Session Chair:

Session Co-Chair:

Numerical simulation of Liquid Lithium-HeXe Coupled Heat Transfer in PCHE with Different Channel Structures

Technical Paper Publication: ICONE32-0073

Chenhao Zou - Shanghai University of Electric Power

Dong Li - Shanghai University of Electric Power

Cheng Peng - Shanghai University of Electric Power

Licheng Gu - Shanghai University of Electric Power

TITLE OF PAPER: Numerical simulation study on coupling heat transfer characteristics of lead-bismuth and supercritical carbon dioxide in different microchannels of PCHE

Technical Paper Publication: ICONE32-0361

Hongyi Yang - China institute of atomic energy

Bin Hou - China institute of atomic energy

Changzhi Xiao - China institute of atomic energy

CFD simulation on flow blockage in zigzag printed circuit heat exchanger

Technical Paper Publication: ICONE32-1382

Qiming Li - Shanghai Institute of Applied Physics, Chinese Academy of Sciences

Yang Zou - Shanghai Institute of Applied Physics, Chinese Academy of Sciences

Xiaohong Yang - Shanghai Institute of Applied Physics, Chinese Academy of Sciences

Ying Xu - Shanghai Institute of Applied Physics, Chinese Academy of Sciences

The heat transfer characteristics of a He-Xe cooled printed circuit plate heat exchanger based on CFD methodology

Technical Paper Publication: ICONE32-1473

rui zhang - Shanghai University of Electric Power

yushun lu - Shanghai University of Electric Power

hong peng - Shanghai University of Electric Power

jianquan liu - Shanghai University of Electric Power

Study on Thermal and hydraulic Characteristics of S-CO₂ and Liquid Lead-bismuth Alloy for Fluid Heat Transfer in Z-type PCHE

Technical Paper Publication: ICONE32-1559

Jianxiang Yao - China institute of atomic energy

Lina Zhu - China institute of atomic energy

Yan Zhao - China institute of atomic energy

YiChi Li - China institute of atomic energy

Numerical simulation of the S-CO₂ performance in the Z-shaped printed circuit heat exchanger

Technical Paper Publication: ICONE32-1929

Haochen Cai - Zhejiang University

Lihua Chen - Zhejiang University

Wei Liang - China Nuclear Power Design Co., Ltd

Qianyin Yang - Zhejiang University

track 9-4 Radioactive Waste Treatment Technology (IV) -Solidification Technology

8:30 am – 10 am, C-104B

Session Chair:

Session Co-Chair:

NITROGEN DOPED IONIC LIQUID COUPLED METAL ORGANIC FRAMEWORKS UNDER HIGH-TEMPERATURE INDUCED DEFECTS: A NOVEL IONIC LIQUID MOF COUPLING MATERIAL WITH EXCELLENT ADSORPTION CAPACITY FOR TcO₄-

Technical Paper Publication: ICONE32-0060

Hongtao Zhao - Heilongjiang Institute of Atomic Energy

Xingyu Tao - Harbin Engineering University

Advances in on Gas Migration in Buffer/Backfill Materials of High-Level Radioactive Waste Geological Repositories

Technical Paper Publication: ICONE32-0300

Weimin Ye - Tongji University

Zhenbei Yang - Tongji University

Linyong Cui - The Hong Kong Polytechnic University

Study on the upper limit of α nuclide residues in the Sr- and Cs-containing solid waste under the high-level liquid waste partitioning strategy

Technical Paper Publication: ICONE32-0508

Meng Wei - CNNC Long'an Co. Ltd.

Shuai Liu - CNNC Long'an Co. Ltd.

Mengqi Cai - China Nuclear Power Engineering

Mingqing Huo - CNNC Long'an Co. Ltd.

A MONTE CARLO APPROACH TO THE RADIATION CHARACTERISTICS OF HIGH-LEVEL WASTE GLASS UNDER HIGH-LEVEL LIQUID WASTE PARTITIONING STRATEGY

Technical Paper Publication: ICONE32-0595

Juntao Hu - CNNC Long'an Co.,Ltd.

Meng Wei - CNNC Long'an Co.,Ltd.

Shuai Liu - CNNC Long'an Co.,Ltd.

Study on similar material ratio of clay rock in Tamusu preselected area of high-level radioactive waste disposal repository

Technical Paper Publication: ICONE32-1548

Haoran Zhu - Department of Nuclear Science and Technology, School of Energy and Power Engineering, Xi'an Jiaotong University, China

Ziqi Cai - Department of Nuclear Science and Technology, School of Energy and Power Engineering, Xi'an Jiaotong University, China

Qingmin Zhang - Department of Nuclear Science and Technology, School of Energy and Power Engineering, Xi'an Jiaotong University, China

Zhenchao Liu - Department of Nuclear Science and Technology, School of Energy and Power Engineering, Xi'an Jiaotong University, China

Research on technical progress and standardization of remote handling devices for radioactive materials

Technical Paper Publication: ICONE32-1966

Fugui Liu - China Institute of Nuclear Industry Strategy Co., Ltd.

Lipo Liu - China Institute of Nuclear Industry Strategy Co., Ltd.

Jijia Zheng - China Institute of Nuclear Industry Strategy Co., Ltd.

Fangfang Dong - China Institute of Nuclear Industry Strategy Co., Ltd.

Meng Zhang - Harbin Engineering University

Xinyu Wang - China Institute of Nuclear Industry Strategy Co., Ltd.

Track1-13 Chemistry and Water Quality Control (Other) III

8:30 am – 10 am, C-105A

Session Chair:

Session Co-Chair:

Synthesis, characterization and engineering application of nuclear grade polyacrylic acid dispersants

Technical Paper Publication: ICONE32-0186

Liu Pengfei - Yangjiang Nuclear Power Co., Ltd

Qiao Hang - Suzhou Nuclear Power Research Institute

Sun Yun - Suzhou Nuclear Power Research Institute

Chen Liqing - Yangjiang Nuclear Power Co., Ltd

Tan Jinshi - Yangjiang Nuclear Power Co., Ltd

EXPERIMENTAL STUDY ON THE PRINCIPLE OF ULTRASONIC DESCALING TECHNOLOGY

Technical Paper Publication: ICONE32-0740

Chang Gao - China Nuclear Power Operation Technology Corporation LTD

Yuan Gao - Fujian Fuqing Nuclear Power Co.,Ltd.

Kaili Xu - China Nuclear Power Operation Technology Corporation LTD

Tianqi He - China Nuclear Power Operation Technology Corporation LTD

Qinglei Jiang - China Nuclear Power Operation Technology Corporation LTD

.....
Research on the adsorption of radionuclides from chemical decontamination effluents by uniform particle size cation resin

Technical Paper Publication: ICONE32-0950

Bin Liu - Suzhou Nuclear Power Research Institute Co., Ltd.

Biao Ai - Suzhou Nuclear Power Research Institute Co., Ltd.

FuHai Li - Suzhou Nuclear Power Research Institute Co., Ltd.

JiaJie Deng - Suzhou Nuclear Power Research Institute Co., Ltd.

CanShuai Liu - Suzhou Nuclear Power Research Institute Co., Ltd.

ZhaoHui Tian - Suzhou Nuclear Power Research Institute Co., Ltd.

Yun Sun - Suzhou Nuclear Power Research Institute Co., Ltd.

.....
INVESTIGATION INTO THE EFFECT OF DISSOLVED OXYGEN IN WATER ON CORROSION PRODUCT FORMATION IN AREAS OF ACCELERATED FLOW

Technical Paper Publication: ICONE32-1007

Guiquan ZHANG - Xi'an Thermal Power Research Institute Co., Ltd.

Jiantao YAO - Xi'an Thermal Power Research Institute Co., Ltd.

Wei WANG - Huaneng Nuclear Energy Technology Research Institute Co., Ltd.

Zhijun WU - Huaneng Nuclear Energy Technology Research Institute Co., Ltd.

.....
A Brief Analysis of HTR-PM Helium Purification System Regeneration Technology

Technical Paper Publication: ICONE32-1396

Huang Jiangtao -Huaneng Shandong Shidao Bay Nuclear Power CO.,LTD

Tong Liyun -Huaneng Shandong Shidao Bay Nuclear Power

CO.,LTD

Liu Shiyong -Huaneng Shandong Shidao Bay Nuclear Power CO.,LTD

Li Zhao -Huaneng Shandong Shidao Bay Nuclear Power CO.,LTD

Liu Chao -Huaneng Shandong Shidao Bay Nuclear Power CO.,LTD

Guo Xing - Huaneng Shandong Shidao Bay Nuclear Power CO.,LTD

.....
Study on Passivation Temperature of the Primary Circuit in Pressurized Water Reactors

Technical Paper Publication: ICONE32-1847

Chao CHEN - China Nuclear Power Engineering Company Ltd.

Shengjie LI - China Nuclear Power Engineering Company Ltd.

Zhengguang WANG - China Nuclear Power Engineering Company Ltd.

Xichao LIU - China Nuclear Power Engineering Company Ltd.

Qionghui TANG - China Nuclear Power Engineering Company Ltd.

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Track2-13 Innovative Fuel and Technology (I)

8:30 am – 10 am, C-105B

Session Chair:

Session Co-Chair:

Neutronic-Thermal Coupling Calculation of U-50Zr Helical Cruciform Fuel Concepts based on openmc code and MOOSE framework

Technical Paper Publication: ICONE32-1327

Yiliang Dong - Institute of Nuclear Energy Technology Innovation, Chongqing University

Qinglong Wen - Institute of Nuclear Energy Technology Innovation, Chongqing University

.....
MYRRHA FAST REACTOR AM-BEARING FUEL PINS MODELLING USING OFFBEAT

Technical Paper Publication: ICONE32-1361

Xinhang Peng - Xi'an Jiaotong University

Tian Zhang - Harbin Engineering University

Dalin Zhang - Xi'an Jiaotong University

Wenxi Tian - Xi'an Jiaotong University

Suizheng Qiu - Xi'an Jiaotong University

Guanghui Su - Xi'an Jiaotong University

RESEARCH ON SUB-CRITICAL REACTOR IN CHINA INSTITUTE OF ATOMIC ENERGY

Technical Paper Publication: ICONE32-1567

Kaijian Li - China Institute of Atomic Energy

Qingfu Zhu - China Institute of Atomic Energy

Qi Zhou - China Institute of Atomic Energy

Zhaodong Xia - China Institute of Atomic Energy

Shuhong Liang - China Institute of Atomic Energy

Jiachen Zhang - China Institute of Atomic Energy

Yisong He - China Institute of Atomic Energy

Research progress of tritium target for neutron generator

Technical Paper Publication: ICONE32-1638

Siqi Liu - Northeast Normal University

Yingying Cao - Northeast Normal University

Pingwei Sun - Northeast Normal University

Shangrui Jiang - Northeast Normal University

Jiayu Li - Northeast Normal University

Sijia Zhou - Northeast Normal University

Jia Song - Northeast Normal University

Shengduo Liu - Northeast Normal University

Weiyang Zhang - Northeast Normal University

Zebin Li - Northeast Normal University

Yuxuan Gu - Northeast Normal University

Yue Sun - Northeast Normal University

Hailong Xu - Northeast Normal University

Shiwei Jing - Northeast Normal University

Investigation of Hydrogen Diffusion and Deposition Behavior of Spiral Fuel in Pressurized Water Reactors

Technical Paper Publication: ICONE32-1738

Nan Chen - Xi'an Jiaotong University

Yuzhe Ding - Xi'an Jiaotong University

Fengrui Xiang - Xi'an Jiaotong University

Yanan He - Xi'an Jiaotong University

Jing Zhang - Xi'an Jiaotong University

Yingwei Wu - Xi'an Jiaotong University

Wenxi Tian - Xi'an Jiaotong University

Guanghui Su - Xi'an Jiaotong University

Suizheng Qiu - Xi'an Jiaotong University

Orderly grabbing and disassembly technology of automatic charging system for new fuel in high temperature gas cooled reactor development and practice

Technical Paper Publication: ICONE32-2055

Weijun Lei - Huaneng Nuclear Energy Technology Research
Institute Co., LTD

Xin Guan - China Machinery Productivity Promotion Center
Co., LTD

Jin Shi - Huaneng Nuclear Energy Technology Research
Institute Co., LTD

Lin Ye - Huaneng Nuclear Energy Technology Research Institute
Co., LTD

Ping Liu - Huaneng Nuclear Energy Technology Research
Institute Co., LTD

Shichun Zhang - Huaneng Nuclear Energy Technology
Research Institute Co., LTD

Track 8-13 Safe Operation of Equipment

8:30 am – 10 am, C-106A

Session Chair:

Session Co-Chair:

NUMERICAL SIMULATION OF FOREIGN OBJECT MOTION ON SECONDARY SIDE OF STEAM GENERATOR TUBE ZONE

Technical Paper Publication: ICONE32-0391

Lifan Zhao - Xi'an Jiaotong University

Mingjun Wang - Xi'an Jiaotong University

Wenxi Tian - Xi'an Jiaotong University

Suizheng Qiu - Xi'an Jiaotong University

Guanghai Su - Xi'an Jiaotong University

NUMERICAL SIMULATION OF HYDRODYNAMIC CHARACTERISTICS IN SUBMERGED INTAKE SYSTEMS FOR NUCLEAR POWER PLANTS

Technical Paper Publication: ICONE32-0465

Xinshu Jiang - China Nuclear Power Engineering Co.,LTD

Puyue Ma - China Nuclear Power Engineering Co.,LTD

Zhen Zhang - China Nuclear Power Engineering Co.,LTD

Li Dai - China Nuclear Power Engineering Co.,LTD

Qi Li - China Nuclear Power Engineering Co.,LTD

Rongyong Zhang - China Nuclear Power Engineering Co.,LTD

Target cooling system design of intense D-T neutron generator for BNCT application

Technical Paper Publication: ICONE32-1502

Pingwei Sun - Northeast normal university

Hailong Xu - Northeast normal university

Shiwei Jing - Northeast normal university

Non-axisymmetric flow characteristics and its alleviation methods in a mixed flow pump

Technical Paper Publication: ICONE32-1832

Weixiang Ye - Tsinghua University

Guihua Lai - Tsinghua University

Hong Wang - Tsinghua University

Xianwu Luo - Tsinghua University

STUDY ON THE TRAJECTORY OF FOREIGN OBJECTS ON THE SECONDARY SIDE OF NUCLEAR POWER STEAM GENERATOR

Technical Paper Publication: ICONE32-1915

Jie Rong - Xi'an Jiaotong University

Mingjun Wang - Xi'an Jiaotong University

Wenxi Tian - Xi'an Jiaotong University

Suizheng Qiu - Xi'an Jiaotong University

Guanghai Su - Xi'an Jiaotong University

THE MIGRATION BEHAVIOR ANALYSIS OF MAIN NUCLIDES IN THE PRIMARY PIPELINE

Technical Paper Publication: ICONE32-1935

Zhao Zhang - Suzhou Nuclear Power Research Institute Co., Ltd.

Feng Xue - Suzhou Nuclear Power Research Institute Co., Ltd.

Ting Luo - Suzhou Nuclear Power Research Institute Co., Ltd.

Track 7-13 Severe accidents analysis (I)

8:30 am – 10 am, C-106B

Session Chair:

Session Co-Chair:

Study on Evolution Mechanism for Melting Accident of Plate Fuel

Technical Paper Publication: ICONE32-0958

Wenjie Ding - Institute of Nuclear Physics and Chemistry, China

Hongwen Huang - Institute of Nuclear Physics and Chemistry, China

Haibing Guo - Institute of Nuclear Physics and Chemistry, China

Jiao Gao - Institute of Nuclear Physics and Chemistry, China

Shaohua Wang - Institute of Nuclear Physics and Chemistry, China

Jimin Ma - Institute of Nuclear Physics and Chemistry, China

Visualization research on the convective heat transfer behaviors of layered corium pools under oscillating conditions

Technical Paper Publication: ICONE32-1043

Simin Luo - China Nuclear Power Technology Research Institute Co. Ltd.

Yong Ouyang - China Nuclear Power Technology Research Institute Co. Ltd.

UNCERTAINTY AND SENSITIVITY ANALYSIS OF SOURCE TERM UNDER SEVERE ACCIDENT FOR THE SPENT FUEL POOL

Technical Paper Publication: ICONE32-1166

Yuan Chang - China Nuclear Power Engineering Co., LTD.

Xu-hao Zhang - China Nuclear Power Engineering Co., LTD.

Xiao-hui Sun - China Nuclear Power Engineering Co., LTD.

Jing Sun - China Nuclear Power Engineering Co., LTD.

Sheng-sheng Lin - China Nuclear Power Engineering Co., LTD.

.....
**SIMULATION STUDY OF ZIRCONIUM ALLOY
CLADDING BALLOONING AND BURST BEHAVIOR
UNDER LOSS-OF-COOLANT ACCIDENT
CONDITIONS CONSIDERING ANISOTROPIC
PLASTIC DEFORMATION**

Technical Paper Publication: ICONE32-1436

Qiwen Chen - NPIC

Chuanbao Tang - NPIC

Jian Deng - NPIC

Yuejian Luo - NPIC

Libo Qian - NPIC

.....
**EFFECT OF DEBRIS EJECTION MODE ON THE
ACCIDENT PROGRESSION AND SOURCE TERM IN
NORDIC BWRs**

Technical Paper Publication: ICONE32-1865

Govatsa Acharya - KTH Royal Institute of Technology

Dmitry Grishchenko - KTH Royal Institute of Technology

Pavel Kudinov - KTH Royal Institute of Technology

.....
**INVESTIGATION OF SEVERE ACCIDENT
PROGRESSION IN INTEGRAL PWR SMRS**

Technical Paper Publication: ICONE32-1958

Govatsa Acharya - KTH Royal Institute of Technology

Dmitry Grishchenko - KTH Royal Institute of Technology

Pavel Kudinov - KTH Royal Institute of Technology

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Track2-18 Nuclear fuel & claddings (V)

8:30 am – 10 am, C-107A

Session Chair:

Session Co-Chair:

**UNLEASHING THE PHONON-MEDIATED
INTRINSIC CARRIER TRANSPORT AND OPTICAL
PROPERTIES OF URANIUM DINITRIDE (UN₂)**

Technical Paper Publication: ICONE32-0072

Safdar Iqbal - Shandong University

Xinlei Duan - Shandong University

Hang Fan - Nuclear Power Institute of China

Kun Zhang - Nuclear Power Institute of China

Linhua Liu - Shandong University

Jia-Yue Yang - Shandong University

.....
**PYRAZOLATE-BASED METAL-ORGANIC
FRAMEWORK FOR EFFICIENT URANIUM
ADSORPTION**

Technical Paper Publication: ICONE32-0461

Jinfeng Li - Harbin Engineering University;Heilongjiang
Institute of Atomic Energy

Qianwen Wang - Heilongjiang Institute of Atomic Energy

Haifeng Gu - Harbin Engineering University

Hongtao Zhao - Harbin Engineering University;Heilongjiang
Institute of Atomic Energy

.....
**PHASE-FIELD SIMULATION OF FISSION GAS
BUBBLES EVOLUTION IN THE $\gamma_1+\gamma_2$ PHASES OF
U-10Zr METALLIC NUCLEAR FUEL**

Technical Paper Publication: ICONE32-0576

Yongxiao La - Xi'an Jiaotong University

Yanbo Jiang - Xi'an Jiaotong University

Wenbo Liu - Xi'an Jiaotong University

.....
**OVERVIEW OF THE MODELLING PROGRESS ON
OXIDATION BEHAVIOR OF ACCIDENT TOLERANT
CR-COATED ZR ALLOY CLADDING**

Technical Paper Publication: ICONE32-0618

Dong Wang - Fuzhou University

Shihao Wu - Xi'an Jiaotong University

Kai Lu - Fuzhou University

Yapei Zhang - Xi'an Jiaotong University

G.H. Su - Xi'an Jiaotong University

Xi Liu - Fuzhou University

Effects of recrystallization on fission gas behavior in U3Si2 fuel at LWR temperature: A combination of phase-field method and rate theory

Technical Paper Publication: ICONE32-1183

Zhenhong Ge - Xi'an Jiaotong University

Xuxi Liu - Xi'an Jiaotong University

Di Yun - Xi'an Jiaotong University

Wenbo Liu - Xi'an Jiaotong University

Multidimensional Thermomechanical Coupling Analysis of Multielement Redistribution in MOX Fuel Rods

Technical Paper Publication: ICONE32-1193

Jinkai Zhang - Xi'an Jiaotong University

High-Temperature Electronic Structure and Transport Properties of Uranium Dioxide (UO2): Role of the Hubbard U Term

Technical Paper Publication: ICONE32-1646

Xinlei Duan - Shandong university

Linhua Liu - Shandong university

Jia-Yue Yang - Shandong university

Track 4-1 Water Cooling SMR

8:30 am – 10 am, C-107B

Session Chair:

Session Co-Chair:

Research on Emergency Operating Procedure Strategies of SGTR in Small Pressurized Water Reactor

Technical Paper Publication: ICONE32-0159

Qian Sun - China Nuclear Power Engineering Co., Ltd

Tianqi Si - China Nuclear Power Engineering Co. Ltd

THE INFLUENCE ANALYSIS OF THE NUMBER OF ISOLATED MAIN HEAT EXCHANGERS ON IPWR

Technical Paper Publication: ICONE32-0502

Zhidong Yue - General Clean Energy Co. Ltd.

Ting Wei - General Clean Energy Co. Ltd.

Robust H_{∞} control of reactor power for the small pressurized water reactor

Technical Paper Publication: ICONE32-0670

Yan Shoujun - China Institute of Nuclear Industry Strategy

Zhou Lijie - China Institute of Nuclear Industry Strategy

Song Lifeng - China Institute of Nuclear Industry Strategy

Li Zhongjie - China Institute of Nuclear Industry Strategy

Research on oxygenation treatment methods of feedwater for fourth-generation nuclear power units

Technical Paper Publication: ICONE32-0893

YAO Yao - Xi'an Thermal Power Research Institute Co., Ltd.

LIU Feng - Xi'an Thermal Power Research Institute Co., Ltd.

MA Xiqiang - HuaNeng Shandong Shidao Bay Nuclear Power Co., Ltd.

HU Yang - Xi'an Thermal Power Research Institute Co., Ltd.

HUANG Peng - HuaNeng Shandong Shidao Bay Nuclear Power Co., Ltd.

WANG Lei - HuaNeng Shandong Shidao Bay Nuclear Power Co., Ltd.

LI Changhai - Xi'an Thermal Power Research Institute Co., Ltd.

ZHANG Ruixiang - Xi'an Thermal Power Research Institute Co., Ltd.

OPTIMIZATION DESIGN OF BORON-FREE SMALL PRESSURIZED WATER REACTOR WITH HELICAL-CRUCIFORM METALLIC FUEL CONSIDERING THE INFLUENCE OF CONTROL ROD COMPENSATION OPERATION HISTORY

Technical Paper Publication: ICONE32-1068

Ruixiang Wang - Shanghai Jiao Tong University

Hui Guo - Shanghai Jiao Tong University

Qufei Song - Shanghai Jiao Tong University

Kunfeng Ma - Shanghai Jiao Tong University

Yao Xiao - Shanghai Jiao Tong University

Hanyang Gu - Shanghai Jiao Tong University

RESEARCH ON CORE DAMAGE ASSESSMENT OF ACP 100 COUPLED WITH ACCIDENT PROCESS AND MONITORING INSTRUMENT CHARACTERISTICS

Technical Paper Publication: ICONE32-1934

Jian Deng - Nuclear Power Institute of China

Zian Zhai - Nuclear Power Institute of China

Tao Xu - Nuclear Power Institute of China

MengMeng Xi - Nuclear Power Institute of China

MingMing Xia - Nuclear Power Institute of China

Junlong Wang - Nuclear Power Institute of China

Track 3-5 I&C System, Platform and Simulation Technology

8:30 am – 10 am, C-108A

Session Chair:

Session Co-Chair:

Exploration of the Application of Formal Methods in I&C of Nuclear Power Plants

Technical Paper Publication: ICONE32-0001

Quan Ma - Science and Technology on Reactor System Design
Technology Laboratory, Nuclear Power Institute of China

Yang Zhao - Science and Technology on Reactor System Design
Technology Laboratory, Nuclear Power Institute of China

MingXing Liu - Science and Technology on Reactor System
Design Technology Laboratory, Nuclear Power Institute of
ChinaScience and Technology on Reactor System Design
Technology Laboratory, Nuclear Power Institute of China

YiJie Qu - Science and Technology on Reactor System Design
Technology Laboratory, Nuclear Power Institute of China

YiFan Huang - Science and Technology on Reactor System
Design Technology Laboratory, Nuclear Power Institute of China

GenHua Liang - Science and Technology on Reactor System
Design Technology Laboratory, Nuclear Power Institute of China

Nan Li - Science and Technology on Reactor System Design
Technology Laboratory, Nuclear Power Institute of China

RongBin Hou - Science and Technology on Reactor System

Design Technology Laboratory, Nuclear Power Institute of China

Conceptual Design of Digital Twin-based Operational Control Platform for Lunar-based Nuclear Reactor Power Source

Technical Paper Publication: ICONE32-0101

Xiao Luo - Deep Space Exploration Laboratory

Yang Zhu - Deep Space Exploration Laboratory

Hongli Chen - Deep Space Exploration Laboratory

Xing Gao - Deep Space Exploration Laboratory

Wei Shi - City University of Hong Kong

Study on Design and Verification for Emulation Controller of Virtual DCS in Digital and Intelligent Nuclear Fuel Reprocessing Plant

Technical Paper Publication: ICONE32-0387

Xueqin CHU - China Nuclear Power Engineering CO.,LTD.

Cong ZHANG - China Nuclear Control System Engineering Co.Ltd.

Qinyu YANG - China Nuclear Power Engineering CO.,LTD.

Research on Time Synchronization Technology of Non- safety DCS System Based on IEEE1588v2 Timing Protocol

Technical Paper Publication: ICONE32-0506

Yuchen Yang - China Nuclear Control System Engineering Co. Ltd.

Dong Wang - China Nuclear Control System Engineering Co. Ltd.

Leilei Liang - China Nuclear Control System Engineering Co. Ltd.

Yiwu Hu - China Nuclear Control System Engineering Co. Ltd.

Research and Practice on the Allocation Scheme of Hardware V&V Integrity Levels for Nuclear Instrumentation and Control System

Technical Paper Publication: ICONE32-0947

Lanlan Zhang - National Key Laboratory of Nuclear Reactor
Technology, Nuclear Power Institute of China

Xinyue Li - National Key Laboratory of Nuclear Reactor
Technology, Nuclear Power Institute of China

Xianjian He - National Key Laboratory of Nuclear Reactor
Technology, Nuclear Power Institute of China

Qiyang Li - National Key Laboratory of Nuclear Reactor Technology, Nuclear Power Institute of China

Yang Chen - National Key Laboratory of Nuclear Reactor Technology, Nuclear Power Institute of China

Xingchen Deng - National Key Laboratory of Nuclear Reactor Technology, Nuclear Power Institute of China

PROPOSAL OF A NOVEL SAFETY DCS COMMUNICATION SYSTEM BASED ON ORTHOGONAL CODING IN NUCLEAR POWER PLANTS

Technical Paper Publication: ICONE32-1424

Naixin Zhang - National Key Laboratory of Nuclear Reactor Technology, Nuclear Power Institute of China

Yang Zhao - National Key Laboratory of Nuclear Reactor Technology, Nuclear Power Institute of China

Qi Chen - National Key Laboratory of Nuclear Reactor Technology, Nuclear Power Institute of China

Jinyu He - National Key Laboratory of Nuclear Reactor Technology, Nuclear Power Institute of China

Xi Ge - National Key Laboratory of Nuclear Reactor Technology, Nuclear Power Institute of China

Track 3-7 Human factors and human performance

8:30 am – 10 am, C-108B

Session Chair:

Session Co-Chair:

RESEARCH AND APPLICATION OF HRA DEPENDENCY ANALYSIS

Technical Paper Publication: ICONE32-0542

KUNXIU LIU - CNNC China Nuclear Power Engineering Co., Ltd

WENJING LI - CNNC China Nuclear Power Engineering Co., Ltd

SHUJIE GUO - CNNC China Nuclear Power Engineering Co., Ltd

TENGJIAO ZHENG - CNNC China Nuclear Power Engineering Co., Ltd

SHIGUANG DENG - CNNC China Nuclear Power Engineering Co., Ltd

YUNLONG XU - CNNC China Nuclear Power Engineering Co., Ltd

High-temperature gas-cooled reactor (HTGR) operator workload assessment—a pilot experiment

Technical Paper Publication: ICONE32-0812

Jiajuan Hang - Huaneng Nuclear Energy Technology Research Institute Co., Ltd

Zhende Zhou - Huaneng Nuclear Energy Technology Research Institute Co., Ltd

Jifeng Han - Sichuan University

Zhu Wang - Huaneng Nuclear Energy Technology Research Institute Co., Ltd

Research on Human Error during the First Overhaul of Nuclear Power Plants

Technical Paper Publication: ICONE32-1110

Yiyang Shi - Huaneng Shandong Shidaobay Nuclear Power Co., Ltd

Shiwei Guo - Huaneng Shandong Shidaobay Nuclear Power Co., Ltd

HUMAN FACTORS EFFECTIVENESS VERIFICATION OF INTELLIGENT ALARM SYSTEMS IN NUCLEAR POWER PLANTS

Technical Paper Publication: ICONE32-1192

Jianhua Chen - Shenzhen University

Sijuan Chen - Shenzhen University

Kunze Yang - The Pennsylvania State University

Chenxi Zhang - Shenzhen University

Jipu Wang - Shenzhen University

Chengxiang Liu - Shenzhen University

Faqlang Qian - Shenzhen University

RESEARCH ON DYNAMIC ASSESSMENT METHOD OF HUMAN FACTOR RELIABILITY AND RISK IN NUCLEAR POWER PLANT ACCIDENT SCENARIOS

Technical Paper Publication: ICONE32-1378

Ting Wen - Shenzhen University

Anqi Xu - Shenzhen University

Ming Yang - Shenzhen University

Xiaomeng Dong - Shenzhen University

Linfeng Li - Shenzhen University

Ziwei Weng - Shenzhen University

Zihan Zhou - Shenzhen University

Guoming Yin - Shenzhen University

Operator Cognitive Model and Human-Machine Interface Requirements Analysis in Automated Environments

Technical Paper Publication: ICONE32-1653

KUNXIU LIU - China Nuclear Power Engineering Co., Ltd.

WANTING LI - China Nuclear Power Engineering Co., Ltd.

TENGJIAO ZHENG - China Nuclear Power Engineering Co., Ltd.

SHIGUANG DENG - China Nuclear Power Engineering Co., Ltd.

RESEARCH AND APPLICATION OF IDHEAS-ECA METHOD IN FIRE HUMAN RELIABILITY ANALYSIS IN NUCLEAR POWER PLANT

Technical Paper Publication: ICONE32-1947

KUNXIU LIU - CNNC China Nuclear Power Engineering Co., Ltd

WANTING LI - CNNC China Nuclear Power Engineering Co., Ltd

HENGPING LIU - CNNC China Nuclear Power Engineering Co., Ltd

YUNLONG XU - CNNC China Nuclear Power Engineering Co., Ltd

SHIGUANG DENG - CNNC China Nuclear Power Engineering Co., Ltd,

TENGJIAO ZHENG - CNNC China Nuclear Power Engineering Co., Ltd

Track 4-3 Metal Cooling SMR (II)

8:30 am – 10 am, C-109A

Session Chair:

Session Co-Chair:

DEVELOPMENT AND IMPLEMENTATION OF AN RVACS MODULE IN THE BELLA DYNAMICS CODE FOR ASSESSMENT OF STATION BLACKOUT EVENTS IN METAL COOLED REACTORS

Technical Paper Publication: ICONE32-0999

Fredrik Dehlin - KTH Royal Institute of Technology

Alejandria Pérez-Valseca - Metropolitan Autonomous University

Janne Wallenius - KTH Royal Institute of Technology

RESEARCH ON CORE FLOW DISTRIBUTION IN A SMALL AND MICRO LEAD-COOLED FAST REACTOR

Technical Paper Publication: ICONE32-1114

Yangguang Zhang - North China Electric Power University

Daogang Lu - North China Electric Power University

Xiaotian Wang - North China Electric Power University

Qiong Cao - North China Electric Power University

SCHEME DESIGN OF MULTI-PURPOSE SMALL MODULAR LEAD-COOLED FAST REACTOR

Technical Paper Publication: ICONE32-1415

Ruiyang Guo - China institute of atomic energy

Yi Zhuang - China institute of atomic energy

Han Zhang - China institute of atomic energy

Yinpeng Zhou - China institute of atomic energy

Jiyue Liang - China institute of atomic energy

Xin Zhou - China institute of atomic energy

Pengrui Qiao - China institute of atomic energy

Hongyi Yang - China institute of atomic energy

Research on the Design Optimization of Small Modular Lead-cooled Fast Reactors Based on Machine Learning

Technical Paper Publication: ICONE32-1530

Han Zhang - China Institute of Atomic Energy

Ruiyang Guo - China Institute of Atomic Energy

Yun Hu - China Institute of Atomic Energy

Pan Cao - China Institute of Atomic Energy

Haixia Wan - China Institute of Atomic Energy

Yi Zhuang - China Institute of Atomic Energy

Pengrui Qiao - China Institute of Atomic Energy

CONCEPTUAL DESIGN OF A YTTRIUM HYDRIDE MODERATED THERMIONIC REACTOR FOR LUNAR BASE

Technical Paper Publication: ICONE32-2015

Zheng Wang - China Institute of Atomic Energy

Yuchen Huo - China Institute of Atomic Energy

Jinduo Wang - China Institute of Atomic Energy

Shouzhi Zhao - China Institute of Atomic Energy

Zheng Sun - China Institute of Atomic Energy

Jing Shao - China Institute of Atomic Energy

Cheng Hou - China Institute of Atomic Energy

Yangliu Li - China Institute of Atomic Energy

Chanjuan Tang - China Institute of Atomic Energy

Binhe Hu - China Institute of Atomic Energy

Track 4-4 Micro Reactor (I)

8:30 am – 10 am, C-109B

Session Chair:

Session Co-Chair:

NODALIZATION OF ACP100 SMR IN APROS AND STEADY STATE SIMULATION

Technical Paper Publication: ICONE32-0034

Zhu Ye - Nuclear Power Institute of China

Danrong Song - Nuclear Power Institute of China

Qing Chu - Nuclear Power Institute of China

Chang Zeng - Nuclear Power Institute of China

Zhiyun Cai - Nuclear Power Institute of China

An Adaptive Modularization Method for Nuclear Systems of Marine Small Modular Reactors Based on DBSCAN and PSO

Technical Paper Publication: ICONE32-0150

Xin Li - China Nuclear Power Technology Research Institute Co. Ltd.

Zhihong Tang - China Nuclear Power Technology Research Institute Co. Ltd.

Liyuan Wang - China Nuclear Power Technology Research Institute Co. Ltd.

Shusheng Guo - China Nuclear Power Technology Research Institute Co. Ltd.

Wenjun Zhang - China Nuclear Power Technology Research Institute Co. Ltd.

Lide Zhang - China Nuclear Power Technology Research Institute Co. Ltd.

Research on ACP100 Emergency Operating Procedures and Methods

Technical Paper Publication: ICONE32-0485

Qian Sun - China Nuclear Power Engineering Co.,Ltd

Qiang Zhao - China Nuclear Power Engineering Co.,Ltd

NUMERICAL SIMULATION OF PRHR SYSTEM CHARACTERISTICS UNDER INTERMEDIATE LOOP LARGE BREAK INCIDENT FOR INTEGRATED SMALL REACTORS

Technical Paper Publication: ICONE32-0501

Zhidong Yue - General Clean Energy Co. Ltd.

Ting Wei - General Clean Energy Co. Ltd.

Research on a rapid prediction method for key core design parameters of small-scale reactors

Technical Paper Publication: ICONE32-0819

Pei Ren - China institute of atomic energy

ZhaoDong Xia - China institute of atomic energy

YuTing Cheng - China institute of atomic energy

CuiJie Pan - China institute of atomic energy

Jiecheng Zhao - China institute of atomic energy

Experimental Investigation and Simulation Analysis of The Pressure Suppression System for Small Modular Reactor ACPR50S

Technical Paper Publication: ICONE32-0870

Yabing Li - China Nuclear Power Technology Research Institute

Di Wang - China Nuclear Power Technology Research Institute

Chenyu Hao - China Nuclear Power Technology Research Institute

ANALYSIS OF DOUBLE-ENDED GUILLotine BREAK ACCIDENT IN SURGE LINE OF ACP100 BASED ON COUPLING METHOD

Technical Paper Publication: ICONE32-0908

Fan Miao - School of Nuclear Science and Technology, Xi'an Jiaotong University

Bin Zhang - School of Nuclear Science and Technology, Xi'an Jiaotong University; State Key Laboratory of Multiphase Flow in Power Engineering, Xi'an Jiaotong University

Tianci Xie - School of Nuclear Science and Technology, Xi'an Jiaotong University

Hao Yang - School of Nuclear Science and Technology, Xi'an Jiaotong University

Jianqiang Shan - School of Nuclear Science and Technology, Xi'an Jiaotong University; State Key Laboratory of Multiphase Flow in Power Engineering, Xi'an Jiaotong University

Track 16-2 Thermal-Hydraulics and Reactor System I

8:30 am – 10 am, C-112

Session Chair:

Session Co-Chair:

Development of Industry-applicable Two-phase Flow Identification and Classification Approach Based on Flow-induced Vibration Signals

Technical Paper Publication: ICONE32-0169

Hanyu Wang - The University of Tokyo

Shuichiro Miwa - The University of Tokyo

Wen Zhou - The University of Tokyo

Koji Okamoto - The University of Tokyo

A Novel Fuel Element: Helical Annular Fuel and Its Thermal-Hydraulic Characteristics Analysis in a 2x2 Bundle

Technical Paper Publication: ICONE32-0277

Shuo Guo - Xi'an Jiaotong University

Xingguang Zhou - Xi'an Jiaotong University

Dianqiang Jiang - Xi'an Jiaotong University

Xiaoli Wu - Nuclear Power Institute of China

Qi Lu - Nuclear Power Institute of China

Ting Zhang - Nuclear Power Institute of China

Dalin Zhang - Xi'an Jiaotong University

DEVELOPMENT OF ONSET OF BOILING ENTRAINMENT AND BOILING ENTRAINMENT RATE PREDICTION METHOD FOR TWO-PHASE FLOW FALLING LIQUID FILM

Technical Paper Publication: ICONE32-0746

KAITO NADE - The University of Electro-Communications

RAKA FIRMAN - The University of Electro-Communications

YUKI NARUSHIMA - Hitachi, Ltd.

TOMIO OKAWA - The University of Electro-Communications

KENICHI KATONO - Hitachi, Ltd.

Loss of External Load Accident Characterization for Heat Pipe Cooled Reactors with Closed Brayton Cycle

Technical Paper Publication: ICONE32-1716

Guanghui Jiao - Harbin Engineering University

Genglei Xia - Harbin Engineering University

Tao Zhou - Harbin Engineering University

RESEARCH ON THE FLOW MIXING CHARACTERISTICS OF DIRECT VESSEL INJECTION IN REACTOR PRESSURE VESSELS

Technical Paper Publication: ICONE32-1983

Changfan Zhu - Harbin Engineering University

Tuo Wang - Harbin Engineering University

Jiajun Li - Harbin Engineering University

Dongyang Li - Harbin Engineering University

Sichao Tan - Harbin Engineering University

Ruifeng Tian - Harbin Engineering University

Track10-1 Equipment research on nuclear power plants

8:30 am – 10 am, C-113

Session Chair:

Session Co-Chair:

RELIABILITY EVALUATION OF HYDRAULIC CIRCUIT COMPONENTS OF MAIN STEAM ISOLATE VALVES

Technical Paper Publication: ICONE32-0442

Wensheng Hu - CNNP

Yibo Guo - CNNP

Design and Qualification Research of Main Feedwater Isolation Valve for HPR

Technical Paper Publication: ICONE32-0788

JIANG KETAO - China Nuclear Power Engineering Co.,Ltd.

SUN JIALI - China Nuclear Power Engineering Co.,Ltd.

LI DONGLIANG - China Nuclear Power Engineering Co.,Ltd.

ZHANG WEI - China Nuclear Power Engineering Co.,Ltd.

ZHU JINGMEI - China Nuclear Power Engineering Co.,Ltd.

Analysis of hydraulic cylinder influence on pressure charging process of control rod hydraulic drive system

Technical Paper Publication: ICONE32-1187

Yun Li - Tsinghua University

Benke Qin - Tsinghua University

Hanliang Bo - Tsinghua University

Study on surface boiling heat transfer of fuel cladding with optimized gas-liquid transport path using a single hydrophobic pattern

Technical Paper Publication: ICONE32-1246

Liyang Shen - South China University of Technology

Jiejing Cai - South China University of Technology

Optimization Research on the Installation Structure of Miniature Neutron Source Reactor Fuel Assembly

Technical Paper Publication: ICONE32-1419

Qian Hao -China Institute of Atomic Energy

Mengjiao Wang -China Institute of Atomic Energy

Jinhua Zhang -China Institute of Atomic Energy

Dan Peng -China Institute of Atomic Energy

Jingyan Hong -China Institute of Atomic Energy

Xiaobo Wu -China Institute of Atomic Energy

Yiguo Li -China Institute of Atomic Energy

Research of new control rod drive mechanism for high

temperature gas-cooled reactor

Technical Paper Publication: ICONE32-2057

Ping Liu - Huaneng Nuclear Energy Technology Research Institute Co., LTD, China

Wei Wang - Huaneng Nuclear Energy Technology Research Institute Co., LTD, China

Dongwang Meng - Huaneng Nuclear Energy Technology Research Institute Co., LTD, China

Weijun Lei - Huaneng Nuclear Energy Technology Research Institute Co., LTD, China

Ye Lin - Huaneng Nuclear Energy Technology Research Institute Co., LTD, China

Jie Xu - Huaneng Nuclear Energy Technology Research Institute Co., LTD, China

Shichun Zhang - Huaneng Nuclear Energy Technology Research Institute Co., LTD, China

Qi Wang - Huaneng Nuclear Energy Technology Research Institute Co., LTD, China

Qiangqiang Yang - Huaneng Nuclear Energy Technology Research Institute Co., LTD, China

Huimin Sun - Huaneng Nuclear Energy Technology Research Institute Co., LTD, China

Track 14-1 Nuclear Safety Simulation

8:30 am – 10 am, C-114

Session Chair:

Session Co-Chair:

SIMULATION OF THERMOHYDRAULICS AND AEROSOL BEHAVIOR IN LACE LA4 VIA SPRUCE

Technical Paper Publication: ICONE32-0677

Pingwen OU - State Key Laboratory of Nuclear Power Safety Technology and Equipment, CNPRI

Chao GUO - State Key Laboratory of Nuclear Power Safety Technology and Equipment, CNPRI

Yong OUYANG - State Key Laboratory of Nuclear Power Safety Technology and Equipment, CNPRI

Peng CHEN - State Key Laboratory of Nuclear Power Safety

Technology and Equipment, CNPRI

**Development and Assessment of Cladding Oxidation
Models of Severe Accident Program SCENES-CoreMt**

Technical Paper Publication: ICONE32-1066

Feng Guo - Shanghai Jiao Tong University

Danting Zhao - Shanghai Jiao Tong University

Meng Zhao - Shanghai Jiao Tong University

Hao Zhang - Shanghai Jiao Tong University

Yanhua Yang - Shanghai Jiao Tong University

**DEVELOPMENT AND VALIDATION OF A
TURBULENT COMBUSTION MODEL FOR CO/H₂/
AIR MIXTURES**

Technical Paper Publication: ICONE32-1082

Siqi Liu - China Nuclear Power Research Institute

Yabing Li - China Nuclear Power Research Institute

Yong Ouyang - China Nuclear Power Research Institute

Xinhai Zhao - China Nuclear Power Research Institute

**SIMULATION OF FISSION PRODUCT RELEASE IN
PHEBUS FPT1 VIA SPRUCE**

Technical Paper Publication: ICONE32-1354

Zehao ZHANG - State Key Laboratory of Nuclear Power Safety
Technology and Equipment, China Nuclear Power Technology
Research Institute Co., Ltd.

Pingwen OU - State Key Laboratory of Nuclear Power Safety
Technology and Equipment, China Nuclear Power Technology
Research Institute Co., Ltd.

Zichen ZHAO - State Key Laboratory of Nuclear Power Safety
Technology and Equipment, China Nuclear Power Technology
Research Institute Co., Ltd.

Yong OUYANG - State Key Laboratory of Nuclear Power Safety
Technology and Equipment, China Nuclear Power Technology
Research Institute Co., Ltd.

Chao GUO - State Key Laboratory of Nuclear Power Safety
Technology and Equipment, China Nuclear Power Technology
Research Institute Co., Ltd.

Peng CHEN - State Key Laboratory of Nuclear Power Safety

Technology and Equipment, China Nuclear Power Technology
Research Institute Co., Ltd.

Yueyang HOU - State Key Laboratory of Nuclear Power Safety
Technology and Equipment, China Nuclear Power Technology
Research Institute Co., Ltd. / University of Science and
Technology of China

**Validation of SPRUCE code with aerosol deposition
experiment in a containment with heat exchanger tubes**

Technical Paper Publication: ICONE32-1598

Yongzheng Chen - China Nuclear Power Technology Research
Institute Co., Ltd

Yong Ouyang - China Nuclear Power Technology Research
Institute Co., Ltd

Pingwen Ou - China Nuclear Power Technology Research
Institute Co., Ltd

Xinnuo E - Harbin Engineering University

Peng Chen - China Nuclear Power Technology Research
Institute Co., Ltd

Chao Guo - China Nuclear Power Technology Research Institute
Co., Ltd

Haifeng Gu - Harbin Engineering University

Feiye Liao - China Nuclear Power Technology Research Institute
Co., Ltd

**An Attempt to Verify Gamma-Ray Transport Codes
Based on the Discrete Ordinates Method Using the
Method of Manufactured Solutions**

Technical Paper Publication: ICONE32-1930

Zhenwen Wei - Institute for Advanced Study in Nuclear Energy
& Safety, College of Physics and Optoelectronic Engineering,
Shenzhen University

Jipu Wang - Institute for Advanced Study in Nuclear Energy
& Safety, College of Physics and Optoelectronic Engineering,
Shenzhen University

Peitao Song - China Institute for Radiation Protection

Tengjie Chen - Institute for Advanced Study in Nuclear Energy
& Safety, College of Physics and Optoelectronic Engineering,
Shenzhen University

Can Huang - Institute for Advanced Study in Nuclear Energy & Safety, College of Physics and Optoelectronic Engineering, Shenzhen University

Ziyang Lin - Institute for Advanced Study in Nuclear Energy & Safety, College of Physics and Optoelectronic Engineering, Shenzhen University

Haoyuan Song - Institute for Advanced Study in Nuclear Energy & Safety, College of Physics and Optoelectronic Engineering, Shenzhen University

Hao Liang - Institute for Advanced Study in Nuclear Energy & Safety, College of Physics and Optoelectronic Engineering, Shenzhen University

Sijuan Chen - Institute for Advanced Study in Nuclear Energy & Safety, College of Physics and Optoelectronic Engineering, Shenzhen University

Ming Yang - Institute for Advanced Study in Nuclear Energy & Safety, College of Physics and Optoelectronic Engineering, Shenzhen University

Yong Liu - Institute for Advanced Study in Nuclear Energy & Safety, College of Physics and Optoelectronic Engineering, Shenzhen University

Track1-5 Advanced Reactors (High-Temperature Reactors, Fast Reactors, New Concept Reactors) I

10:30 am – 12:00 pm, C-101AB

Session Chair:

Session Co-Chair:

Study on Thermal Expansion Reactivity of CEFR at full power

Technical Paper Publication: ICONE32-0592

xinyuan Bian - China Institute of Atomic Energy

guotu Ke - China Institute of Atomic Energy

jian Zhang - China Institute of Atomic Energy

Analysis of Primary Frequency Modulation Response of Large-scale Pool-type Sodium-Cooled Fast Reactor

Technical Paper Publication: ICONE32-0733

Weiping Hong - China Institute of Atomic Energy

Jun Yang - China Institute of Atomic Energy

Zhongxiao Guo - China Institute of Atomic Energy

Jin Wang - China Institute of Atomic Energy

Linjie Zhou - China Institute of Atomic Energy

Study on the Sensitivity of Steam Outlet Temperature in THTR Steam Generators

Technical Paper Publication: ICONE32-1064

wang miaomiao - Huaneng Nuclear Energy Technology Research Institute Co., Ltd.

li jingsong - China Nuclear Power Operation Technology Corporation

ma xiqiang - Huaneng Nuclear Energy Technology Research Institute Co., Ltd.

zhu yingjie - Huaneng Nuclear Energy Technology Research Institute Co., Ltd.

zhang tianqi - China Nuclear Power Operation Technology Corporation

zhang wei - China Nuclear Power Operation Technology Corporation

wang lang - Huaneng Nuclear Energy Technology Research Institute Co., Ltd., China

AN OVERVIEW OF NUCLEAR HYDROGEN PRODUCTION: TECHNOLOGIES, CHALLENGES, AND PROSPECTS

Technical Paper Publication: ICONE32-1286

Wenxiao Chen - Huaneng Nuclear Energy Technology Research Institute

Na An - Huaneng Nuclear Energy Technology Research Institute

Bin Zhang - Huaneng Nuclear Energy Technology Research Institute

Jianli Huang - Huaneng Nuclear Energy Technology Research Institute

Anti-sway strategy for crane hoisting in floating nuclear power plants

Technical Paper Publication: ICONE32-1610

Xiaobin Qu - China Nuclear Power Technology Research Institute Co.,Ltd.

Apeng Zhao - China Nuclear Power Technology Research Institute Co.,Ltd.

Shujian Tang - China Nuclear Power Technology Research Institute Co.,Ltd.

Yu Hou - Xi'an Jiaotong University

Gang Liu - China Nuclear Power Technology Research Institute Co.,Ltd.

Guofeng Zhou - China General Nuclear Power Co., Ltd.

Potential Benefits of Converting Coal Power Plants to Integrated Nuclear Energy Systems in China

Technical Paper Publication: ICONE32-1628

Suoni Qi - China Nuclear Power Engineering Co.,LTD.

Li Fun - China Nuclear Power Engineering Co.,LTD.

RESEARCH AND APPLICATION OF OXYGENATION TREATMENT IN SODIUM-COOLED FAST REACTOR NUCLEAR POWER UNIT

Technical Paper Publication: ICONE32-1658

Zhenhua Hu - Xi'an Thermal Power Research Institute Co., Ltd

Yumin Yang - Xi'an Thermal Power Research Institute Co., Ltd

Junwan Li - Xi'an Thermal Power Research Institute Co., Ltd

Track2-5 Nuclear fuel fabrication and testing

10:30 am – 12:00 pm, C-102

Session Chair:

Session Co-Chair:

Reliability studies for Additive manufacturing Parts of Nuclear fuel

Technical Paper Publication: ICONE32-0496

Guopeng QIN-CNNC Jianzhong Nuclear Fuel Co.,Ltd.

Liying ZHANG - CNNC Jianzhong Nuclear Fuel Co.,Ltd.

HTR-PM FUEL ELEMENT MANUFACTURING AND OPERATIONAL PERFORMANCE ANALYSIS

Technical Paper Publication: ICONE32-1009

Bin QU - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd.

Haiqiong LI - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd.

An XU - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd.

Xing FENG - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd.

EFFECTS OF DIFFERENT ROLLING Q-VALUES AND DEFORMATIONS ON THE PROPERTIES OF ZR-4 ALLOY PIPE UNDER DIFFERENT ANNEALING REGIMES

Technical Paper Publication: ICONE32-1549

HAOHAO Guan - State Nuclear Baoti Zirconium Industry Company, China

Weidong CuI - State Nuclear Baoti Zirconium Industry Company, China

Yangping Sun - State Nuclear Baoti Zirconium Industry Company, China

Chunguang Liu - State Nuclear Baoti Zirconium Industry Company, China

Yahui Cheng - State Nuclear Baoti Zirconium Industry Company, China

PREPARATION AND PROPERTIES OF MICRO-ARC OXIDATION LAYER ON ZIRCONIUM ALLOY SURFACE

Technical Paper Publication: ICONE32-1563

Zhibin Wang - China North Nuclear Fuel Co., Ltd

Jinguo Wu - China North Nuclear Fuel Co., Ltd

Mingyang Li - China North Nuclear Fuel Co., Ltd

Zhenfang Cai - China North Nuclear Fuel Co., Ltd

Siyuan Liu - China North Nuclear Fuel Co., Ltd

Preparation and Characterization of CERMET Fuel Pellet Matrix Using Powder Extrusion Printing

Technical Paper Publication: ICONE32-1688

Zhao Yumeng - China North Nuclear Fuel Co., Ltd.

Shao Zongyi - China North Nuclear Fuel Co., Ltd.

Xun Yuxuan - China North Nuclear Fuel Co., Ltd.

Li Yu - China North Nuclear Fuel Co., Ltd.

Li Zongshu - China North Nuclear Fuel Co., Ltd.

Liu Wentao - China North Nuclear Fuel Co., Ltd.

Liu Wei - China North Nuclear Fuel Co., Ltd.

Ji Pengbo - China North Nuclear Fuel Co., Ltd.

Application and prospect of surface treatment and modification technologies in nuclear fuel assembly

Technical Paper Publication: ICONE32-1731

Zhao Yumeng - China North Nuclear Fuel Co., Ltd.

Li Zongshu - China North Nuclear Fuel Co., Ltd.

Wang Zhibin - China North Nuclear Fuel Co., Ltd.

Ji Pengbo - China North Nuclear Fuel Co., Ltd.

Xie Chenchen - China North Nuclear Fuel Co., Ltd.

Du Jiangpin - China North Nuclear Fuel Co., Ltd.

Lu Yongheng - China North Nuclear Fuel Co., Ltd.

Wang Wei - China North Nuclear Fuel Co., Ltd.

liu Yanshuo - China North Nuclear Fuel Co., Ltd.

Elevated lithium concentration effect on PWR primary materials

Technical Paper Publication: ICONE32-1845

Zhang Yu - Daya Bay Nuclear Power Operation And Management Co., Ltd.

Lin GenXian - Suzhou Nuclear Power Research Institute Co., Ltd

Liu CanShuai - Suzhou Nuclear Power Research Institute Co., Ltd

Tian ZhaoHui - Suzhou Nuclear Power Research Institute Co., Ltd

Sun Yun - Suzhou Nuclear Power Research Institute Co., Ltd

Lijun Song - Suzhou Nuclear Power Research Institute Co., Ltd

Track 7-5 Thermal-hydraulic experiments and measurement methods (V)

10:30 am – 12:00 pm, C-103

Session Chair:

Session Co-Chair:

EXPERIMENTAL AND MECHANISTIC STUDY ON THE EFFECT OF INCLINED CONDITIONS ON THE CHF OF UPWARD FLOW OF R134A IN A TUBE

Technical Paper Publication: ICONE32-0091

Huanjun Kong - Xi'an Jiaotong University

Ya Li - Xi'an Jiaotong University

Jianqiang Shan - Xi'an Jiaotong University

Miao Gui - Xi'an Jiaotong University

EXPERIMENTAL STUDY ON THE DYNAMIC RESPONSE OF VCT OUTLET CONCENTRATION DURING DILUTION OPERATION

Technical Paper Publication: ICONE32-0166

Xiangyu Chi - China Nuclear Power Engineering Co.,Ltd.

Jiazhao Wang - China Nuclear Power Engineering Co.,Ltd.

Bin Zhao - China Nuclear Power Engineering Co.,Ltd.

Pei Yu - China Nuclear Power Engineering Co.,Ltd.

Jiazhili Liu - China Nuclear Power Engineering Co.,Ltd.

EFFECT OF SURFACTANT ON BOILING HEAT TRANSFER — FROM A BUBBLE DYNAMIC PERSPECT

Technical Paper Publication: ICONE32-0196

Song Ni - City University of Hong Kong, China

Sina Li - City University of Hong Kong, China

Chung Ki Cheng - City University of Hong Kong, China

Jiyun Zhao - City University of Hong Kong, China

Experimental Study of Resistance Characteristics in Helically-Coiled Tube of Steam Generator for Lead-bismuth Reactor and Evaluation of Empirical Formulas

Technical Paper Publication: ICONE32-0340

Bin Hou - China institute of atomic energy

Hongyi Yang - China institute of atomic energy

Changzhi Xiao - China institute of atomic energy

Design and modeling of the simulation platform for integrated thermal hydraulic test facility

Technical Paper Publication: ICONE32-0414

Si Ni - China Nuclear Power Engineering Co., LTD

Liqun Zhang - China Nuclear Power Engineering Co., LTD

Chao Wang - China Nuclear Power Engineering Co., LTD

Changjiang Yang - China Nuclear Power Engineering Co., LTD

Shaohua Wang - China Nuclear Power Engineering Co., LTD

Shuang Lin - China Nuclear Power Engineering Co., LTD

Qianxi Xiao - Xi'an Jiaotong University

Study On The Effects Of Condensate Temperature And Steam Pressure On Condensation-Induced Water Hammer (CIWH) In Steam Pipelines Of Nuclear Power Plants

Technical Paper Publication: ICONE32-1648

Rongyang Xue - North China Electric Power University

Jiaming Zhao - China Nuclear Power Engineering Co.,Ltd

Minchao Liang - North China Electric Power University

Jiarui Zhang - North China Electric Power University

Wentao Guo - North China Electric Power University

Shengfei Wang - North China Electric Power University

Track 8-5 Rod Bundle Channel and Subchannel

10:30 am – 12:00 pm, C-104A

Session Chair:

Session Co-Chair:

Research on Structural Design and Flow Field Optimization of 5x5 Helical Cruciform Fuel Assembly

Technical Paper Publication: ICONE32-0218

Xinli Yin - Harbin Engineering University

Guangliang Chen - Harbin Engineering University

Design of a Fluid Network Method Coupled CFD Scheme for Rod bundle Fuel Assemblies

Technical Paper Publication: ICONE32-0490

Rui Li - Fundamental Science on Nuclear Safety and Simulation Technology Laboratory

Guangliang Chen - Fundamental Science on Nuclear Safety and Simulation Technology Laboratory

Yuhang Zhang - Fundamental Science on Nuclear Safety and Simulation Technology Laboratory

Lixuan Zhang - Fundamental Science on Nuclear Safety and Simulation Technology Laboratory

Zhaofei Tian - Fundamental Science on Nuclear Safety and Simulation Technology Laboratory

CFD investigation on coolant flow behaviour of LBE cooled fuel assemblies with different bundle size

Technical Paper Publication: ICONE32-0673

Guanwen Luo - China Nuclear Power Technology Research Institute

Jun Xing - China Nuclear Power Technology Research Institute

Kuo Wang - China Nuclear Power Technology Research Institute

Jingwei Pan - China Nuclear Power Technology Research Institute

Yiliang Xie - China Nuclear Power Technology Research Institute

Xiaohang Wu - China Nuclear Power Technology Research Institute

Huiyong Zhang - China Nuclear Power Technology Research Institute

Wenxi Tian - Xi'an Jiaotong University

Numerical Simulation Study of the Dispersed Flow Region During Reflooding in Narrow Gap Channels

Technical Paper Publication: ICONE32-1215

Xinkui Fang - Beijing University of Chemical Technology

Dexia Yuan - Beijing University of Chemical Technology

Jingqi Xu - Beijing University of Chemical Technology

Tao Lu - Beijing University of Chemical Technology

Yan Luo - Beijing University of Chemical Technology

Numerical simulation of subchannel heat transfer and non-uniform wall heat flux characteristics based on conjugate heat transfer

Technical Paper Publication: ICONE32-1297

Yongchao Chen - South China University of Technology

Jiejun Cai - South China University of Technology

Heng Xie - Tsinghua University

Analysis of the influence of square bond structure and carbon brick metal reactor gap channel on the bypass flow distribution characteristics of Pebble-Bed High Temperature Gas Cooled Reactor

Technical Paper Publication: ICONE32-1399

Yuhang Liu - Beijing Jiaotong University

Lixin Yang - Beijing Jiaotong University

Jinsong Guo - HUANENG Nuclear Energy Technology Research Institute

Wei Liu - HUANENG Nuclear Energy Technology Research Institute

Ting Zhao - Beijing Jiaotong University

Track 9-5 Radioactive Waste Packaging and Transport Containers

10:30 am – 12:00 pm, C-104B

Session Chair:

Session Co-Chair:

RESEARCH AND APPLICATION OF LEAD POURING TECHNOLOGY IN TRANSFER CASK OF SPENT FUEL DRY STORAGE

Technical Paper Publication: ICONE32-0127

Yuanyuan WEI - CHINA

Cheng CHENG - CHINA

Yuelong PAN - CHINA

Qionghui TANG - CHINA

Zhaoyu NIE - CHINA

Yafu GAO - CHINA

Xueling ZHANG - CHINA

Qinglong WEN - CHINA

Jiaming LI - CHINA

Sensitivity Analysis of Factors Influencing the Source Terms and Dose Consequences of Fuel Drop Accidents

Technical Paper Publication: ICONE32-0193

Wei DENG - China Nuclear Power Engineering Co.,Ltd

Ya LIU - China Nuclear Power Engineering Co.,Ltd

Jiaxuan GAO - China Nuclear Power Engineering Co.,Ltd

Mengxi WANG - China Nuclear Power Engineering Co.,Ltd

RESEARCH ON THE PREDICTION OF THE WHOLE LIFE CYCLE COST OF RADIOACTIVE SOLID WASTE STORAGE AT MEDIUM AND DEEP GEOLOGY

Technical Paper Publication: ICONE32-0336

Dong Zhao - China Nuclear Power Engineering Co.,Ltd., China

Hong-ying Yu - China Nuclear Power Engineering Co.,Ltd., China

Xin Shang - China Nuclear Power Engineering Co.,Ltd., China

FEASIBILITY STUDY ON DRY STORAGE OF MNSR FUEL

Technical Paper Publication: ICONE32-0680

Qian HAO - China Institute of Atomic Energy

Shuo WANG - China Institute of Atomic Energy

Jinhua ZHANG - China Institute of Atomic Energy

Yinghao LU - China Institute of Atomic Energy

Preparation of Intermediate-Level Waste Packages for Off-site Shipment Using Specialized Engineered Waste Handling and Transfer Equipment

Technical Paper Publication: ICONE32-0885

Yi Mi - CNL

Samuel Melnyk - CNL

Discussion on Tritium Analysis and Optimization of Control in the Primary Circuit of High-temperature Gas-cooled Reactor

Technical Paper Publication: ICONE32-1523

Qian Ma - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd

Xi Chen - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd

Jie Di - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd

Zheng Liang - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd

Yongsheng Jia - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd

Wenting Jia - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd

Yulin Zhang - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd

Research on the influence of regeneration of Helium Purification System on gaseous effluent in HTR-PM

Technical Paper Publication: ICONE32-1603

Qian Ma - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd
Yongsheng Jia - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd
Xinyue Zhang - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd
Xi Chen - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd
Na Li - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd
Yulin Zhang - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd
Peipei Zhang - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd
Xue He - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd

Track1-14 Equipment Reliability and Failure Analysis (Case Analysis) I

10:30 am – 12:00 pm, C-105A

Session Chair:

Session Co-Chair:

Development and Application of Ex-Vessel Neutron Dosimetry System in Tianwan VVER-1000 Unit 2

Technical Paper Publication: ICONE32-0187

Meng Zhang - CNNP Operation Maintenance Technology Co., Ltd
Chunfeng Shi - CNNP Operation Maintenance Technology Co., Ltd
Yaping Zhang - School of Nuclear Science and Technology,
Xi'an Jiaotong University
Liangzhi Cao - School of Nuclear Science and Technology,
Xi'an Jiaotong University
Donghui Wang - State Nuclear Power Plant Service Company, China

FAILURE ANALYSIS OF A DISSIMILAR METAL WELD PIPING IN THE SECONDARY LOOP OF A CANDU NUCLEAR REACTOR

Technical Paper Publication: ICONE32-0883

Yuling You - Shanghai Jiao Tong University, China
Jiamei Wang - Shanghai Jiao Tong University, China
Kai Chen - Shanghai Jiao Tong University, China
Lefu Zhang - Shanghai Jiao Tong University, China

Pneumatic Solenoid Valve Fault Modeling and Simulation Verification for Nuclear Power Plants

Technical Paper Publication: ICONE32-1344

Haitao Lan - Hubei University of Automotive Technology
Gejia Zhu - China Resources Power Investment Co
Jianxun Lu - Shenzhen Technology University
Ben Zhang - Shenzhen Technology University
Wenlin Wang - Shenzhen Technology University
Guohua Wu - Shenzhen Technology University
Ping Zheng - China Great Wall Technology Group Co
Haichuan Zhang - Shenzhen Technology University

ROOT CAUSE ANALYSIS AND IMPROVEMENT MEASURES FOR THE PLUNGER ASSEMBLY FAILURES IN THE EMERGENCY BORIC ACID INJECTION PUMP OF HPR1000

Technical Paper Publication: ICONE32-1606

Yixin Lin - CNNP Operation Maintenance Technology Co.,Ltd
Zhiming Wu - CNNP Operation Maintenance Technology Co.,Ltd
Xue Wen - CNNP Operation Maintenance Technology Co.,Ltd
Xiaoyu Hou - CNNP Operation Maintenance Technology Co.,Ltd

ANOMALY DETECTION FOR MAIN STEAM ISOLATION VALVE WITH MULTIVARIATE TIME SERIES

Technical Paper Publication: ICONE32-1804

Ping Liu - China Nuclear SUFA Technology Industry Co., Ltd
Zhi-yan Li - Zhejiang University
An-qi Guan - Zhejiang University
Fang-na Xiang - Zhejiang University
Zhen-hao Lin - Zhejiang University, Hangzhou Valvever
Intelligent Technology Co., Ltd.
Jin-yuan Qian - Zhejiang University

Analysis of Gearbox Tooth Failure and Improvement Measures of Nuclear Power Plant Chiller Compressor

Technical Paper Publication: ICONE32-1814

Dongxiong Feng - Suzhou Nuclear Power Research Institute Co.,Ltd.

Qingqing Wang - Suzhou Nuclear Power Research Institute Co.,Ltd.

Xiaokang Wu - Suzhou Nuclear Power Research Institute Co.,Ltd.

Analysis and Study on Operation Reliability of Degassing Tower in HPR1000 Boron Recycling System

Technical Paper Publication: ICONE32-2103

Wenxuan Zhang - Huaneng Hainan Changjiang Nuclear power Co., Ltd.

Track2-14 Innovative Fuel and Technology (II)

10:30 am – 12:00 pm, C-105B

Session Chair:

Session Co-Chair:

Comparative Study on Quasi-Transient Neutronics of MSR Fuel Drainage Process for MSFR and DFR

Technical Paper Publication: ICONE32-0106

Bowen Wang - Harbin Engineering University

Xiang Wang - Harbin Engineering University

UNCERTAINTY ANALYSIS OF NON-DESTRUCTIVE URANIUM LOADING MEASUREMENT IN SPHERICAL FUEL ELEMENTS OF HIGH-TEMPERATURE REACTORS

Technical Paper Publication: ICONE32-0649

Yanlong Wen - Tsinghua University

Haiyan Xiao - Tsinghua University

Hongjian Zhang - Tsinghua University

Qing Zhu - Tsinghua University

Hong Li - Tsinghua University

Liguo Zhang - Tsinghua University

Validation and Application of MLFF in Generating the Input of Thermal Scattering Data for Liquid FLiBe

Technical Paper Publication: ICONE32-0653

Guoxiao Cai - Shanghai Institute of Applied Physics

Jifeng Hu - Shanghai Institute of Applied Physics

Xiaohe Wang - Shanghai Institute of Applied Physics

Xiangzhou Cai - Shanghai Institute of Applied Physics

Jingen Chen - Shanghai Institute of Applied Physics

Study on Optimization of Count Control Logic for Fuel Handling System in HTR-PM Reactor

Technical Paper Publication: ICONE32-0849

xiaotao xing -Huaneng Shandong Shidaowan Nuclear Power Co., LTD

xiaojin huang - Tsinghua University

chen wang - Huaneng Shandong Shidaowan Nuclear Power Co., LTD

feng jiang -Huaneng Shandong Shidaowan Nuclear Power Co., LTD

hui wang - Huaneng Shandong Shidaowan Nuclear Power Co., LTD

guining qi - Huaneng Shandong Shidaowan Nuclear Power Co., LTD

huimin sun - Huaneng Nuclear Energy Technology Research Institute Co., LTD

Automatic Control Strategy and Method of Ball Flow in Fuel Element of HTR-PM

Technical Paper Publication: ICONE32-0933

Chen Wang - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd.

Feng Jiang - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd.

Xiaotao Xing - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd.

Junsheng Fang - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd.

Huimin Sun - Huaneng Nuclear Energy Technology Research Institute Co.,Ltd.

Yijie Yan - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd.

Qiangqiang Yang - Huaneng Nuclear Energy Technology Research Institute Co.,Ltd.

Research on the Analysis Method of Mechanical Characteristic of Plate Fuel Assembly

Technical Paper Publication: ICONE32-1180

yujie Liu - Shanghai Nuclear Engineering Research and Design Institute

Shiyin Xu - Shanghai Nuclear Engineering Research and Design Institute

JIngya Sun - Shanghai Nuclear Engineering Research and Design Institute

Jie Ding - Shanghai Nuclear Engineering Research and Design Institute

Heting Sun - Shanghai Nuclear Engineering Research and Design Institute

Xiaoqiang Chen - Shanghai Nuclear Engineering Research and Design Institute

Track 8-14 Advanced Reactor (I)

10:30 am – 12:00 pm, C-106A

Session Chair:

Session Co-Chair:

Optimization of surface thermocouple arrangement of sodium-cooled fast reactor steam generator

Technical Paper Publication: ICONE32-0986

Xiangyu Yan - China institute of atomic energy

Lina Zhu - China institute of atomic energy

Shuai Xing - China institute of atomic energy

Huanjun Zhu - China institute of atomic energy

Yichen Li - China institute of atomic energy

Weiying Li - China institute of atomic energy

Bin Hou - China institute of atomic energy

Optimization study of external electric heater arrangement of sodium-cooled fast reactor steam generator

Technical Paper Publication: ICONE32-0987

Xiangyu Yan - China institute of atomic energy

Lina Zhu - China institute of atomic energy

Shuai Xing - China institute of atomic energy

Huanjun Zhu - China institute of atomic energy

Yichen Li - China institute of atomic energy

Weiying Li - China institute of atomic energy

Bin Hou - China institute of atomic energy

NUMERICAL STUDY AND EXPERIMENTAL VALIDATION ON PRIMARY SIDE RESISTANCE CHARACTERISTICS OF HOTSG HELICAL PIPE SECTION

Technical Paper Publication: ICONE32-1337

ZHOU Youxin - CNPRI

CHEN Xiting - CNPRI

GAO Yaxin - CNPRI

MAO Yulong - CNPRI

YUAN Zhaojun - CNPRI

Investigation on the transient performance of High Temperature Sodium Heat Pipe Based on CFD Simulation

Technical Paper Publication: ICONE32-1393

Haojie Zhang - Beijing Jiaotong University

Zhuqian Zhang - Beijing Jiaotong University

Lixin Yang - Beijing Jiaotong University

Heyao Li - Beijing Jiaotong University

Shihao Yang - Beijing Jiaotong University

Research on Thermal Characteristics of Lithium cooled Reactor Comprehensive Test Device Based on SindaFluint

Technical Paper Publication: ICONE32-1452

Su Hang - China Institute of Atomic Energy

Guo Chunqiu - China Institute of Atomic Energy

Huang Jinlu - Xi'an Jiaotong University

Li Weihai - China Institute of Atomic Energy

Numerical simulation of thermal fluctuation in subchannels of wire-wrapped fuel rods for sodium-cooled fast reactors

Technical Paper Publication: ICONE32-1495

Zhaoxin Chen - China Institute of Atomic Energy

Yi Huang - China Institute of Atomic Energy

Fuhai Gao - China Institute of Atomic Energy

Track 7-14 Severe accidents analysis (II)

10:30 am – 12:00 pm, C-106B

Session Chair:

Session Co-Chair:

Experimental Study on Natural Removal of Aerosols in Containment of ACP100 during Severe Accidents

Technical Paper Publication: ICONE32-0239

Yu FENG - China Nuclear Power Engineering Co., LTD.

Hongliang WANG - China Nuclear Power Engineering Co., LTD.

Mingrui YU - China Nuclear Power Engineering Co., LTD.

Yiran GUO - China Nuclear Power Engineering Co., LTD.

Bolin ZHU - China Nuclear Power Engineering Co., LTD.

Yidan YUAN - China Nuclear Power Engineering Co., LTD.

Uncertainty Analysis of Severe Accidents in AP1000

Technical Paper Publication: ICONE32-0510

Yunfeng Gu - China Nuclear Power Operation Technology Corporation, LTD

Jue Wang - China Nuclear Power Operation Technology Corporation, LTD

Wei Wei - China Nuclear Power Operation Technology Corporation, LTD

Ma Guoyang - China Nuclear Power Operation Technology Corporation, LTD

Xiong Huang - China Nuclear Power Operation Technology Corporation, LTD

Yuqing Chen - China Nuclear Power Operation Technology Corporation, LTD

MODEL DEVELOPMENT FOR DETERMINING OXYGEN FLUX DIFFUSING INTO ZR SUBSTRATE IN THE DEGRADATION STAGE OF CR COATING UNDER HIGH-TEMPERATURE STEAM OXIDATION CONDITIONS

Technical Paper Publication: ICONE32-0607

Dong Wang - Fuzhou University

Kai Lu - Fuzhou University

Yapei Zhang - Xi'an Jiaotong University

G.H. Su - Xi'an Jiaotong University

Xi Liu - Fuzhou University

A Temperature Coupling Framework for Thermohydraulic Analysis of Stratified Molten Pool Configuration Under Severe Accident Conditions

Technical Paper Publication: ICONE32-0656

PENGYA GUO - Department of Engineering Physics, Tsinghua University, Beijing 100084, China

ERHUI CHEN - CNNC Key Laboratory for Severe Accident Research in Nuclear Power Safety, China Nuclear Power Engineering Co., Ltd, Beijing 100048, China

PENG YU - CNNC Key Laboratory for Severe Accident Research in Nuclear Power Safety, China Nuclear Power Engineering Co., Ltd, Beijing 100048, China

LI ZHANG - CNNC Key Laboratory for Severe Accident Research in Nuclear Power Safety, China Nuclear Power Engineering Co., Ltd, Beijing 100048, China

ZHUO LIU - CNNC Key Laboratory for Severe Accident Research in Nuclear Power Safety, China Nuclear Power Engineering Co., Ltd, Beijing 100048, China

WEI LI - CNNC Key Laboratory for Severe Accident Research in Nuclear Power Safety, China Nuclear Power Engineering Co., Ltd, Beijing 100048, China

JIYANG YU - Department of Engineering Physics, Tsinghua University, Beijing 100084, China

YIDAN YUAN - Department of Engineering Physics, Tsinghua University, Beijing 100084, China

CHARACTERISTICS OF EUTECTIC REACTION LAYER DURING EUTECTIC MELTING OF BORON CARBIDE ABSORBER AND STAINLESS STEEL

Technical Paper Publication: ICONE32-0685

Xuesong Bai - Shanghai Jiao Tong University

Lili Tong - Shanghai Jiao Tong University

Xuewu Cao - Shanghai Jiao Tong University

Thermal-hydraulic Safety Analysis of the Passive Containment Air-Cooling System for ACP100 after a Severe Accident

Technical Paper Publication: ICONE32-0852

Longyu Pu - Harbin Engineering University

Yanfeng Zhang - Harbin Engineering University

Chunhui Dong - Harbin Engineering University

Ronghua Chen - Xi'an Jiaotong University

Track 7-19 Small modular reactors and Gen IV reactors (II)

10:30 am – 12:00 pm, C-107A

Session Chair:

Session Co-Chair:

NUMERICAL STUDY ON THE DESIGN OF AN ENERGY BALANCE FLOW METER FOR ULTRA LOW FLOW MEASUREMENT IN LIQUID METAL SYSTEMS

Technical Paper Publication: ICONE32-0338

Jiahao Zhao - Southeast University

Bin Han - Southeast University

Xiaoliang Zhu - Southeast University

BaoWen Yang - DEQD Institute for Advanced Research in Multiphase Flow and Energy Transfer

Aiguo Liu - DEQD Institute for Advanced Research in Multiphase Flow and Energy Transfer

Yuanjie Zhang - Southeast University

Research on Flow Induced Vibration Analysis Method of Sodium-Sodium Heat Exchanger in Sodium Cooled Fast Reactor

Technical Paper Publication: ICONE32-0651

Yuning Liu - CIAE

Shan He - CIAE

Guangdong Song - CIAE

Shuai Xing - CIAE

Accident analyses of station blackout for Liquid Fuel Molten Salt Reactor

Technical Paper Publication: ICONE32-0834

Pinyan Huang - Shanghai Institute Of Applied Physics,CAS

Chong Zhou - Shanghai Institute Of Applied Physics,CAS

Shuaiyu Xue - Shanghai Institute Of Applied Physics,CAS

Qiang Sun - Shanghai Institute Of Applied Physics,CAS

Xiaohan Yu - Shanghai Institute Of Applied Physics,CAS

Research of Thermal-hydraulic characterization in narrow-slit flow of core bypass under the fuel assembly blockage accident condition of SMILE lead-cooled fast reactor in the range of natural circulation flow rate

Technical Paper Publication: ICONE32-0862

Xiaotian Wang - School of Nuclear Science and Engineering, North China Electric Power University

Daogang Lu - School of Nuclear Science and Engineering, North China Electric Power University

Yangguang Zhang - School of Nuclear Science and Engineering, North China Electric Power University

Qiong Cao - School of Nuclear Science and Engineering, North China Electric Power University

Analysis and Study on Sodium Fire Accidents and Detection Methods in the Primary Loop of Sodium Cooled Fast Reactor

Technical Paper Publication: ICONE32-0907

Xin ZHANG - CIAE

Fengyang SHEN - CIAE

Xisi ZHANG - CIAE

Fangyuan XUE - CIAE

Lijie ZHOU - CIAE

Verification of Numerical simulation code for high-pressured water injection in molten LBE

Technical Paper Publication: ICONE32-1326

Hua Pang - China Nuclear Power Technology Research Institute

Feng Mao - China Nuclear Power Technology Research Institute

Peng Sun - China Nuclear Power Technology Research Institute

Lei Zhang - China Nuclear Power Technology Research Institute
Xiangyu Yun - China Nuclear Power Technology Research Institute

Huiyong Zhang - China Nuclear Power Technology Research Institute

Shishun Zhang - China Nuclear Power Technology Research Institute

Track 4-2 Metal Cooling SMR (I)

10:30 am – 12:00 pm, C-107B

Session Chair:

Session Co-Chair:

Experimental and numerical investigation on Natural Circulation of Lead-bismuth in China LEAd-based Reactor System

Technical Paper Publication: ICONE32-0433

Qiqi Yan - CGPNRI

Miaomiao Xu - CGPNRI

Ren huo - CGPNRI

Ren Liang - CGPNRI

Zhikang Lin - CGPNRI

Concept of the Fifth Generation Nuclear Energy System (N5G) and the R&D Status of China Lead-based Reactor

Technical Paper Publication: ICONE32-0604

Yican Wu - Shandong Key Laboratory of Neutron Science and Technology, International Academy of Neutron Science (IANS), Qingdao, Chongqing and Hefei

Chao Liu - Shandong Key Laboratory of Neutron Science and Technology, International Academy of Neutron Science (IANS), Qingdao, Chongqing and Hefei

Ming Jin - Shandong Key Laboratory of Neutron Science and Technology, International Academy of Neutron Science (IANS), Qingdao, Chongqing and Hefei

Yuqing Bai - Shandong Key Laboratory of Neutron Science and Technology, International Academy of Neutron Science (IANS), Qingdao, Chongqing and Hefei

Qingsheng Wu - Shandong Key Laboratory of Neutron Science and Technology, International Academy of Neutron Science (IANS), Qingdao, Chongqing and Hefei

Chunjing Li - Shandong Key Laboratory of Neutron Science and Technology, International Academy of Neutron Science (IANS), Qingdao, Chongqing and Hefei

Yazhou Li - Shandong Key Laboratory of Neutron Science and Technology, International Academy of Neutron Science (IANS), Qingdao, Chongqing and Hefei

Tao Zhou - Shandong Key Laboratory of Neutron Science and Technology, International Academy of Neutron Science (IANS), Qingdao, Chongqing and Hefei

Jieqiong Jiang - Shandong Key Laboratory of Neutron Science and Technology, International Academy of Neutron Science (IANS), Qingdao, Chongqing and Hefei

Fang Wang - Shandong Key Laboratory of Neutron Science and Technology, International Academy of Neutron Science (IANS), Qingdao, Chongqing and Hefei

Yong Song - Shandong Key Laboratory of Neutron Science and Technology, International Academy of Neutron Science (IANS), Qingdao, Chongqing and Hefei

Liqing Hu - Shandong Key Laboratory of Neutron Science and Technology, International Academy of Neutron Science (IANS), Qingdao, Chongqing and Hefei

CONCEPTUAL DESIGN OF 100 MW NATURAL CIRCULATION LEAD COOLED FAST REACTOR POWER SYSTEM

Technical Paper Publication: ICONE32-0637

Ruiyang Guo - China institute of atomic energy

Han Zhang - China institute of atomic energy

Pengrui Qiao - China institute of atomic energy

Hongyi Yang - China institute of atomic energy

Yi Zhuang - China institute of atomic energy

Design and Application of Self-start-stop Mode for Non-nuclear Integrated Test Device of Small Modular Sodium-cooled Fast Reactor

Technical Paper Publication: ICONE32-0780

Yichen Li - China institute of atomic energy

Jundong Qian - China institute of atomic energy

Huanjun Zhu - China institute of atomic energy

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Study on ZrH-BC in Shielding Design of Small Sodium-Cooled-Fast-Reactor with Annular Fuel

Technical Paper Publication: ICONE32-0863

Bin Ye - Southwest University of Science and Technology

Junyan liu - Southwest University of Science and Technology

Feng Zhu - Southwest University of Science and Technology

Shiyu Liu - Southwest University of Science and Technology

Junjie Mao - Southwest University of Science and Technology

Yanling Ji - Southwest University of Science and Technology

Yushan Yang - Southwest University of Science and Technology

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OXYGEN CORROSION SIMULATION OF LEAD COOLED FAST REACTOR SNCLFR-100 BASED ON NUCLEAR THERMAL COUPLING PROGRAM

Technical Paper Publication: ICONE32-0934

Sifan Dong - University of Science and Technology of China

Jingguo Wei - University of Science and Technology of China

Junjia Zhang - University of Science and Technology of China

Shuai Wang - University of Science and Technology of China

Kefan Zhang - University of Science and Technology of China

Hongli Chen - University of Science and Technology of China

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Track 3-6 Reliability and Diagnostic Technology

10:30 am – 12:00 pm, C-108A

Session Chair:

Session Co-Chair:

Research on Logic Degradation Technology of Diversity Actuation System Based on Simple Hardware Technology

Technical Paper Publication: ICONE32-0200

Jikun Wang - China Techenergy Co., Ltd.

Mingli Li - China Techenergy Co., Ltd.

Gang Li - China Techenergy Co., Ltd.

RELIABILITY STUDY OF POWER SYSTEM PERFORMANCE BASED ON IGBT LOSS AND JUNCTION TEMPERATURE ESTIMATION

Technical Paper Publication: ICONE32-1268

Yifan Song - School of Energy and Power Engineering, Chongqing University, China

Feng Wang - School of Energy and Power Engineering, Chongqing University, China

Shang Geng - School of Energy and Power Engineering, Chongqing University, China

Xiuqin Zhang - School of Energy and Power Engineering, Chongqing University, China

Zhaolei Zheng - School of Energy and Power Engineering, Chongqing University, China

Hong Gao - School of Energy and Power Engineering, Chongqing University, China

Jun Liu - Chongqing Changan Automobile Co., Ltd. New Energy Research Institute, China

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RESEARCH ON FAULT CHARACTERISTIC PARAMETER EXTRACTION AND STATE EVALUATION METHOD OF SWITCHING POWER SUPPLY IN NUCLEAR POWER PLANT

Technical Paper Publication: ICONE32-1343

Tao Zhang - Suzhou Nuclear Power Research Institute

Nan Lin - Suzhou Nuclear Power Research Institute

Tang Tang - Suzhou Nuclear Power Research Institute

Qiang Wang - Suzhou Nuclear Power Research Institute

Binfeng Wang - Suzhou Nuclear Power Research Institute

Haiyang Yu - Suzhou Nuclear Power Research Institute

Hong Ying - Suzhou Nuclear Power Research Institute

Jie Xu - Suzhou Nuclear Power Research Institute

Yingjie Wang - Suzhou Nuclear Power Research Institute

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Research on Uncertainty of Indicating Signals in Nuclear Instrument System of Nuclear Power Plant

Technical Paper Publication: ICONE32-1508

Yuxiang Zhu - China Nuclear Power Technology Research Institute Co.

Xianghui Lu - China Nuclear Power Technology Research Institute Co.

Changyou Zhao - China Nuclear Power Technology Research Institute Co.

Xin Wang - China Nuclear Power Technology Research Institute Co.

Huaijin Xu - China Nuclear Power Technology Research Institute Co.

Qingyu Gao - China Nuclear Power Technology Research Institute Co.

Yan Zhao - China Nuclear Power Technology Research Institute Co.

A TEMPORAL TRANSFER LEARNING MODEL WITH ADAPTIVE BATCH NORMALIZATION FOR FAULT DIAGNOSIS OF NUCLEAR POWER PLANTS UNDER MULTIPLE POWER LEVELS

Technical Paper Publication: ICONE32-1736

Wenhao Jia - Harbin University of Science and Technology

Zhanguo Ma - Harbin University of Science and Technology

Long Tian - Harbin University of Science and Technology

Dihao Zheng - Harbin University of Science and Technology

Ziyang Cui - Harbin University of Science and Technology

SPATIO-TEMPORAL FEATURE EXTRACTION FOR I&C SYSTEM PROCESS VARIABLES OF NUCLEAR STEAM SUPPLY SYSTEM IN HTR-PM600 BASED ON GCN-LSTM MODEL

Technical Paper Publication: ICONE32-1803

Zijian Wu - Institute of Nuclear and New Energy Technology, Tsinghua University, China

Tianhao Zhang - Institute of Nuclear and New Energy Technology, Tsinghua University, China

Jianghai Li - Institute of Nuclear and New Energy Technology, Tsinghua University, China

Xiaojin Huang - Institute of Nuclear and New Energy Technology, Tsinghua University, China

Track 3-8 Application of Digital and Intelligent Technology

10:30 am – 12:00 pm, C-108B

Session Chair:

Session Co-Chair:

Research on the Automatic Identification Method of Maintenance Isolation Boundaries for the Equipment of NPPs

Technical Paper Publication: ICONE32-0225

Zhang Xiuchun - Suzhou Nuclear Power Research Institute Co.,Ltd.

Kong Kaihe - China Nuclear Power Engineering Company, LTD.

Ma Rui - Suzhou Nuclear Power Research Institute Co.,Ltd.

Liu Zhiyun - China Nuclear Power Engineering Company, LTD.

Liu Jie - Suzhou Nuclear Power Research Institute Co.,Ltd.

Sun Chen - China Nuclear Power Engineering Company, LTD.

Xue Feng - Suzhou Nuclear Power Research Institute Co.,Ltd.

Zhang Jie - Suzhou Nuclear Power Research Institute Co.,Ltd.

Wu Zhenhua - Suzhou Nuclear Power Research Institute Co.,Ltd.

Sun Xuefeng - Suzhou Nuclear Power Research Institute Co.,Ltd.

Guo Dongyuan - Suzhou Nuclear Power Research Institute Co.,Ltd.

Research on the Function of Digital Procedure System for Pressurized Water Reactor Nuclear Power Plants

Technical Paper Publication: ICONE32-0226

Jiahao Liu - China Nuclear Power Engineering Co.,Ltd.

Ao Li - China Nuclear Power Engineering Co.,Ltd.

Intelligent Screening and Grading Algorithm for Nuclear Power Experience Feedback Based on the Knowledge-Enhanced Pre-Trained Language Model

Technical Paper Publication: ICONE32-0266

CHENXI XU - China Nuclear Power Design Co., Ltd

PENG WANG - China Nuclear Power Design Co., Ltd

SITAI YAN - China Nuclear Power Design Co., Ltd

YUNFU WANG - China Nuclear Power Design Co., Ltd

HEMIN LIU - China Nuclear Power Design Co., Ltd

Research on Intelligent Calibration Methods for Ionizing Radiation Instruments Based on Artificial Intelligence and Digital Technologies

Technical Paper Publication: ICONE32-1170

shasha Yu - Suzhou Nuclear Power Research Institute

Yang Wang - Suzhou Nuclear Power Research Institute

Xu Liu - Suzhou Nuclear Power Research Institute

Heterogeneous sensing to defend the I&C monitoring function against feedback tampering based on deep learning

Technical Paper Publication: ICONE32-1756

Jianghai Li - Tsinghua University

Tianhao Zhang - Tsinghua University

Boyuan Li - Tsinghua University

Si Yao - Tsinghua University

Xiaojin Huang - Tsinghua University

Research on the Application of Digital Simulation Construction in Nuclear Power Plant

Technical Paper Publication: ICONE32-2032

Zhao Danfeng - China Nuclear Power Engineering Co.,Ltd.

Du Guang - China Nuclear Power Engineering Co.,Ltd.

Zhang Nianzhe - China Nuclear Power Engineering Co.,Ltd.

Li Daping - China Nuclear Power Engineering Co.,Ltd.

Track 4-5 Micro Reactor (II)

10:30 am – 12:00 pm, C-109A

Session Chair:

Session Co-Chair:

SIMULATION OF PROCESSES IN NATURAL CIRCULATION FOR SMALL MODULAR REACTOR

Technical Paper Publication: ICONE32-1422

Minglian Liao - Huaneng Xiapu Nuclear Power CO LTD

Shengli Cai - Huaneng Xiapu Nuclear Power CO LTD

Neutron-physical and Safety-related Core Design Optimization of a Soluble-boron-free Small Modular Reactor

Technical Paper Publication: ICONE32-1423

Yi Song - Karlsruhe Institute of Technology

Victor Hugo Sanchez Espinoza - Karlsruhe Institute of Technology

Analysis of Mitigation System Activation Time Intervals for Severe Accidents in Small Modular Reactors and Recommendations for Accident Management

Technical Paper Publication: ICONE32-1616

Chunrong Liu - China nuclear power technology research institute

Ruitao Li - China nuclear power technology research institute

Zijie Wu - China nuclear power technology research institute

Modeling and simulation of nitrogen pressurizer pressure system in SMR

Technical Paper Publication: ICONE32-1656

JIASHU LI - Shanghai Jiao Tong University

MENG LIN - Shanghai Jiao Tong University

JINYUAN ZENG - China Nuclear Power Technology Research Institute Co., Ltd

KAI WANG - China Nuclear Power Technology Research Institute Co., Ltd

JUNYI LIN - Shanghai Nuclear Reactor Engineering Simulation Technology Co., Ltd

ANALYSIS OF A SMALL REACTOR WITH FULL-CORE DETAILED NEUTRONIC-THERMAL-HYDRAULIC COUPLING MODEL

Technical Paper Publication: ICONE32-1820

Mingtao He - China Nuclear Power Technology Research Institute Co. Ltd.

Xinxin Wang - China Nuclear Power Technology Research Institute Co. Ltd.

Rong Duan - China Nuclear Power Technology Research Institute Co. Ltd.

Changyou Zhao - China Nuclear Power Technology Research Institute Co. Ltd.

INVESTIGATION OF SOLAR PHOTOVOLTAIC INTEGRATION WITH SMALL MODULAR NUCLEAR REACTORS

Technical Paper Publication: ICONE32-2089

HaiWang Yan - Huaneng Hainan ChangJiang Nuclear Power co.,Ltd

Du Wang - Shanghai University of Electric Power

GENETIC ALGORITHM LAYOUT OPTIMISATION FOR SMALL MODULAR REACTORS BALANCE OF PLANT

Technical Paper Publication: ICONE32-2169

Paul Wrigley - Derby University

Paul wood - Derby University

Richard Hall - Derby University

Jason Joannou - UKAEA

Sam O'Neil - Derby University

Dan Robertson - Rolls-Royce SMR

Track 4-6 Gas Cooling SMR

10:30 am – 12:00 pm, C-109B

Session Chair:

Session Co-Chair:

Enhanced Numerical Methods for Fission Product Diffusion Modeling in Spherical Fuel Elements of Pebble-Bed HTGR

Technical Paper Publication: ICONE32-0583

CAO Chenghao - Tsinghua University

SHEN Shaoning - Tsinghua University

LIANG Jinhang - Tsinghua University

LI Chuan - Tsinghua University

CAO Jianzhu - Tsinghua University

TRANSIENT THERMODYNAMIC PERFORMANCE ANALYSIS OF STIRLING ENGINE INTEGRATED SPACE GAS-COOLED NUCLEAR REACTOR

Technical Paper Publication: ICONE32-1225

Tao Zhou - Harbin Engineering University

Yuandong Zhang - Harbin Engineering University

Genglei Xia - Harbin Engineering University

Guanghui Jiao - Harbin Engineering University

Yifan Xu - Harbin Engineering University

Research on Cost Influencing Factors and Investment Control of High Temperature Gas-Cooled Reactor

Technical Paper Publication: ICONE32-1310

Bin Zhang - Huaneng Nuclear Energy Technology Research Inst.

Na An - Huaneng Nuclear Energy Technology Research Inst.

Wenxiao Chen - Huaneng Nuclear Energy Technology Research Inst.

Jianli Huang - Huaneng Nuclear Energy Technology Research Inst.

RESEARCH ON THE DRAG COEFFICIENTS FOR AN IN-LINE ARRAY OF THREE SPHERICAL FUEL ELEMENTS IN HTGR VERTICAL PIPES

Technical Paper Publication: ICONE32-1339

Lei He - Institute of Nuclear and New Energy Technology, Key Laboratory of Advanced Reactor Engineering and Safety of Ministry of Education, Tsinghua University, China

Junfeng Nie - Institute of Nuclear and New Energy Technology, Key Laboratory of Advanced Reactor Engineering and Safety of Ministry of Education, Tsinghua University, China

Wendong Cui - Institute of Nuclear and New Energy Technology, Key Laboratory of Advanced Reactor Engineering and Safety of Ministry of Education, Tsinghua University, China

Junyu Chen - Institute of Nuclear and New Energy Technology, Key Laboratory of Advanced Reactor Engineering and Safety of Ministry of Education, Tsinghua University, China

Pandong Lin - Ministry of Education, Key Laboratory for Liquid-Solid Structural Evolution and Processing of Materials, School of Materials Science and Engineering, Shandong University, China

DESIGN AND HEAT TRANSFER CHARACTERISTICS ANALYSIS OF THE MAIN PIPELINE OF AIR-COOLED MICROREACTORS

Technical Paper Publication: ICONE32-1451

Chenhui Wang - China Nuclear Power Engineering Co., Ltd.

Huicui Chen - China Nuclear Power Engineering Co., Ltd.

Ran Zhang - China Nuclear Power Engineering Co., Ltd.

Production of Medical Isotope ¹³¹I by Irradiation in HTR-PM

Technical Paper Publication: ICONE32-1680

Linyun Liu - Huaneng Nuclear Energy Technology Research Institute Co., Ltd..

Yong Luo - Huaneng Nuclear Energy Technology Research Institute Co., Ltd.

Hongyang Wei - School of Nuclear Science and Technology, Harbin Engineering University

Track 16-4 Radioactive Material Transport and Safety Analysis

10:30 am – 12 pm, C-112

Session Chair:

Session Co-Chair:

Modelling of alpha spectra - application to Continuous Air Monitors (CAMs)

Technical Paper Publication: ICONE32-0299

Mohamed Dahi M'Hayham - Autorité de sûreté nucléaire et de radioprotection (ASNR), PSN-RES/SCA/LPMA1Autorité de sûreté nucléaire et de radioprotection (ASNR), PSN-RES/SCA/LPMA

Grégoire Dougniaux - Autorité de sûreté nucléaire et de radioprotection (ASNR), PSN-RES/SCA/LPMA1Autorité de sûreté nucléaire et de radioprotection (ASNR), PSN-RES/SCA/LPMA

Benoît Sabot - Université Paris-Saclay, CEA, List, Laboratoire National Henri Becquerel (LNE-LNHB)

Xavier Mougeot - Université Paris-Saclay, CEA, List, Laboratoire National Henri Becquerel (LNE-LNHB)

Evaluation of Bayesian source reconstruction methods for atmospheric radionuclide releases: likelihood comparison and selection criterion design

Technical Paper Publication: ICONE32-0643

Yuhan Xu - Tsinghua University

Xinwen Dong - Tsinghua University

Hao Hu - Tsinghua University

Haoyuan Luo - Tsinghua University

Sheng Fang - Tsinghua University

CONSEQUENCE ANALYSIS IN THE CASE OF A SEVERE ACCIDENT IN BARAKAH NUCLEAR POWER PLANT Evaluation of Atmospheric Dispersion of Radioactive Materials and Exposure Doses during Severe Accident Using HYSPLIT

Technical Paper Publication: ICONE32-0728

Abdulla Bin Tamim - Tokai University

Takaaki Sakai - Tokai University

PRELIMINARY EXPERIMENTAL STUDY ON GASEOUS IODINE MIGRATION AND CHEMICAL TRANSFORMATIONS IN CONTAINMENT

Technical Paper Publication: ICONE32-0838

Jiaxuan Tang - Key Laboratory of Low-grade Energy Utilization Technologies and Systems, Ministry of Education, Chongqing University

Jialong Li - Key Laboratory of Low-grade Energy Utilization Technologies and Systems, Ministry of Education, Chongqing University

Luteng Zhang - Key Laboratory of Low-grade Energy Utilization Technologies and Systems, Ministry of Education, Chongqing University

Yang Yang - Key Laboratory of Low-grade Energy Utilization Technologies and Systems, Ministry of Education, Chongqing University

Liangming Pan - Key Laboratory of Low-grade Energy Utilization Technologies and Systems, Ministry of Education, Chongqing University

Numerical Simulation of Radionuclide Transport Behavior in Hangzhou Bay

Technical Paper Publication: ICONE32-1609

Zhengzhe Qu - Tsinghua University

Feng Xie - Tsinghua University

Yongye Liu - Nuclear and Radiation Safety Center, MEE, China
Ping Wang - Nuclear and Radiation Safety Center, MEE, China
Xinhua Liu - Nuclear and Radiation Safety Center, MEE, China

NUMERICAL STUDY OF AEROSOL DEPOSITION IN MICRO-CHANNEL BASED ON OPENFOAM

Technical Paper Publication: ICONE32-2029

Qinrui Zhang - Xi'an Jiaotong University
Nuo Chen - Xi'an Jiaotong University
Shiqi Wang - Xi'an Jiaotong University
Mingjun Wang - Xi'an Jiaotong University
Wenxi Tian - Xi'an Jiaotong University
Suizheng Qiu - Xi'an Jiaotong University
Guanghui Su - Xi'an Jiaotong University

Track10-2 Research on materials of nuclear power plants 10:30 am – 12:00 pm, C-113

Session Chair:

Session Co-Chair:

ADVANCED MANUFACTURING METHOD TO PROLONG LIFE OF DISSIMILAR METAL WELDED COMPONENTS: OPTIMIZED FE/NI INTERFACE FORM

Technical Paper Publication: ICONE32-0261

Xiaogang Li - Tsinghua University
Xuelan Yan - Gansu Academy of Sciences, China
Xu Zhang - Beijing Institute of Astronautical Systems Engineering, China
Haiquan Zhang - Tsinghua University

High-precision Backwash Metal Filter Element Design and Application in NPPs

Technical Paper Publication: ICONE32-0297

Yuteng Liu - Hualong Nuclear Power Technology Co., Ltd
Shengyong Li - AT&M Environmental Engineering Technology Co., Ltd., China
Wei Shang - Hualong Nuclear Power Technology Co., Ltd
Zhongquan Hu - Hualong Nuclear Power Technology Co., Ltd

Lifeng Zhang - AT&M Environmental Engineering Technology Co., Ltd., China

Yanwei Cao - AT&M Environmental Engineering Technology Co., Ltd., China

Xiaobo Wu - Hualong Nuclear Power Technology Co., Ltd

CORROSION BEHAVIOR OF TYPICAL AUSTENITIC ALLOYS IN SUPERCRITICAL CARBON DIOXIDE

Technical Paper Publication: ICONE32-0694

Zhu Liu - HUANENG Nuclear Energy Technology Research Institute
Wei Liu - HUANENG Nuclear Energy Technology Research Institute
Jin Shi - HUANENG Nuclear Energy Technology Research Institute
Xianglong Guo - Shanghai Jiao Tong University
Lefu Zhang - Shanghai Jiao Tong University

Analysis of the Microstructure and Properties of UNS N08810 Rod in the Hot Extrusion and Heat Treatment States

Technical Paper Publication: ICONE32-0719

Hao Dong - China Nuclear Power Engineering
Anzhou Qi - China Nuclear Power Engineering
Guoming Liu - China Nuclear Power Engineering
Xiaochuan Jiang - China Nuclear Power Engineering
Liyang Zhang - China Nuclear Power Engineering
Teng Shen - China Nuclear Power Engineering
Jingyu Guan - China Nuclear Power Engineering

Corrosion behaviour of Ni-based alloys in high temperature liquid sodium

Technical Paper Publication: ICONE32-1059

Chunsong Liu - Chongqing University
Qinglong Wen - Chongqing University
Qiang Li - China Institute of Atomic Energy

Stress-strain analysis of welding seam in modular construction of Hua-long Pressurized Reactor steel lining

Technical Paper Publication: ICONE32-1154

Yang Liu - Huaneng Shandong ShidaoBay Nuclear Power Co., Ltd
Lingyun Bi - Huaneng Shandong ShidaoBay Nuclear Power Co., Ltd
Hudong Liu - Huaneng Shandong ShidaoBay Nuclear Power Co., Ltd

Research on the 3D Printing of W-Fe Alloy Matrix for Dispersion Nuclear Fuel

Technical Paper Publication: ICONE32-1685

Shan Feng - China North Nuclear Fuel Co., Ltd., China; Inner Mongolia University of Technology, China
Ruifeng Liu - Inner Mongolia University of Technology, China
Mingyang Li - China North Nuclear Fuel Co., Ltd.; CNNC Key Laboratory of New Materials Research and Application Development
Wei Liu - China North Nuclear Fuel Co., Ltd.; CNNC Key Laboratory of New Materials Research and Application Development
Xiaoping Niu - China North Nuclear Fuel Co., Ltd. ; CNNC Key Laboratory of New Materials Research and Application Development
Hexi Baoyin - Inner Mongolia University of Technology, China

Track 14-2 Multiphysics Simulation

10:30 am – 12:00 pm, C-114

Session Chair:

Session Co-Chair:

STUDY ON THE PHOTON EFFECT IN BURNUP CALCULATION OF THE FAST BREEDER REACTOR BASED ON THE DETERMINISTIC TWO-STEP METHOD

Technical Paper Publication: ICONE32-0006

Hu Kui - China Nuclear Power Engineering Co., Ltd.
Zhang Peng - China Nuclear Power Engineering Co., Ltd.

CFD CODE VALIDATION ON NACIE-UP ROD BUNDLE: REVIEW ON NUMERICAL METHODS AND RESULTS

Technical Paper Publication: ICONE32-0029

Haoyang Li - Xi'an Jiaotong University
Dalin Zhang - Xi'an Jiaotong University
Wenxi Tian - Xi'an Jiaotong University
Suizheng Qiu - Xi'an Jiaotong University

Development and application of Neutronics-Thermal Coupling Program in Liquid metal Reactor core

Technical Paper Publication: ICONE32-0565

Haotian Li - China Institute of Atomic Energy
Tianze Li - Nuclear and Radiation Safety Center, MEE, China
Mingyu Wu - China Institute of Atomic Energy
Zongyun Wu - China Institute of Atomic Energy
Weihan Li - China Institute of Atomic Energy

Development and Verification of a Subchannel Analysis Code Applicable to the Reactor under Motion Conditions

Technical Paper Publication: ICONE32-1149

Dongyu HE - CNPRI
Ke WANG - CNPRI
Hang XIA - CNPRI

Research on the Grid-Tracking-Based Hybrid Liquid Level Tracking Model

Technical Paper Publication: ICONE32-1173

Mingjie Ma - Shanghai Jiao Tong University
Hao Zhang - Shanghai Jiao Tong University
Yanhua Yang - Shanghai Jiao Tong University

RESEARCH ON DISTRIBUTED COUPLED COMPUTATIONAL METHODS BASED ON THE VITARS PLATFORM

Technical Paper Publication: ICONE32-1521

Qianxi Xiao - Xi'an Jiaotong University
Dezhi Wan - Xi'an Jiaotong University
Ronghua Chen - Xi'an Jiaotong University
Liqun Zhang - China Nuclear Power Engineering, Co., Ltd
Si Ni - China Nuclear Power Engineering, Co., Ltd

Wenxi Tian - Xi'an Jiaotong University
Suizheng Qiu - Xi'an Jiaotong University

Track1-6 Advanced Reactors (High-Temperature Reactors, Fast Reactors, New Concept Reactors)II
3:30 pm –5 pm , C-101AB

Session Chair:

Session Co-Chair:

Research on Diagnosis Strategy and Method for Gas cooled Microreactor Accidents

Technical Paper Publication: ICONE32-0171

Jiahao Liu - China Nuclear Power Engineering Co.,Ltd.
Qian Sun - China Nuclear Power Engineering Co.,Ltd.

IMPROVEMENT OF FRICTION PAIR IN HTGR REACTIVITY CONTROL DRIVE MECHANISM

Technical Paper Publication: ICONE32-0911

Guangjian CHEN - Huaneng Nuclear Energy Technology Research Institute

Ling LIU - Tsinghua University
Yucheng WANG - Tsinghua University
Feng XIE - Tsinghua University

Analysis and Discussion on Gamma Nuclide Radiation in Primary Circuit and Optimal Control of HTR-PM

Technical Paper Publication: ICONE32-0974

Wenting Jia - Huaneng Shandong Shidaobay Nuclear Power Co., Ltd
Qian Ma - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd
Xi Chen - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd
Shiwei Guo - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd
Yulin Zhang - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd
Ermo Wang - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd
Peng Su - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd

Chuang Yuan - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd

Research on Helium Quality Control Technology in the Primary Circuit of High-Temperature Gas-Cooled Reactors

Technical Paper Publication: ICONE32-1139

Zhenjiang Li - Huaneng Nuclear Energy Technology Research Institute

Guangjian Chen - Huaneng Nuclear Energy Technology Research Institute

Yingjie Zhu - Huaneng Nuclear Energy Technology Research Institute
Lei Ma - Huaneng Nuclear Energy Technology Research Institute
Yijie Yan - Huaneng Nuclear Energy Technology Research Institute
Miaomiao Wang - Huaneng Nuclear Energy Technology Research Institute

Chongxi Chang - Huaneng Shandong Shidao Bay Nuclear Power Co.,Ltd

Wenming Yang - Huaneng Shandong Shidao Bay Nuclear Power Co.,Ltd

Research of Multi-parameter Fusion Intelligent Early-warning Method for HTR-PM Primary Helium Circulator

Technical Paper Publication: ICONE32-1153

Miaomiao Wang - Huaneng Nuclear Energy Technology Research Institute

Yijie Yan - Huaneng Nuclear Energy Technology Research Institute

YUhui Dong - Huaneng Nuclear Energy Technology Research Institute

Jian Wang - Huaneng Nuclear Energy Technology Research Institute

Research on Negative Pressure Lifting Method for Spherical Spent Fuel Elements in High-Temperature Gas-cooled Reactors

Technical Paper Publication: ICONE32-1179

Lei Ma - Huaneng Nuclear Energy Technology Research Institute

Qian Zhang - Huaneng Nuclear Energy Technology Research Institute
Zhenjiang Li - Huaneng Nuclear Energy Technology Research Institute
Yijie Yan - Huaneng Nuclear Energy Technology Research Institute
Yingjie Zhu - Huaneng Nuclear Energy Technology Research Institute
Guangjian Chen - Huaneng Nuclear Energy Technology Research Institute
Yifan Wu - Huaneng Nuclear Energy Technology Research Institute
Miaomiao Wang - Huaneng Nuclear Energy Technology Research Institute
Tao Wu - Huaneng Shandong Shidao Bay Nuclear Power Co.,Ltd

Track2-6 Reactor Physics and Core Design (I)
3:30 pm –5 pm , C-102

Session Chair:

Session Co-Chair:

OPTIMIZATION STUDY AND VALIDATION OF REACHING CRITICALITY OF HPR1000 UNIT

Technical Paper Publication: ICONE32-1611

Bo LIU - China Nuclear Power Technology Research Institute Co.,Ltd.
Dechang CAI - China Nuclear Power Technology Research Institute Co.,Ltd.
Xingxing XU - China Nuclear Power Technology Research Institute Co.,Ltd.
Yuxiang ZHU - China Nuclear Power Technology Research Institute Co.,Ltd.
Changyou ZHAO - China Nuclear Power Technology Research Institute Co.,Ltd.
Zhijun LI - China Nuclear Power Technology Research Institute Co.,Ltd.

Research on the Breeding Characteristics of Uranium-Plutonium Fuel in Liquid Metal Fast Reactors

Technical Paper Publication: ICONE32-1751

Changheng Xu - China Nuclear Power Technology Research Institute Co.,Ltd
Yunliang Lin - China Nuclear Power Technology Research Institute Co.,Ltd
Hui Pan - China Nuclear Power Technology Research Institute Co.,Ltd
Mingtao He - China Nuclear Power Technology Research Institute Co.,Ltd
Changyou Zhao - China Nuclear Power Technology Research Institute Co.,Ltd
Shengze Ma - China Nuclear Power Technology Research Institute Co.,Ltd
Lin Ye - China Nuclear Power Technology Research Institute Co.,Ltd
Huaijin Xu - China Nuclear Power Technology Research Institute Co.,Ltd

A STUDY OF AN IRREGULAR COARSE MESH DIVISION WITH THE METHOD OF CHARACTERISTICS FOR WIDE-SPECTRUM ULTRA-HIGH FLUX EXPERIMENTAL REACTORS

Technical Paper Publication: ICONE32-1778

Zaqing Huang - Harbin Engineering University
Chen Hao - Harbin Engineering University
Wen Yin - Harbin Engineering University
Yizhen Wang - Harbin Engineering University
Ning Xu - Harbin Engineering University

Design Research of Plate Deep Penetration Shielding Benchmark Experiments Based on Cf-252 Neutron Source

Technical Paper Publication: ICONE32-1781

Zi'an Zhai - Nuclear Power Institute of China
Songqian Tang - Nuclear Power Institute of China
Sifan Liu - Nuclear Power Institute of China
Xianglei Wang - Nuclear Power Institute of China
Xingjian Wen - Nuclear Power Institute of China
Yirui Wu - Nuclear Power Institute of China

Preliminary Study on the Irradiation Production Characteristics of Cf-252 in a High Flux Reactor

Technical Paper Publication: ICONE32-1789

Boyi Yu - INET, Tsinghua University

Jian Li - INET, Tsinghua University

Lei Shi - INET, Tsinghua University

NEUTRONIC ANALYSIS OF COMPLEX REACTOR CORE BASED ON MONTE CARLO-DETERMINISTIC COUPLING METHOD

Technical Paper Publication: ICONE32-1826

Xuezhong Li - China Nuclear Power Technology Research Institute Co. Ltd.

Mingtao He - China Nuclear Power Technology Research Institute Co. Ltd.

Desheng Meng - China Nuclear Power Technology Research Institute Co. Ltd.

Changheng Xu - China Nuclear Power Technology Research Institute Co. Ltd.

Changyou Zhao - China Nuclear Power Technology Research Institute Co. Ltd.

Track 7-6 Boiling heat transfer and two-phase flow (I)

3:30 pm –5 pm , C-103

Session Chair:

Session Co-Chair:

EFFECTS OF GAP WIDTH VARIATION ALONG AXIAL LENGTH ON FRICTION LOSS AND HEAT TRANSFER IN TAYLOR-COUPETTE-POISEUILLE FLOW

Technical Paper Publication: ICONE32-1142

Zhou Yuan - Institute of Nuclear and New Energy Technology of Tsinghua University

Zhang Qinzhaoh - Institute of Nuclear and New Energy Technology of Tsinghua University

Study on Flow Heat Transfer and Acoustic Characteristics During Quenching Process

Technical Paper Publication: ICONE32-1227

Dexia Yuan - Beijing University of Chemical Technology

Junquan Zhang - Beijing University of Chemical Technology

Xinkui Fang - Beijing University of Chemical Technology

Yan Luo - Beijing University of Chemical Technology

Experimental study of droplet entrainment characteristics in boiling liquid pools

Technical Paper Publication: ICONE32-1599

Jianqun Yu - Harbin Engineering University

Haifeng Gu - Harbin Engineering University

Yanmin Zhou - Harbin Engineering University

Xinnuo E - Harbin Engineering University

Jawaria Ahad - Pakistan Institute of Engineering & Applied Sciences (PIEAS)

STUDY ON DIFFERENCE OF POOL BOILING HEAT TRANSFER PERFORMANCE BETWEEN CHROMIUM-COATED ZIRCONIUM ALLOY CLADDING AND ZIRCONIUM ALLOY CLADDING AT ATMOSPHERIC PRESSURE

Technical Paper Publication: ICONE32-1623

Yalun YAN - China Nuclear Power Technology Research Institute

Deying ZHANG - China Nuclear Power Technology Research Institute

Haotian WANG - China Nuclear Power Technology Research Institute

Jie YE - China Nuclear Power Technology Research Institute

Xuefeng FU - China Nuclear Power Technology Research Institute

Zhenxun PENG - China Nuclear Power Technology Research Institute

Semi-empirical Model for Predicting Void Fraction of Dispersed Air-Water Flow in Vertical Upward Tubes Based on the Principle of Minimum Entropy Generation

Technical Paper Publication: ICONE32-1785

Hao Liu - Chongqing University

Zaiyong Ma - Chongqing University

Luteng Zhang - Chongqing University

Kang Li - Chongqing University

Qiang Lian - Chongqing University

Zhiwen Peng - Chongqing University

Liangming Pan - Chongqing University

Peclet Number Effect on Net Vapor Generation in Subcooled Flow Boiling

Technical Paper Publication: ICONE32-2225

Tomio Okawa - The University of Electro-Communications

Track 8-6 Thermal-Hydraulics and Reactor Safety

3:30 pm –5 pm , C-104A

Session Chair:

Session Co-Chair:

Study on Characteristic of Cold Trap and Boron Concentration Distribution in Passive Core Makeup System

Technical Paper Publication: ICONE32-0422

Yafu Gao - State Key Laboratory of Nuclear Power Safety Monitoring Technology and Equipment, China; China Nuclear Power Design Company, China

Chende Xu - State Key Laboratory of Nuclear Power Safety Monitoring Technology and Equipment, China; China Nuclear Power Design Company, China

Hui Qian - State Key Laboratory of Nuclear Power Safety Monitoring Technology and Equipment, China; China Nuclear Power Design Company, China

NUMERICAL SIMULATION OF NATURAL CIRCULATION FLOW STABILITY IN SMALL REACTOR

Technical Paper Publication: ICONE32-0500

Ting Wei - General Clean Energy Co. Ltd.

Zhidong Yue - General Clean Energy Co. Ltd.

DESIGN OPTIMIZATION AND NUMERICAL SIMULATION OF VENTILATION SYSTEM FOR THE MAIN STEAM ISOLATION VALVE ROOM IN HPR1000 NUCLEAR POWER STATION

Technical Paper Publication: ICONE32-1033

Jinquan Han - China Nuclear Power Engineering Co., Ltd.

Bei Hu - China Nuclear Power Engineering Co., Ltd.

Experimental Study and Numerical Simulation of a Small Reactor Passive Containment Air Cooling System

Technical Paper Publication: ICONE32-1259

Shengsheng LIN - China Nuclear Power Engineering Co.,Ltd

Xuhao ZHANG - China Nuclear Power Engineering Co.,Ltd

Jing SUN - China Nuclear Power Engineering Co.,Ltd

Yuan CHANG - China Nuclear Power Engineering Co.,Ltd

Dongliang LI - China Nuclear Power Engineering Co.,Ltd

LARGE EDDY SIMULATION OF HEAT TRANSFER IN LOW-PRANDTL-NUMBER FLUID: SOME PRELIMINARY INVESTIGATIONS

Technical Paper Publication: ICONE32-1566

Jie Wu - South China University of Technology

Jiejun Cai - South China University of Technology

Yanping Huang - Nuclear Power Institute of China

ANALYSIS OF THE FLOW DISTRIBUTION IN THE REACTOR PRESSURE VESSEL OF CPR1000 UNDER ASYMMETRICAL REACTOR INLET CONDITIONS

Technical Paper Publication: ICONE32-1827

Xin Wang - China Nuclear Power Technology Research Institute

Chaohao Shang - China Nuclear Power Technology Research Institute

Jie Ye - China Nuclear Power Technology Research Institute

Yingjie Feng - China Nuclear Power Technology Research Institute

Xianmin Dong - China Nuclear Power Technology Research Institute

Track 9-6 Decontamination And Analysis

3:30 pm –5 pm , C-104B

Session Chair:

Session Co-Chair:

Research on gamma scanning iterative reconstruction method based on Tikhonov regularization method

Technical Paper Publication: ICONE32-0899

Hao Zhou - CGN Research Institute Co.,Ltd.

Chenyu Shan - CGN Research Institute Co.,Ltd.

Qingxin Lei - CGN Research Institute Co.,Ltd.

Kang Chang - CGN Research Institute Co.,Ltd.

Feng Liu - CGN Research Institute Co.,Ltd.

Xiajie Liu - CGN Research Institute Co.,Ltd.

Chaoyuan Xiao - CGN Research Institute Co.,Ltd.

Yizhi Chen - CGN Research Institute Co.,Ltd.

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Experimental Study and Analysis of Wear Properties of Graphite Balls Used in HTR-PM at Different Temperatures

Technical Paper Publication: ICONE32-1198

Hu Xiaomuzi - China Institute of Atomic Energy

Wang Xiujuan - China Huaneng ShanDong ShiDao Bay Nuclear Power co.,ltd.

Zhang Haochun - Harbin Institute of Technology, China

Cao Jian - China Huaneng ShanDong ShiDao Bay Nuclear Power co.,ltd.

.....

Research on the Cascade extraction and liquid scintillation Analysis of uranium and plutonium in aerosol samples

Technical Paper Publication: ICONE32-1471

Qimeng Fan - Xi'an Research Institute of Hi-tec, China

Hanlin Li - Xi'an Research Institute of Hi-tec, China

Chen Xie - Xi'an Research Institute of Hi-tec, China

Kuo Zhao - Xi'an Research Institute of Hi-tec, China

Xianchao Jiang - Xi'an Research Institute of Hi-tec, China

.....

DESIGN AND PROCESS RESEARCH OF IN-SITU RADIOACTIVE DECONTAMINATION EQUIPMENT FOR LARGE-SCALE COMPONENTS BASE ON CAVITATION JET TECHNOLOGY

Technical Paper Publication: ICONE32-1586

Jiawen LI - China Nuclear Power Technology Research Institute Co., Ltd

Danfeng JIANG - China Nuclear Power Technology

Research Institute Co., Ltd

Yufei GAO - China Nuclear Power Technology Research Institute Co., Ltd

Jie ZHAN - China Nuclear Power Technology Research Institute Co., Ltd

Feng LIU - China Nuclear Power Technology Research Institute Co., Ltd

Xuefei LI - China Nuclear Power Technology Research Institute Co., Ltd

Xingdong SU - China Nuclear Power Technology Research Institute Co., Ltd

Cailun WANG - China Nuclear Power Technology Research Institute Co., Ltd

Liyuan YAN - China Nuclear Power Technology Research Institute Co., Ltd

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Pulse Shape Discrimination Anti-coincidence Method Using BGO Crystal in Liquid Scintillation Counting

Technical Paper Publication: ICONE32-1621

Husheng Wang - Wuhan Second Ship Design and Research Institute, China

Liangzhou Zuo - Wuhan Second Ship Design and Research Institute, China

Yangyang Yan - Wuhan Second Ship Design and Research Institute, China

Hao Jiang - Wuhan Second Ship Design and Research Institute, China

Wenjie Qiu - Wuhan Second Ship Design and Research Institute, China

Xingyu Liu - Wuhan Second Ship Design and Research Institute, China

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Research on decontamination test of radioactive metal items based on ultrasound and electrochemistry

Technical Paper Publication: ICONE32-1698

Xisan Chen - NPIC

Jinlong Liu - NPIC

Zhijun Sun - NPIC

Lei Teng - NPIC

Zhang Yongling - NPIC

**Track1-15 Equipment Reliability and Failure Analysis
(Conceptual Analysis) II**

3:30 pm –5 pm , C-105A

Session Chair:

Session Co-Chair:

**DEVELOPMENT OF THE HITACHI ADVANCED
PLANT PERFORMANCE DIAGNOSIS SYSTEM
FOR NUCLEAR POWER PLANT PERFORMANCE
MONITORING: INSTRUMENT AND EQUIPMENT
DETERIORATION EVALUATION FOR PLANT
OUTPUT MAXIMIZATION**

Technical Paper Publication: ICONE32-0096

Akinori Tamura - Hitachi Ltd.

Nobuyuki Shinohara - Hitachi-GE Nuclear Energy Ltd.

Kenji Sasaki - Hitachi-GE Nuclear Energy Ltd.

Norikazu Hamaura - Hitachi-GE Nuclear Energy Ltd.

**Vibration diagnosis and analysis of guide bearing fault
of large vertical pump for Nuclear Power Unit vertical
pump unit**

Technical Paper Publication: ICONE32-0254

Mingli Liu - Shandong Nuclear Power Co.Ltd

Hui ren Zhang - Shandong Nuclear Power Co.Ltd

Hao Wang - Shandong Nuclear Power Co.Ltd

Chuangdong Li - Shandong Nuclear Power Co.Ltd

**RESEARCH ON LONG TERM OPERATION STATUS
EVALUATION TECHNOLOGY OF ELECTRICAL
PENETRATING COMPONENTS IN NUCLEAR
POWER PLANTS**

Technical Paper Publication: ICONE32-1061

Binfeng Wang - Suzhou Nuclear Power Research Institute

Tao Zhang - Suzhou Nuclear Power Research Institute

Hong Ying - Suzhou Nuclear Power Research Institute

Tang Tang - Suzhou Nuclear Power Research Institute

Nan Lin - Suzhou Nuclear Power Research Institute

Tianyu Hui - Suzhou Nuclear Power Research Institute

Yingjie Wang - Suzhou Nuclear Power Research Institute

**RESEARCH ON THE AGING AND REMAINING
LIFE ASSESSMENT OF RELAYS IN NUCLEAR
POWER PLANTS**

Technical Paper Publication: ICONE32-1340

Xu Liu - Suzhou Nuclear Power Research Institute

Nan Lin - Suzhou Nuclear Power Research Institute

Tao Zhang - Suzhou Nuclear Power Research Institute

Shasha Yu - Suzhou Nuclear Power Research Institute

Ming Xia - Suzhou Nuclear Power Research Institute

Yazhou Gan - Suzhou Nuclear Power Research Institute

Qinghe Zheng - Suzhou Nuclear Power Research Institute

Qiang Wang - Suzhou Nuclear Power Research Institute

**Research on Equipment Reliability Classification
Technology for High-Temperature Gas-Cooled Reactors**

Technical Paper Publication: ICONE32-1433

Junxiu Lv - Chinergy Co.Ltd

Dingqiang li - Chinergy Co.Ltd

Research on Improvement in Reliability of Charging Pump
Couplings in Nuclear Power Plants

Technical Paper Publication: ICONE32-1578

Guodong Li - Suzhou Nuclear Power Research Institute Co.,Ltd.

Qingqing Wang - Suzhou Nuclear Power Research Institute
Co.,Ltd.

Shuangfei wang - Suzhou Nuclear Power Research Institute
Co.,Ltd.

**OVERVIEW OF OECD/NEA METAL SUBGROUP
ACTIVITIES IN SUPPORTING LIFE EXTENSION**

Technical Paper Publication: ICONE32-2162

Keiko Chitose - Nuclear Energy Agency

Track2-15 Nuclear Fuel and Claddings (IV)

3:30 pm –5 pm , C-105B

Session Chair:

Session Co-Chair:

Uncertainty quantification of corrosion model for zirconium alloy cladding based on artificial intelligence

Technical Paper Publication: ICONE32-0135

Tao Zhang - State Key Laboratory of Advanced Nuclear Energy Technology, Nuclear Power Institute of China

Yongjun Jiao - State Key Laboratory of Advanced Nuclear Energy Technology, Nuclear Power Institute of China

Zhenhai Liu - State Key Laboratory of Advanced Nuclear Energy Technology, Nuclear Power Institute of China

Shuo Xing - State Key Laboratory of Advanced Nuclear Energy Technology, Nuclear Power Institute of China

Haoyu Wang - State Key Laboratory of Advanced Nuclear Energy Technology, Nuclear Power Institute of China

Zengping Pu - State Key Laboratory of Advanced Nuclear Energy Technology, Nuclear Power Institute of China

Yuanming Li - State Key Laboratory of Advanced Nuclear Energy Technology, Nuclear Power Institute of China

Preliminary study on X-ray digital radiography detection of nuclear rod-shaped fuel elements

Technical Paper Publication: ICONE32-0215

Xiaoliang Yang - Nuclear Power Institute of China

Xuequan Wang - Nuclear Power Institute of China

Ji Li - Nuclear Power Institute of China

Zhe Pan - Nuclear Power Institute of China

Jiandong Luo - Nuclear Power Institute of China

Research on Crud Deposition of Zr-4 and N36 Zirconium Alloys in Simulated PWR Primary Water Chemistry

Technical Paper Publication: ICONE32-0432

Guoqing Li - Nuclear Power Institute of China

Mingyang Zhou - Nuclear Power Institute of China

Xi Qiu - Nuclear Power Institute of China

Jiamei Wang - Shanghai Jiaotong University

Fawen Zhu - Nuclear Power Institute of China

Zengping Pu - Nuclear Power Institute of China

The analysis of the characteristic of Control Rod Burnup Based on RMC in Fast Reactor

Technical Paper Publication: ICONE32-0882

Tianya Li - Nuclear Power Institute of China

Lianjie Wang - Nuclear Power Institute of China

Bangyang Xia - Nuclear Power Institute of China

Rui Guo - Nuclear Power Institute of China

Qing Li - Nuclear Power Institute of China

Irradiation Effects on the Radial and Axial Chemical Composition of Ag-In-Gd Control Rods

Technical Paper Publication: ICONE32-0956

Yuanyu Dong - China Nuclear Power Engineering Co., Ltd, China

Lidong Zhang - China Nuclear Power Engineering Co., Ltd, China

Cang Ma - China Nuclear Power Engineering Co., Ltd, China

Zhengfa Liao - China Nuclear Power Engineering Co., Ltd, China

NUMERICAL INVESTIGATION OF EQUIVALENT THERMAL CONDUCTIVITY IN METAL-INSERTED UO₂ FUEL ELEMENTS

Technical Paper Publication: ICONE32-1171

Yiwei ZHANG - China Institute of Atomic Energy

Junhui DIAO - China Institute of Atomic Energy

Qi WU - China Institute of Atomic Energy

Yuanfang ZOU - China Institute of Atomic Energy

Track 8-15 Advanced Reactor (II)

3:30 pm – 5 pm , C-106A

Session Chair:

Session Co-Chair:

FLUID MALDISTRIBUTION THROUGH CANTILEVER STICK BUNDLE AT LOW AND HIGH REYNOLDS NUMBERS: A SIMULATION STUDY

Technical Paper Publication: ICONE32-0234

M. Irfan Khalid - Harbin Engineering University

Gao Puzhen - Harbin Engineering University

Abid Hussain - Harbin Engineering University

Ashhar Bilal - Harbin Engineering University

NUMERICAL STUDY OF OXYGEN CONCENTRATION CONTROL AND OXYGEN TRANSPORT CHARACTERISTICS OF LIQUID LEAD-BISMUTH

Technical Paper Publication: ICONE32-0633

Jinyu Yue - China Nuclear Power Technology Research Institute

Xian Zeng - China Nuclear Power Technology Research Institute

Chen Hu - China Nuclear Power Technology Research Institute

Zhonghui Liao - China Nuclear Power Technology Research Institute

Numerical analysis on heat transfer of convective LBE flow around a hemi-spherical window of spallation target

Technical Paper Publication: ICONE32-1100

Xiaolin Chen - Institute of Modern Physics Chinese Academy of Sciences

Weiping Deng - Institute of Modern Physics Chinese Academy of Sciences

Tao Wan - Institute of Modern Physics Chinese Academy of Sciences

NUMERICAL SIMULATION OF GAS COOLING PERFORMANCE OF HIGH-FREQUENCY PRESSURE SENSOR IN HIGH-TEMPERATURE MOLTEN LBE

Technical Paper Publication: ICONE32-1469

Hua Pang - China Nuclear Power Technology Research Institute

Feng Mao - China Nuclear Power Technology Research Institute

Peng Sun - China Nuclear Power Technology Research Institute

Lei Zhang - China Nuclear Power Technology Research Institute

Xiangyu Yun - China Nuclear Power Technology Research Institute

Huiyong Zhang - China Nuclear Power Technology Research Institute

Shishun Zhang - China Nuclear Power Technology Research Institute

Advanced mixing analysis in boiling water reactors: A comprehensive CFD study

Technical Paper Publication: ICONE32-2223

Chao Wang - Framatome

Evaluation of gas entrainment flow rate by circulating annular flow model

Technical Paper Publication: ICONE32-2227

Kei Ito - Kyoto University

Naoya Odaira - Kyoto University

Daisuke Ito - Kyoto University

Yasushi Saito - Kyoto University

Kentarou Matsushita - Japan Atomic Energy Agency

Toshiki Ezure - Japan Atomic Energy Agency

Masaaki Tanaka - Japan Atomic Energy Agency

Track 7-15 Fuel thermal-hydraulics (I)

3:30 pm – 5 pm , C-106B

Session Chair:

Session Co-Chair:

Study on influence of PWR fuel assembly bow on DNBR at fuel assembly edge

Technical Paper Publication: ICONE32-1077

Bin Qiu - China Nuclear Power Technology Research Institute

Fang Chen - China Nuclear Power Technology Research Institute

Hanhong Zhao - China Nuclear Power Technology Research Institute

Yiran Liu - China Nuclear Power Technology Research Institute

An Experimental Research of Mixing Coefficient of a PWR Fuel Assembly

Technical Paper Publication: ICONE32-1446

Minghui Duan - China Institute of Atomic Energy

Minfu Zhao - China Institute of Atomic Energy

Xiaoyang Zhang - China Institute of Atomic Energy

Bin Yang - China Institute of Atomic Energy

Junhan Wei - China Institute of Atomic Energy

Dongxu Zhang - China Institute of Atomic Energy

Yongwang Xu - China Institute of Atomic Energy

Qingyuan Li - China Institute of Atomic Energy

.....
Study on the Two-Dimensional Heat Conduction Characteristics of Plate-Type ATF Fuel under Different Bubbling Modes

Technical Paper Publication: ICONE32-1647

Chengrui Zhang - North China Electric Power University

Juan Chen - North China Electric Power University

Xinkun Song - North China Electric Power University

Huichen Yu - North China Electric Power University

.....
Research on the Thermal-Hydraulic Characteristics of High-Temperature Gas-cooled Prismatic Graphite Components

Technical Paper Publication: ICONE32-1650

Zheng Huang - China Nuclear Power Engineering Co.,Ltd

Yanyun Sun - China Nuclear Power Engineering Co.,Ltd

Dingsheng Wang - China Nuclear Power Engineering Co.,Ltd

Jun Fang - China Nuclear Power Engineering Co.,Ltd

Shuoting Zhang - China Nuclear Power Engineering Co.,Ltd

Guoming Liu - China Nuclear Power Engineering Co.,Ltd

Qiaoyan Cheng - China Nuclear Power Engineering Co.,Ltd

Lanyu Zhou - China Nuclear Power Engineering Co.,Ltd

.....
ANALYSIS OF TEMPERATURE CONTROL IN SPENT FUEL STORAGE TANKS WITH VENTILATION AND NATURAL CONVECTION

Technical Paper Publication: ICONE32-1833

Cong Xu - China Nuclear Power Engineering Co., LTD

Si Peng - China Nuclear Power Engineering Co., LTD

Li Wan - Institute of Nuclear and New Energy Technology, Tsinghua University

Shunyang Li - Institute of Nuclear and New Energy Technology, Tsinghua University

.....
EFFECT OF SNB ON CRUD DEPOSITION AND BORON PRECIPITATION ON FUEL CLADDING SURFACE

Technical Paper Publication: ICONE32-2011

Desheng Jin - CNPRI

Jiapeng Liao - CNPRI

Wei Zhang - CNPRI

Haotian Wang - CNPRI

Yulong Mao - CNPRI

Student award

3:30 pm –5 pm , C-107A

.....
Track 4-7 Other SMR (I)

3:30 pm –5 pm , C-107B

Session Chair:

Session Co-Chair:

Numerical simulation and optimization design of thermoelectric generator for space nuclear power system

Technical Paper Publication: ICONE32-0048

Xing Gao - Deep Space Exploration Laboratory

Yang Zhu - Deep Space Exploration Laboratory

Yang Liu - Deep Space Exploration Laboratory

Bingkang Zhou - Deep Space Exploration Laboratory

Zhi Yang - Deep Space Exploration Laboratory

Xiao Luo - Deep Space Exploration Laboratory

.....
The optimization of Feeder joint shim design and manufacture for Fusion Tokamak Assembly

Technical Paper Publication: ICONE32-0249

CUICAI DONG - China Nuclear Power Engineering Co.,Ltd.

WEI HAN - China Nuclear Power Engineering Co.,Ltd.

MEIMEI YOU - China Nuclear Power Engineering Co.,Ltd.

HANJIE XU - China Nuclear Power Engineering Co.,Ltd.

Peng LU - China Nuclear Power Engineering Co.,Ltd.

.....
RESEARCH ON COST MANAGEMENT METHODS FOR NUCLEAR FUSION ASSEMBLY PROJECTS BASED ON SCRUM AGILE MANAGEMENT THEORY

Technical Paper Publication: ICONE32-0335

YOU MEIMEI - China Nuclear Power Engineering Co.,Ltd.

DONG CUICAI - China Nuclear Power Engineering Co.,Ltd.

HAN WEI - China Nuclear Power Engineering Co.,Ltd.

XU HANJIE - China Nuclear Power Engineering Co.,Ltd.

..... **Research on fusion Engineering management in China**

Technical Paper Publication: ICONE32-0703

Peng LU - China Nuclear Power Engineering Corporation

Jingwu WEN - China Nuclear Power Engineering Corporation

Jingzhu DOU - China Nuclear Power Engineering Corporation

Cuicai DONG - China Nuclear Power Engineering Corporation

..... **DESIGN AND ANALYSIS OF 40KW LOW-ENRICHED URANIUM LUNAR SURFACE REACTOR SYSTEM**

Technical Paper Publication: ICONE32-0769

SHUO JIANG - China Institute of Atomic Energy

GU HU - China Institute of Atomic Energy

ZELONG ZHAO - China Institute of Atomic Energy

CHI XU - China Institute of Atomic Energy

AO WANG - China Institute of Atomic Energy

YUEJUN LI - China Institute of Atomic Energy

..... **International Thermonuclear Experimental Reactor (ITER) Program TAC-1 project management practice**

Technical Paper Publication: ICONE32-0964

Peng Liu - China Nuclear Power Engineering Co.,Ltd.

Yi Li - China Nuclear Power Engineering Co.,Ltd./University of
International Business and Economics

Track 7-23 Thermal-hydraulic HX and equipment (II)

3:30 pm –5 pm , C-108A

Session Chair:

Session Co-Chair:

Impact of Surface Emissivity on the Heat Transfer Performance of Passive Containment Air-Cooling System

Technical Paper Publication: ICONE32-0055

Hongliang Wang - China Nuclear Power Engineering Co.,Ltd.

Yu Feng - China Nuclear Power Engineering Co.,Ltd.

Mingrui Yu - China Nuclear Power Engineering Co.,Ltd.

Yong Guo - China Nuclear Power Engineering Co.,Ltd.

Wei Li - China Nuclear Power Engineering Co.,Ltd.

Qiang Guo - China Nuclear Power Engineering Co.,Ltd.

Yidan Yuan - China Nuclear Power Engineering Co.,Ltd.

..... **Design and performance analysis on forced circulation integrated cold trap**

Technical Paper Publication: ICONE32-0175

Bing Yang - China Institute of Atomic Energy

Chunli Yu - China Institute of Atomic Energy

Xu Li - China Institute of Atomic Energy

..... **A DESIGN OF AIR-WATER MIXED COOLING PASSIVE RESIDUAL HEAT REMOVAL SYSTEM**

Technical Paper Publication: ICONE32-0425

Yuepeng Bi - Harbin Engineering University

Chenyang Wang - Harbin Engineering University

Yifan Xu - Harbin Engineering University

Genglei Xia - Harbin Engineering University

..... **Design and thermal analysis of a brazed water-cooled beam window**

Technical Paper Publication: ICONE32-0663

Zhang Hao - Institute of Advanced Light Source Facilities,
Shenzhen, China

..... **Study on Design of Heat Exchanger for Component Cooling Water System in Linglong**

Technical Paper Publication: ICONE32-0687

Siyuan Wang - Zhengzhou Branch of China Nuclear Power
Engineering Co.,LTD.

Zhiqiang Wang - Zhengzhou Branch of China Nuclear Power
Engineering Co.,LTD.

Jiling Chen - Zhengzhou Branch of China Nuclear Power
Engineering Co.,LTD.

..... **Analysis of Thermal Hydraulic Coupling Stress Characteristics of Spiral Tube Steam Generator in High Temperature Gas Cooled Reactor**

Technical Paper Publication: ICONE32-0759

junfeng liu - Xi'an Thermal Power Research Institute Co., Ltd

chenglong wang - Xi'an Jiaotong University

wenshu li - Xi'an Jiaotong University

xiaolong ma - Xi'an Thermal Power Research Institute Co., Ltd

suizheng qiu - Xi'an Jiaotong University

.....
**ANALYSIS OF FLUID-SOLID COUPLED VIBRATION
 CHARACTERISTICS AND STRUCTURAL
 OPTIMIZATION DESIGN OF A NUCLEAR POWER
 BY-PASS CONTROL VALVE**

Technical Paper Publication: ICONE32-0789

Dan Wang - Xi'an Thermal Power Research Institute Co., Ltd.

Dawei Wei - Xi'an Thermal Power Research Institute Co., Ltd.

Bo Zhao - Xi'an Thermal Power Research Institute Co., Ltd.

Chuangao Han - Xi'an Thermal Power Research Institute Co., Ltd.

Lei Dong - Xi'an Thermal Power Research Institute Co., Ltd.

Boyuan Wang - Xi'an Thermal Power Research Institute Co., Ltd.

Track 5-1 Accident Analysis and Management

3:30 pm –5 pm , C-108B

Session Chair:

Session Co-Chair:

**RIES, A COMPREHENSIVE SYSTEM
 INCORPORATING RADIOLOGICAL RISK
 ASSESSMENT AND EMERGENCY STRATEGY
 SUPPORT FOR SEVERE NUCLEAR ACCIDENT**

Technical Paper Publication: ICONE32-0903

Li Yang - North China Electric Power University

Cunyou Wang - North China Electric Power University

Jiayue Song - North China Electric Power University

Huanting Li - North China Electric Power University

Zhaoyang Wang - North China Electric Power University

Xinpeng Li - North China Electric Power University

Sheng Fang - Tsinghua University

Yixue Chen - North China Electric Power University

**ACCIDENT ANALYSIS OF TOTAL INSTANTANEOUS
 BLOCKAGE OF A FUEL SUBASSEMBLY OF CHINA
 INITIATIVE ACCELERATOR DRIVEN SYSTEM**

Technical Paper Publication: ICONE32-1003

Yonggang Cao - China Institute of Atomic Energy

Lixia Wang - China Institute of Atomic Energy

Huiping OuYang - China Institute of Atomic Energy

Pengrui Qiao - China Institute of Atomic Energy

Jiyue Liang - China Institute of Atomic Energy

.....
**Research on accident diagnosis models based on a
 combination of knowledge and data-driven approaches**

Technical Paper Publication: ICONE32-1241

Yuan Zhou - Sichuan University

Sulin Qin - Sichuan University

Guang Yang - China Nuclear Power Research and Design Institute

Dahuan Zhu - China Nuclear Power Research and Design Institute

Tao Huang - China Nuclear Power Research and Design Institute

Qinwen Xiong - China Nuclear Power Research and Design Institute

.....
Research on core melt droplet interactions in sodium pool

Technical Paper Publication: ICONE32-1437

Nassir Yassin - Harbin Engineering University

Zhi-Gang Zhang - Harbin Engineering University

Zhi Yang - Harbin Engineering University

Gosai A.M. Abdegader - Harbin Engineering University

.....
**Calculation of differential pressure in the containment
 compartment under LOCA accident**

Technical Paper Publication: ICONE32-1615

ShiLei Dun - Southeast University

ZongYan Bai - Southeast University

Tao Zhou - Southeast University

LanYv Zhou - China National Nuclear Power Engineering
 Corporation

.....
**Safety Function Analysis of Pool-Type Sodium-Cooled
 Fast Reactor under SBO Accident**

Technical Paper Publication: ICONE32-2035

Haibo Zhang - China Nuclear Power Engineering Co., LTD.

Xiaoman Zhai - China Nuclear Power Engineering Co., LTD.

Teng Teng - China Nuclear Power Engineering Co., LTD.

Study on characteristics of SEOP accident operational procedure system based on Hualong One technology

Technical Paper Publication: ICONE32-2133

Ming Zhong - Huaneng Hainan Changjiang Nuclear Power Co. Ltd

Qing He - Huaneng Hainan Changjiang Nuclear Power Co. Ltd

ShiDong Yu - Huaneng Hainan Changjiang Nuclear Power Co. Ltd

Track 4-8 Other SMR (II)

3:30 pm –5 pm , C-109A

Session Chair:

Session Co-Chair:

Numerical Simulation and Validation of a Non-Nuclear Prototype for a Heat Pipe-Cooled Space Reactor

Technical Paper Publication: ICONE32-0971

Ziang Guo - Shanghai Jiao Tong University

Limin Liu - Shanghai Jiao Tong University

Zi Yin Liu - Shanghai Jiao Tong University

Yihu Wang - Shanghai Jiao Tong University

Zhengyu Du - Nuclear Power Institute of China

Xiaoqiang He - Nuclear Power Institute of China

Hanyang Gu - Shanghai Jiao Tong University

SIMULATION RESEARCH ON PRESSURE CONTROL OF STEAM-GAS PRESSURIZER BASED ON NEURAL NETWORK ADAPTIVE PID

Technical Paper Publication: ICONE32-1594

Minglong Yue - Harbin Engineering University

Minyang Gui - Harbin Engineering University

Lei Cheng - Harbin Engineering University

Jian Deng - Nuclear Power Institute of China, Science and Technology on Reactor System Design Technology Laboratory

Xiaoli Wu - Nuclear Power Institute of China, Science and Technology on Reactor System Design Technology Laboratory

Ruifeng Tian - Harbin Engineering University

Sicao Tan - Harbin Engineering University

Preliminary Design of a SF6 Gas Insulating HV-Bushing for CRAFT NNBI

Technical Paper Publication: ICONE32-1687

Yuchen Qu - Hefei Institutes of Physical Science, Chinese Academy of Sciences

Zhimin Liu - Hefei Institutes of Physical Science, Chinese Academy of Sciences

Caichao Jiang - Hefei Institutes of Physical Science, Chinese Academy of Sciences

Jianglong Wei - Hefei Institutes of Physical Science, Chinese Academy of Sciences

Bo Liu - Hefei Institutes of Physical Science, Chinese Academy of Sciences

Yuanlai Xie - Hefei Institutes of Physical Science, Chinese Academy of Sciences

Conceptual design and preliminary thermal-hydraulic analysis of a heat pipe cooled reactor

Technical Paper Publication: ICONE32-1984

Bian Jiawei - China Nuclear Power Technology Research Institute

Sun Hao - China Nuclear Power Technology Research Institute

Guo Zihao - China Nuclear Power Technology Research Institute

Wu Jun - China Nuclear Power Technology Research Institute

Zhang Dalin - Xi'an Jiaotong University

Yang Jiang - China Nuclear Power Technology Research Institute

THE STRATEGIC ROLE AND OUTLOOKS OF CHINA'S NUCLEAR ENERGY UNDER THE GOAL OF CARBON PEAKING AND CARBON NEUTRALITY

Technical Paper Publication: ICONE32-2016

Xiaoguang Liu - China National Nuclear Corporation

Yunhuang Zhang - Neutron Exploration Technologies

Gangyang Zheng - Neutron Exploration Technologies

Limiao Xing - Neutron Exploration Technologies

Ziguan Wang - Neutron Exploration Technologies

Guangliang Chen - Harbin Engineering University

A REGULATORY ROADMAP FOR SEA-BASED NUCLEAR PROJECTS FOR INTERNATIONAL COMMERCIAL ACTIVITIES

Technical Paper Publication: ICONE32-2023

Eirik Ovrum - DNV

Ole Christen Reistad - DNV

Track 4-9 Other SMR (III)

3:30 pm –5 pm , C-109B

Session Chair:

Session Co-Chair:

SIMULATION METHOD FOR FLUID NETWORKS BASED ON SUPERCRITICAL CO₂ CYCLE SYSTEM

Technical Paper Publication: ICONE32-0063

Yiming Xiong - Harbin Engineering University

Minjun Peng - Harbin Engineering University

Genglei xia - Harbin Engineering University

THERMAL RESISTANCE ANALYSIS AND STRUCTURAL MECHANICAL EVALUATION OF HIGH-TEMPERATURE MOLTEN SALT PUMP INSULATION SCREEN FOR MOLTEN SALT REACTORS

Technical Paper Publication: ICONE32-0203

JIN YANG - Shanghai Institute of Applied Physics, Chinese Academy of Sciences

YUAN FU - Shanghai Institute of Applied Physics, Chinese Academy of Sciences

JIAN-YU ZHANG - Shanghai Institute of Applied Physics, Chinese Academy of Sciences

XING-CHAO SHEN - Shanghai Institute of Applied Physics, Chinese Academy of Sciences

RONG-FANG YU - Shanghai Institute of Applied Physics, Chinese Academy of Sciences

ZHI-JUN LI - Shanghai Institute of Applied Physics, Chinese Academy of Sciences

Data-driven-assisted Optimization of Supercritical CO₂ Brayton Cycle with Uncertain Boundary Constraints

Technical Paper Publication: ICONE32-0287

Shengyu Shen - Zhejiang University

Heyuan Wang - Marine Design and Research Institute of China

Jun He - Marine Design and Research Institute of China

Guofeng Fan - Zhejiang University

Chunhui Dai - Zhejiang University

Shaohong Zhang - Zhejiang University

Numerical simulation study on operating characteristics of sCO₂ natural circulation

Technical Paper Publication: ICONE32-1363

Yuandong Zhang - Harbin Engineering University

Chenyang Wang - Harbin Engineering University

Bowen Dai - Harbin Engineering University

Zhan Li - Harbin Engineering University

Yuepeng Bi - Harbin Engineering University

Analysis of Thorium-based Molten Salt Micro-reactor Core Physics Characteristics Based on Monte Carlo Method

Technical Paper Publication: ICONE32-2142

Feng Wang - Chongqing University

Lizha BIEKEEN - Chongqing University

Jianqiang Lang - Chongqing University

Shang Geng - Chongqing University

Yifan Song - Chongqing University

Track11-1 Numerical Simulation and Experimental Verification

3:30 pm –5 pm , C-112

Session Chair:

Session Co-Chair:

NUMERICAL ANALYSIS OF INTERFACE STABILITY DURING ZIRCONIUM OXIDATIVE SOLIDIFICATION

Technical Paper Publication: ICONE32-0094

Haoli Wang - Xi'an Jiaotong University

Yapei Zhang - Xi'an Jiaotong University

Shihao Wu - Xi'an Jiaotong University

Wenxi Tian - Xi'an Jiaotong University

Suizheng Qiu - Xi'an Jiaotong University

G. H. Su - Xi'an Jiaotong University

**Experimental and numerical studies on the interaction
between high temperature melt and cooling tube of core
catcher**

Technical Paper Publication: ICONE32-0250

Fengyang Quan - China Nuclear Power Engineering Co

Wei Li - China Nuclear Power Engineering Co

Yidan Yuan - China Nuclear Power Engineering Co

Mengyi Wang - China Nuclear Power Engineering Co

**SIMULATION OF PASSIVE CONTAINMENT
COOLING SYSTEM IN SEVERE ACCIDENT VIA
ASTEC**

Technical Paper Publication: ICONE32-0676

Pingwen OU - CNPRI

Jianhua CAO - CNPRI

Yong OUYANG - CNPRI

Chao GUO - CNPRI

**Study on the Impact of Squib Valve Opening Time on
Maximum Temperature of Cladding During a SBO
Accident in the ACP100**

Technical Paper Publication: ICONE32-1541

Yujian Wang - Xi'an Jiaotong University

Haoli Wang - Xi'an Jiaotong University

Shihao Wu - Xi'an Jiaotong University

Yapei Zhang - Xi'an Jiaotong University

Wenxi Tian - Xi'an Jiaotong University

Suizheng Qiu - Xi'an Jiaotong University

G. H. Su - Xi'an Jiaotong University

**Preliminary Experimental Study on Suppression of Steam
Explosion with Superabsorbent Polymer Microbeads**

Technical Paper Publication: ICONE32-1697

jingqi zhao - School of Nuclear Science and Technology of Xi'an
Jiaotong University/China Nuclear Power Engineering Co., Ltd

qiang guo - China Nuclear Power Engineering Co., Ltd

jinkun min - China Nuclear Power Engineering Co., Ltd

bin zhang - School of Nuclear Science and Technology of Xi'an
Jiaotong University

wei li - China Nuclear Power Engineering Co., Ltd

yidan yuan - China Nuclear Power Engineering Co., Ltd

**STUDY ON CORE DAMAGE ASSESSMENT OF ACP
100S FLOATING NUCLEAR POWER PLANT**

Technical Paper Publication: ICONE32-1948

Jian Deng - Nuclear Power Institute of China

Zian Zhai - Nuclear Power Institute of China

Tao Xu - Nuclear Power Institute of China

Mengmeng Xi - Nuclear Power Institute of China

Mingming Xia - Nuclear Power Institute of China

Junlong Wang - Nuclear Power Institute of China

Track10-3 Advanced methods of manufacture and others

3:30 pm –5 pm , C-113

Session Chair:

Session Co-Chair:

**Influences of Base Isolation on the Seismic Resistance of
Nuclear Power Plant Reactor Building**

Technical Paper Publication: ICONE32-0088

ZHONG HU - Hualong Nuclear Power Technology Co.,Ltd.

YATING ZHANG - Hualong Nuclear Power Technology
Co.,Ltd.

JUNFENG WANG - Hualong Nuclear Power Technology
Co.,Ltd.

**Optimized Design and Analysis of Large Pressurized
Water Reactor Steam Supply System**

Technical Paper Publication: ICONE32-0162

Ping Wang - China Nuclear Engineering Corporation

liheng Wang - China Nuclear Engineering Corporation
chenhui Wang - China Nuclear Engineering Corporation
Feixue Liu - China Nuclear Engineering Corporation
qian Yu - China Nuclear Engineering Corporation

EFFECT OF SOURCE TERM RELEASE RATE ON RADIATION DOSE OF MAIN CONTROL ROOM UNDER ACCIDENT CONDITION

Technical Paper Publication: ICONE32-1247

Yichen Chen - China Nuclear Power Technology Research Institute Co., Ltd
Changdong Lu - China Nuclear Power Technology Research Institute Co., Ltd
Wanjun Xie - China Nuclear Power Technology Research Institute Co., Ltd

Equipment Design Management And Analysis Of New Nuclear Project

Technical Paper Publication: ICONE32-1608

JINGJING RAO - China Nuclear Power Engineering Co., Ltd, China
YU ZHANG - China Nuclear Power Engineering Co., Ltd, China

Performance Investigation of Concrete Models on Local Damage of RC Structure Subjected to Oblique Impact Loading

Technical Paper Publication: ICONE32-1682

Zuoyi Kang - Japan Atomic Energy Agency
Akemi Nishida - Japan Atomic Energy Agency
Haruji Tsubota - Japan Atomic Energy Agency
Masaharu Itoh - Japan Atomic Energy Agency

Prediction and control measurements of natural draft wet cooling towers noise in nuclear power plant

Technical Paper Publication: ICONE32-1909

Zixuan Zhu - China Nuclear Power Engineering Co., Ltd.
Fang Lin - China Nuclear Power Engineering Co., Ltd.
Wei Bai - China Nuclear Power Engineering Co., Ltd.
Jia Yang - China Nuclear Power Engineering Co., Ltd.

Track 14-3 Advanced Reactor Simulation

3:30 pm –5 pm , C-114

Session Chair:

Session Co-Chair:

Study on overconfidence characteristic of deep learning-based fault diagnostic models for nuclear power plants

Technical Paper Publication: ICONE32-0855

JiaHao Cheng - Harbin Engineering University
Sichao Tan - Harbin Engineering University
Jiangkuan Li - Harbin Engineering University
Tong Li - Harbin Engineering University
Ruifeng Tian - Harbin Engineering University
Jiaoshen Xu - China Nuclear Power Engineering Co., Ltd

Validation of a Transient Analysis Program for Heat Pipe-Cooled Reactors Based on KRUSTY Experiments

Technical Paper Publication: ICONE32-0976

Kunpeng Shao - Shanghai Jiao Tong University
Ziang Guo - Shanghai Jiao Tong University
Changhe Liu - Shanghai Jiao Tong University
Ziyin Liu - Shanghai Jiao Tong University
Limin Liu - Shanghai Jiao Tong University
Hanyang Gu - Shanghai Jiao Tong University

Evaluation of Fuel Coolant Interaction Model in SCENES_CM Based on FARO Experiments

Technical Paper Publication: ICONE32-1229

Danting Zhao - Shanghai Jiao Tong University
Feng Guo - Shanghai Jiao Tong University
Yanhua Yang - Shanghai Jiao Tong University
Meng Zhao - Shanghai Jiao Tong University
Hao Zhang - Shanghai Jiao Tong University

DEVELOPMENT OF VALIDATION MATRIX OF FUEL ASSEMBLY THERMAL-HYDRAULICS SUB-CHANNEL ANALYSIS CODE FOR SODIUM-COOLED FAST REACTORS

Technical Paper Publication: ICONE32-1263

Norihiro Kikuchi - Japan Atomic Energy Agency

Ryuji Yoshikawa - Japan Atomic Energy Agency

Masaaki Tanaka - Japan Atomic Energy Agency

.....

Comparison Analysis and Research of Irradiation Devices and Test Loops

Technical Paper Publication: ICONE32-1593

Yan Zhao - China Institute of Atomic Energy

Bin Hou - China Institute of Atomic Energy

Huanjun Zhu - China Institute of Atomic Energy

Yichi Li - China Institute of Atomic Energy

Jianxiang Yao - China Institute of Atomic Energy

.....

The Verification and Validation of the Lead-Bismuth Subchannel Thermal-Hydraulic Analysis Program Based on COSINE

Technical Paper Publication: ICONE32-1764

Jinhao Yi - Shanghai Jiao Tong University

Hao Zhang - Shanghai Jiao Tong University

Meng Zhao - Shanghai Jiao Tong University

Yanhua Yang - Shanghai Jiao Tong University

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Thursday, June 26th

Track1-7 Engineering Construction Cost Optimization

8:30 am –10:00 am , C-101AB

Session Chair:

Session Co-Chair:

Stability analysis of concrete pouring for large-span dome steel formwork in reactor building

Technical Paper Publication: ICONE32-0112

Xiaoyi Yang - China Nuclear Power Engineering Co., Ltd.

Guozhen Xu - China Nuclear Power Engineering Co., Ltd.

Zhimao Feng - China Nuclear Power Engineering Co., Ltd.

Lijian Cai - China Nuclear Power Engineering Co., Ltd.

THE OPTIMIZATION STUDY ON THE SET-POINTS OF HPR1000 UNDER DIFFERENT CONTAINMENT CONDITIONS

Technical Paper Publication: ICONE32-0224

TIANQI SI - China Nuclear Power Engineering Co.,Ltd

YU DU - China Nuclear Power Engineering Co.,Ltd

KE YI - China Nuclear Power Engineering Co.,Ltd

Parameter Sensitivity Investigation on Site Response Analysis for Nuclear Power Plants on Soil Sites

Technical Paper Publication: ICONE32-0638

JINGXIONG ZHAO - CHINA NUCLEAR POWER ENGINEERING CO., LTD

XIAOYING SUN - CHINA NUCLEAR POWER ENGINEERING CO., LTD

PERFORMANCE ANALYSIS OF SQUAT SHEAR WALL WITH DIFFERENT EDGE REINFORCEMENT IN NUCLEAR ISLAND

Technical Paper Publication: ICONE32-0645

Shaojie Wang - CNPE

Jianglong Luo - CNPE

Dongmei Wang - CNPE

Xinli Zhao - CNPE

Yumin Li - CNPE

Study on Scale Effect of Impact Resistance of Reinforced Concrete Structures with High Reinforcement Ratio and High Strength

Technical Paper Publication: ICONE32-1197

Mengsha LIU - China Nuclear Power Engineering Co. LTD

Ge GAO - China Nuclear Power Engineering Co. LTD

Di JIANG - China Nuclear Power Engineering Co. LTD

RESEARCH ON THE MODULAR TECHNOLOGY OF STEAM GENERATOR COMPARTMENT IN THE REACTOR BUILDING OF NUCLEAR POWER PLANT

Technical Paper Publication: ICONE32-1447

xiting wu - China Nuclear Power Engineering Co., Ltd

yuanda liu - China Nuclear Power Engineering Co., Ltd

yulin liu - China Nuclear Power Engineering Co., Ltd

Track2-7 Reactor Physics and Core Design (II)

8:30 am –10:00 am , C-102

Session Chair:

Session Co-Chair:

DEVELOPMENT AND APPLICATION OF ADVANCED NEUTRONICS PROGRAM TOPMC

Technical Paper Publication: ICONE32-0205

Guangyao SUN - SuperSafety Science & Technology Co., Ltd; International Academy of Neutron Science, China

The Core Design and Optimization of Small Reactor with Annular Fuel

Technical Paper Publication: ICONE32-1008

Cuijie Pan - China Institute of Atomic Energy

Yuting Cheng - China Institute of Atomic Energy

Zhaodong Xia - China Institute of Atomic Energy

Qingfu Zhu - China Institute of Atomic Energy

Qi Zhou - China Institute of Atomic Energy

Zhifeng Zhang - China Institute of Atomic Energy

Convergence Optimization of Curved Surface Nodal Method

Technical Paper Publication: ICONE32-1130

Xiaoyu Zhou - Harbin Engineering University

Chen Hao - Harbin Engineering University

Yizhen Wang - Harbin Engineering University

Zhengxin Du - Harbin Engineering University

Jining Li - Harbin Engineering University

Yunlin Xu - Purdue University

THREE-DIMENSIONAL SUPER-RESOLUTION RECONSTRUCTION OF POWER DISTRIBUTION IN REACTOR BY NEURAL NETWORK

Technical Paper Publication: ICONE32-1194

Jiacheng Wang - Tsinghua University

Xiaodong Huo - China Nuclear Power Engineering Co., Ltd (CNPE))

Haifeng Yang - China Nuclear Power Engineering Co., Ltd (CNPE))

Kan Wang - Tsinghua University

Fuel management design for PWR decommissioning

Technical Paper Publication: ICONE32-1205

Zhuoting Shi - China Nuclear Power Technology Research Institute

Jinfeng Wei - China Nuclear Power Technology Research Institute

Shufan Zhang - China Nuclear Power Technology Research Institute

Yuxiang Zhu - China Nuclear Power Technology Research Institute

Changyou Zhao - China Nuclear Power Technology Research Institute

Hong Zhang - China Nuclear Power Technology Research Institute

Study on the spatial response correction algorithm of induced fission neutrons in active coincidence counting of uranium materials

Technical Paper Publication: ICONE32-1269

Yuqi Zhang - China Institute of Atomic Energy

Yimei Cheng - China Institute of Atomic Energy

Haitao Zhao - China Institute of Atomic Energy

Lixin Bu - China Institute of Atomic Energy

Calculation and Verification of Geometry Parameters Integration in CSN Method Based on Quasi-Monte Carlo Method

Technical Paper Publication: ICONE32-1282

Jining Li - Harbin Engineering University

Chen Hao - Harbin Engineering University

Xiaoyu Zhou - Harbin Engineering University

Yizhen Wang - Harbin Engineering University

Yunlin Xu - Purdue University

Track 7-7 Boiling heat transfer and two-phase flow (II)

8:30 am –10:00 am , C-103

Session Chair:

Session Co-Chair:

Study of Boiling Heat Transfer in Tubes Based on Machine Learning

Technical Paper Publication: ICONE32-0631

Dan Yang - China Institute of Atomic Energy

Kaiwen Du - China Institute of Atomic Energy

Minfu Zhao - China Institute of Atomic Energy

Junhan Wei - China Institute of Atomic Energy

Yongwang Xv - China Institute of Atomic Energy

Qingyuan Li - China Institute of Atomic Energy

Ziwei Wang - China Institute of Atomic Energy

Dongxu Zhang - China Institute of Atomic Energy

Evaluation of droplet entrainment phenomenon in steam generator

Technical Paper Publication: ICONE32-0705

Xiang Yu - The 404 Company Limited

Lingqing Yang - The 404 Company Limited

Jian Zhou - The 404 Company Limited

Bingzheng Ke - The 404 Company Limited

Caibing Liu - The 404 Company Limited

A NEURAL NETWORK PREDICTION MODEL FOR POST-DRYOUT HEAT TRANSFER BASED ON SAMPLE EXPANSION

Technical Paper Publication: ICONE32-0708

Zhong Cui - Yantai Research Institute, Harbin Engineering University

Yanfeng Zhang - Yantai Research Institute, Harbin Engineering University

Zhunzeng Fan - State Nuclear Power Demonstration Plant Co., Ltd, China

Guixiang Wang - Yantai Research Institute, Harbin Engineering University

Fuqiu Ma - Yantai Research Institute, Harbin Engineering University

Chunhui Dong - Yantai Research Institute, Harbin Engineering University

Numerical Simulation Study on the Coalescence of Coaxial Double Vapor Bubbles during subcooled pool boiling

Technical Paper Publication: ICONE32-0772

Wenjie Hao - Tsinghua University

Yao Liu - Tsinghua University

Jinyu Han - Tsinghua University

Chenru Zhao - Tsinghua University

Hanliang Bo - Tsinghua University

Numerical and experimental study of transient response characteristics of multi-loop coupled natural circulation systems

Technical Paper Publication: ICONE32-0775

Shilong Pei - China Advanced Research Institute of Nuclear Energy and Safety, School of Physics and Optoelectronic Engineering, Shenzhen University

Yuzhao Ye - China Advanced Research Institute of Nuclear Energy and Safety, School of Physics and Optoelectronic Engineering, Shenzhen University

Xiaomeng Dong - China Advanced Research Institute of Nuclear Energy and Safety, School of Physics and Optoelectronic

Engineering, Shenzhen University

Ming Yang - China Advanced Research Institute of Nuclear Energy and Safety, School of Physics and Optoelectronic Engineering, Shenzhen University

Xi Huang - China Advanced Research Institute of Nuclear Energy and Safety, School of Physics and Optoelectronic Engineering, Shenzhen University

Anqi Xu - China Advanced Research Institute of Nuclear Energy and Safety, School of Physics and Optoelectronic Engineering, Shenzhen University

Yang Yu - China Nuclear Power Research and Design Institute

Numerical Study On The Effect Of Flow Direction On Condensation Heat Transfer Outside The Tube

Technical Paper Publication: ICONE32-1617

Xinyi Shen - Harbin engineering university

Ruihan Jing - Harbin engineering university

Xu Zhang - Harbin engineering university

Jia Guo - Harbin engineering university

Haozhi Bian - Harbin engineering university

Track 8-7 Multi-Physics Coupling

8:30 am –10:00 am , C-104A

Session Chair:

Session Co-Chair:

Influence of Beam Length on Flow Patterns and Vibration in Fluid-Structure Interaction Simulations

Technical Paper Publication: ICONE32-0714

Qingyun He - China Nuclear Power Technology Research Institute Co.,Ltd; State Key Laboratory of Nuclear Power Safety Technology and Equipment

Yingxuan Hu - China Nuclear Power Technology Research Institute Co.,Ltd

Yijun Zhang - China Nuclear Power Technology Research Institute Co.,Ltd

Wenhui Li - China Nuclear Power Technology Research Institute Co.,Ltd

Ting Wang - China Nuclear Power Technology Research
Institute Co.,Ltd

**NUMERICAL SIMULATION AND THERMO-
HYDRO-MECHANICAL COUPLING OF THERMAL
CYCLING PHENOMENA IN DOWN-HORIZONTAL
PIPING**

Technical Paper Publication: ICONE32-0959

Shuo Wang - Beijing University of Chemical Technology
Qile Gao - China Nuclear Power Engineering Co., Ltd
Ruizhi Hao - Beijing University of Chemical Technology
Haitao Ren - Beijing University of Chemical Technology
Shuhua Zhou - Beijing University of Chemical Technology
Wenshu Jiang - Beijing University of Chemical Technology
Xudong Wang - Beijing University of Chemical Technology
Tao Lu - Beijing University of Chemical Technology

**STUDY ON THE FLUID-STRUCTURE
INTERACTION CHARACTERISTICS OF A DOUBLE-
LAYERED COAXIAL CYLINDRICAL SHELL WITH
LIQUID IN NARROW GAPS**

Technical Paper Publication: ICONE32-1004

Xinyue LUO - China Nuclear Power Engineering Co., Ltd

**The Fluid-Structure Interaction Study of Porous Spent
Fuel Storage and Transport Baskets under Seismic
Conditions Based on Direct Numerical Simulation
Method**

Technical Paper Publication: ICONE32-1305

Yubo Zhang - North China Electric Power University
Yu Liu - North China Electric Power University
Yijun Huang - Huaneng Shidao Bay Nuclear Power
Development Co., Ltd
Daogang Lu - North China Electric Power University
Feifan Zhang - North China Electric Power University

**THREE-DIMENSIONAL MULTI-PHYSICS
COUPLING NUMERICAL SIMULATION METHOD
BASED ON FLAT LINEAR INDUCTION PUMP**

Technical Paper Publication: ICONE32-1385

Heyao Li - Beijing Jiaotong University

Lixin Yang - Beijing Jiaotong University

Zhuqian Zhang - Beijing Jiaotong University

Xiao Chen - Beijing Jiaotong University

**Fluid-Structure Interaction Study of a Flexible-Walled
Rectangular Water Tank Based on the ALE Finite
Element Method**

Technical Paper Publication: ICONE32-1527

Fei Xie - North China Electric Power University
Feifan Zhang - North China Electric Power University
Yixian Zhou - North China Electric Power University
Daogang Lu - North China Electric Power University
Yu Liu - North China Electric Power University

Trank 9-7 Radioactive Waste Management

8:30 am –10:00 am , C-104B

Session Chair:

Session Co-Chair:

**RESEARCH ON DECOMMISSIONING TREATMENT
PLAN FOR REACTOR PRESSURE VESSEL HEAD
BASED ON VIRTUAL SIMULATION**

Technical Paper Publication: ICONE32-0228

Zhennan Zhang - China Nuclear Power Engineering Company
Yujia Chen - China Nuclear Power Engineering Company
Weilun Liang - China Nuclear Power Engineering Company
Yuelong Pan - China Nuclear Power Engineering Company
Qiang Li - China Nuclear Power Engineering Company
Ming Huo - China Nuclear Power Engineering Company

**Study on off-site management strategy and shipping
mode of spent fuel in China in the next dozen years**

Technical Paper Publication: ICONE32-0675

Haijun Liu - CGNPC Uranium Resources Co. Ltd.
Chao Liu - CGNPC Uranium Resources Co. Ltd.
Jiabei Zhang - CGNPC Uranium Resources Co. Ltd.

INTELLIGENT RECOGNITION OF HIGH DOSE RATE RADIOACTIVE SOLID MAINTENANCE WASTE IN NUCLEAR POWER PLANTS USING ENHANCED YOLOV11

Technical Paper Publication: ICONE32-1367

Hongyuan Zhang - Institute of Nuclear and New Energy Technology, Tsinghua University, China

Jianmin Tong - Institute of Nuclear and New Energy Technology, Tsinghua University, China

Lifeng Wei - China Datang Corporation Nuclear Power Company, Ltd., China

Helin Zhang - Fujian Ningde Nuclear Power Co.,Ltd., Fujian, China

Jianbo Chen - Fujian Ningde Nuclear Power Co.,Ltd., Fujian, China

INTELLIGENT RECOGNITION OF SMALL TARGETS OF NUCLEAR POWER PLANT MAINTENANCE WASTE BASED ON DEEP LEARNING

Technical Paper Publication: ICONE32-1392

Hongyuan Zhang - Institute of Nuclear and New Energy Technology, Tsinghua University, China

Jianmin Tong - Institute of Nuclear and New Energy Technology, Tsinghua University, China

Lifeng Wei - China Datang Corporation Nuclear Power Company, Ltd., China

Helin Zhang - Fujian Ningde Nuclear Power Co.,Ltd., Fujian, China

Jianbo Chen - Fujian Ningde Nuclear Power Co.,Ltd., Fujian, China

SYNTHESIS OF NOVEL PHOSPHORUS-DOPED CARBONITRIDE PHOTOCATALYST AND ITS APPLICATION FOR URANIUM REMOVAL

Technical Paper Publication: ICONE32-2021

Yonglin LI - PLA Rocket Force University of Engineering

Siman MAO - Northwestern Polytechnical University

Xingfu CAI - PLA Rocket Force University of Engineering

Sufen LI - PLA Rocket Force University of Engineering

Yonggang HUO - PLA Rocket Force University of Engineering

Standpipe and Bunker Waste Retrieval System

Technical Paper Publication: ICONE32-2229

Sohaib Syed - Canadian Nuclear Laboratories

Ehtisham Ishfaq - Canadian Nuclear Laboratories

Track1-16 Nuclear Power Plant Management System I

8:30 am –10:00 am , C-105A

Session Chair:

Session Co-Chair:

The Establishment and Application of Mobile Office Platform for Procurement Information Management in Nuclear Power Engineering

Technical Paper Publication: ICONE32-0133

Chen Shi - China Nuclear Power Engineering Co., Ltd.

Xiao Yuan - China Nuclear Power Engineering Co., Ltd.

Optimization Research on Procurement Strategy of Warehouse Management Services for Nuclear Power Enterprises

Technical Paper Publication: ICONE32-0136

Xiao Yuan - China Nuclear Power Engineering Co., Ltd.

Chen Shi - China Nuclear Power Engineering Co., Ltd.

Purchasing Strategy and Economic Analysis of Bulk Materials in the Nuclear Power Industry

Technical Paper Publication: ICONE32-0137

Xiao Yuan - China Nuclear Power Engineering Co., Ltd.

Rui Wang - China Nuclear Power Engineering Co., Ltd.

Chen Shi - China Nuclear Power Engineering Co., Ltd.

Research on full-scope operation crew training system in nuclear power plants based on virtual reality and system simulation technology

Technical Paper Publication: ICONE32-0230

CHEN YAWEI - CNPO

FANG MING - CNPO

Application of Intrinsic Safety Design Concept in Occupational Health and Industrial Safety Risk Prevention and Control of Nuclear Power Plants

Technical Paper Publication: ICONE32-0367

Liping CHEN - China Nuclear Power Engineering Co. Ltd.

Qingmin CHEN - China Nuclear Power Engineering Co. Ltd.

Yuanxia ZHOU - China Nuclear Power Engineering Co. Ltd.

Yikun ZHOU - China Nuclear Power Engineering Co. Ltd.

Construction and Implementation of "Training-Authorization-On-post" System for Standard Posts of Nuclear Power Projects Based on Knowledge Engineering

Technical Paper Publication: ICONE32-0749

Yufan Song - China Nuclear Power Engineering Co., LTD

Jinyu Guo - China Nuclear Power Engineering Co., LTD

Tianyu Zhao - China Nuclear Power Engineering Co., LTD

Track2-16 Nuclear Fuel Cycle (I)

8:30 am –10:00 am , C-105B

Session Chair:

Session Co-Chair:

SENSITIVITY STUDY OF BORON CARBIDE PARTICLE ARRANGEMENT ON SPENT FUEL STORAGE CRITICALITY

Technical Paper Publication: ICONE32-0716

Wenwang RAN - China Nuclear Engineering Co., Ltd

Yuanyu DONG - China Nuclear Engineering Co., Ltd

Cang Ma - China Nuclear Engineering Co., Ltd

Yongneng LIU - China Nuclear Engineering Co., Ltd

EXTRACTION AND γ -RADIATION RADIOLYSIS PERFORMANCE OF T2EHDGA IN KEROSENE SOLVENT

Technical Paper Publication: ICONE32-0737

Jiawei Zheng - Shanghai Jiao Tong University

Hongji Sang - Shanghai Jiao Tong University

Muhan Chen - Shanghai Jiao Tong University

Yan Wu - Shanghai Jiao Tong University

Yuezhou Wei - Shanghai Jiao Tong University

SIMULATION ANALYSIS OF HEAT STORAGE AREA HEIGHT OF PASSIVE SPENT FUEL STORAGE VESSEL

Technical Paper Publication: ICONE32-1109

Jiayu Mu - Harbin Engineering University College of Nuclear Science and Technology

Hetao Sun - Harbin Engineering University College of Nuclear Science and Technology

Xiuchun Luan - Harbin Engineering University College of Nuclear Science and Technology

Yuheng Zhang - Harbin Engineering University College of Nuclear Science and Technology

Effectiveness of Sodium Hydroxide Pretreatment in Enhancing Fission Product Removal During Alkaline Spent Fuel Reprocessing

Technical Paper Publication: ICONE32-1388

Gosai ABDELGADER - College of Science and Technology, Harbin Engineering university

Caishan Jiao - College of Nuclear Science and Technology, Harbin Engineering university

Mingjian HE - College of Nuclear Science and Technology, Harbin Engineering university

Haofan Fang - College of Nuclear Science and Technology, Harbin Engineering university

Wael Kamal - College of Nuclear Science and Technology, Harbin Engineering university

Research on the Design of Nuclear Material Online Monitoring and Accountancy System for Spent Fuel Pyroprocessing Facilities

Technical Paper Publication: ICONE32-1489

Lixia He - China Institute of Atomic Energy
Xiao Zhao - China Institute of Atomic Energy
Jing Wang - China Institute of Atomic Energy

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**HIGHLY EFFICIENT ADSORPTION OF EUROPIUM
 BY ZIRCONIUM PHOSPHORODIAMIDATE-
 FUNCTIONALIZED MESOPOROUS SILICA**

Technical Paper Publication: ICONE32-1861

Shuyi Yang - Shanghai Jiao Tong University
Zhennan Wu - Shanghai Jiao Tong University
Luyu Zhang - Shanghai Jiao Tong University
Hao Wu - Shanghai Jiao Tong University

.....
Track 8-16 Other CFD Application

8:30 am –10:00 am , C-106A

Session Chair:

Session Co-Chair:

**A DISCRETE BOLTZMANN MODEL COMBINED
 WITH IMMERSED BOUNDARY METHOD FOR
 COMPRESSIBLE VISCOUS FLOW**

Technical Paper Publication: ICONE32-0820

Sun Xiaopeng - China Nuclear Power Engineering Co., Ltd,
 China
Yu Wenchi - China Nuclear Power Engineering Co., Ltd, China
Wang Renjun - China Nuclear Power Engineering Co., Ltd,
 China
Wang Jun - China Nuclear Power Engineering Co., Ltd, China
Jiang Yanyi - China Nuclear Power Engineering Co., Ltd, China
Ding Menglong - China Nuclear Power Engineering Co., Ltd,
 China
Ma Cang - China Nuclear Power Engineering Co., Ltd, China

.....
**Numerical study of pressure drop in structured packed
 beds based on the layer-stacking model**

Technical Paper Publication: ICONE32-0851

Yilong Guo - Harbin Engineering University
Bo Li - Harbin Engineering University

Kejie Tian - Harbin Engineering University
Ming Ding - Harbin Engineering University
Zhongning Sun - Harbin Engineering University
Zehua Guo - Harbin Engineering University

.....
**STUDY OF MIXING MODELS REFLECTING LOCAL
 CHARACTERISTICS**

Technical Paper Publication: ICONE32-1102

Junhan Wei - China Institute of Atomic Energy
Xiaoyang Zhang - Peking University Ordos Research Institute
 of Energy
Minfu Zhao - China Institute of Atomic Energy
Peng Liang - China Institute of Atomic Energy
Minghui Duan - China Institute of Atomic Energy
Dongxu Zhang - China Institute of Atomic Energy
Yongwang Xu - China Institute of Atomic Energy
Qingyuan Li - China Institute of Atomic Energy
Ziwei Wang - China Institute of Atomic Energy
Dan Yang - China Institute of Atomic Energy
Yufan Wang - China Institute of Atomic Energy

.....
**The Design and Calibration of a New Differential
 Calorimetric Dedicated to Nuclear Heating Measurements**

Technical Paper Publication: ICONE32-1612

Junxin Zhang - Sichuan University
Tianchi Ma - Sichuan University
Liang Zhang - Nuclear Power Institute of China
Guofeng Qu - Sichuan University
Xingjie Peng - Nuclear Power Institute of China
Jifeng Han - Sichuan University
Guang Zhao - Nuclear Power Institute of China

.....
**Numerical study of turbulence drag reduction in circular
 pipe with micro-groove surfaces**

Technical Paper Publication: ICONE32-1732

Yuang Tan - Harbin Engineering University
Tan Ma - Harbin Engineering University
Shou Feng - Harbin Engineering University
Rulei Sun - Harbin Engineering University

Puzhen Gao - Harbin Engineering University

Ruifeng Tian - Harbin Engineering University

Sichao Tan - Harbin Engineering University

.....
Analysis of influence of finite measuring points on measurement deviation of leakage rate of containment

Technical Paper Publication: ICONE32-1891

Jianfa Li - China National Nuclear Corporation

Yifan Sun - Harbin Engineering University

Zhaoming Meng - Harbin Engineering University

Xiangcheng Wu - China Three Gorges University

.....
Track 7-16 Fuel thermal-hydraulics (II)

8:30 am –10:00 am , C-106B

Session Chair:

Session Co-Chair:

THERMAL-MECHANICAL ANALYSIS OF ANNULAR FUEL ASSEMBLY BASED ON A MODIFIED SUB-CHANNEL CODE

Technical Paper Publication: ICONE32-0081

Xu Rongshuan - China Nuclear Power Technology Research Institute Co.Ltd

Wu Yingwei - Xi'an Jiaotong University

Li Jinggang - China Nuclear Power Technology Research Institute Co.Ltd

Wang Ting - China Nuclear Power Technology Research Institute Co.Ltd

Zhu Yuanbing - China Nuclear Power Technology Research Institute Co.Ltd

.....
Research on heat split phenomenon in dual-cooled fuel assembly

Technical Paper Publication: ICONE32-0179

Bing Yang - China Institute of Atomic Energy

.....
A NOVEL FRICTION FACTOR CORRELATION FOR WIRE-WRAPPED FUEL ASSEMBLIES VIA ANN AND SYMBOLIC REGRESSION

Technical Paper Publication: ICONE32-0720

Kexin Ji - China Institute of Atomic Energy

Daoxi Cheng - China Institute of Atomic Energy

.....
SENSITIVITY ANALYSIS OF THERMAL CONDUCTIVITY CALCULATION MODEL FOR THE FUEL OF REACTOR

Technical Paper Publication: ICONE32-0790

Junjie pan - Nuclear Power Institute of China

Bangyang Xia - National Key Laboratory of Nuclear Reactor Technology

Shenglong Qiang - Nuclear Power Institute of China

Wei Lu - Nuclear Power Institute of China

.....
Preliminary Analysis of Fuel Behavior in Reactivity-Initiated Accidents at High Burnup

Technical Paper Publication: ICONE32-0791

BOSEN XIE - China Nuclear Power Design Co.,Ltd

HANPING LI - China United Gas Turbine Technology Co.,Ltd

YUBIN ZHANG - China Nuclear Power Design Co.,Ltd

DINGQING GUO - China Nuclear Power Design Co.,Ltd

QIN ZHOU - China Nuclear Power Design Co.,Ltd

SHAOBIN LI - China Nuclear Power Design Co.,Ltd

.....
THERE - DIMENSIONAL HYDRAULIC CHARACTERISTICS INVESTIGATION OF THE PLATE-TYPE FUEL ASSEMBLY

Technical Paper Publication: ICONE32-0949

Shuai Liu - Shanghai Nuclear Engineering Research and Design Institute Co., Ltd.

Bing Ren - Shanghai Nuclear Engineering Research and Design Institute Co., Ltd.

Jingya Sun - Shanghai Nuclear Engineering Research and Design Institute Co., Ltd.

Jie Ding - Shanghai Nuclear Engineering Research and Design Institute Co., Ltd.

Jie Zhang - Shanghai Nuclear Engineering Research and Design Institute Co., Ltd.

Yu Dang - Shanghai Nuclear Engineering Research and Design

Institute Co., Ltd.

Fujun Gan - Shanghai Nuclear Engineering Research and Design Institute Co., Ltd

On the factors affecting the flow-induced vibration characteristics of PWR fuel assemblies

Technical Paper Publication: ICONE32-0981

Kangkang Jin - Shanghai Jiao Tong University

Xiaojing Liu - Shanghai Jiao Tong University

Jinbiao Xiong - Shanghai Jiao Tong University

Xiang Chai - Shanghai Jiao Tong University

Hui He - Shanghai Jiao Tong University

Track 7-20 Small modular reactors and Gen IV reactors (III)

8:30 am –10:00 am , C-107A

Session Chair:

Session Co-Chair:

DESIGN AND PRE-TEST CFD SIMULATIONS OF A THERMAL-HYDRAULIC TEST FACILITY FOR A PRISMATIC GAS-COOLED MICRO REACTOR

Technical Paper Publication: ICONE32-0177

ZHENG HUANG - China Nuclear Power Engineering Co., Ltd. (CNPE)

MIAOXIN JIAO - Xi'an Jiaotong University

JIAN JIAO - Xi'an Jiaotong University

SHUOTING ZHANG - China Nuclear Power Engineering Co., Ltd. (CNPE)

YANFANG XUE - China Nuclear Power Engineering Co., Ltd. (CNPE)

YANYU SUN - China Nuclear Power Engineering Co., Ltd. (CNPE)

DINGSHENG WANG - China Nuclear Power Engineering Co., Ltd. (CNPE)

optimization analysis of a power cycle using supercritical CO₂-based mixture working fluid

Technical Paper Publication: ICONE32-1181

Feng Chen - CNOOC Key Laboratory of Liquefied Natural Gas and Low -Carbon Technology

Kuankuan Qi - Xi'an Thermal Engineering Research Institute Co. Ltd.

Jiahao Kang - CNOOC Key Laboratory of Liquefied Natural Gas and Low -Carbon Technology

Yujia Zhou - Xi'an Thermal Engineering Research Institute Co. Ltd.

Feng Qin - CNOOC Key Laboratory of Liquefied Natural Gas and Low -Carbon Technology

Jianyu Shen - CNOOC Key Laboratory of Liquefied Natural Gas and Low -Carbon Technology

Yifan Zhang - Xi'an Thermal Engineering Research Institute Co. Ltd.

Hongzhi Li - Xi'an Thermal Engineering Research Institute Co. Ltd.

Radiator Design and Optimization for Thermoelectric Space Heat Pipe-Cooled Nuclear Reactors

Technical Paper Publication: ICONE32-1334

Ao Wang - China institute of Atomic Energy

Gu Hu - China institute of Atomic Energy

Panhe Ge - China institute of Atomic Energy

Shuo Jiang - China institute of Atomic Energy

STUDY ON THE RELEASE CHARACTERISTICS OF FISSION GASES DUE TO FUEL CLADDING FAILURE IN LEAD-BISMUTH REACTORS

Technical Paper Publication: ICONE32-1365

Yuchen Li - Harbin Engineering University

Yanmin Zhou - Harbin Engineering University

Haifeng Gu - Harbin Engineering University

Yichen Zhang - Harbin Engineering University

Pingting Jiang - China Nuclear Power Technology Research Institute Co. Ltd.

Zhenghui Wang - China Nuclear Power Technology Research Institute Co. Ltd.

Ruxun Ding - Harbin Engineering University

SIMULATION RESEARCH ON THE FLOW CHARACTERISTICS OF LEAD-BISMUTH LOOP UNDER REAL SEA ROLLING CONDITION

Technical Paper Publication: ICONE32-1459

Pei Mou - Institute of Nuclear Energy Safety Technology, Hefei
Institute of Physical Science

Zhen Wang - Institute of Nuclear Energy Safety Technology,
Hefei Institute of Physical Science

Shichao Zhang - Institute of Nuclear Energy Safety Technology,
Hefei Institute of Physical Science

Jiangtao Jia - Institute of Nuclear Energy Safety Technology,
Hefei Institute of Physical Science

Rui Pan - Institute of Nuclear Energy Safety Technology, Hefei
Institute of Physical Science

RESEARCH ON DYNAMIC CHARACTERISTICS OF NITROGEN PRESSURIZER SYSTEM BASED ON LOCUST

Technical Paper Publication: ICONE32-2044

Junfeng Li - CGN Research Institute Co., LTD.

Bin Yang - CGN Research Institute Co., LTD.

Xinpeng Luo - CGN Research Institute Co., LTD.

Pu Tan - CGN Research Institute Co., LTD.

Feng Chen - CGN Research Institute Co., LTD.

Track 5-2 Emergency Preparedness and Response

8:30 am –10:00 am , C-107B

Session Chair:

Session Co-Chair:

Feasibility Analysis of Emergency Evacuation from Nuclear Power Plant Sites

Technical Paper Publication: ICONE32-0192

Wei DENG - China Nuclear Power Engineering Co.,Ltd

Jiemin ZHANG - China Nuclear Power Engineering Co.,Ltd

Mengxi WANG - China Nuclear Power Engineering Co.,Ltd

Jin YAN - China Nuclear Power Engineering Co.,Ltd

Research On The Optimization Of Emergency Planning Zone Determination Based On The Weather Stratified Sampling Method

Technical Paper Publication: ICONE32-0194

Qun Cao - China Nuclear Power Engineering Co., Ltd

Jin Yan - China Nuclear Power Engineering Co., Ltd

Jiemin Zhang - China Nuclear Power Engineering Co., Ltd

Mengxi Wang - China Nuclear Power Engineering Co., Ltd

Liang Long - China Nuclear Power Engineering Co., Ltd

Hongtao Lin - China Nuclear Power Engineering Co., Ltd

EMERGENCY ASSEMBLY POINT SELECTION METHOD FOR NUCLEAR FACILITY AREA

Technical Paper Publication: ICONE32-0356

Jiemin ZHANG - China Nuclear Power Engineering Co., Ltd

Jin YAN - China Nuclear Power Engineering Co., Ltd

Jiaxuan GAO - China Nuclear Power Engineering Co., Ltd

Ya LIU - China Nuclear Power Engineering Co., Ltd

Wei DENG - China Nuclear Power Engineering Co., Ltd

Analysis of key factors for inland nuclear emergency

Technical Paper Publication: ICONE32-0460

JIANWEI GAO - China Nuclear Power Engineering Co., Ltd

HONGTAO LIN - China Nuclear Power Engineering Co., Ltd

MENGXI WANG - China Nuclear Power Engineering Co., Ltd

QUN CAO - China Nuclear Power Engineering Co., Ltd

JIN YAN - China Nuclear Power Engineering Co., Ltd

JIEMIN ZHANG - China Nuclear Power Engineering Co., Ltd

SHUMING HUANG - China Nuclear Power Engineering Co., Ltd

NA XUE - China Nuclear Power Engineering Co., Ltd

LIN QIU -

Research on System and Method for Tabletop Exercise of Emergency Response to Nuclear Accident

Technical Paper Publication: ICONE32-0858

Yuhao Yin - Suzhou Nuclear Power Research Institute Co.,Ltd.

Qian Chen - Suzhou Nuclear Power Research Institute Co.,Ltd.

Yichao Huang - Suzhou Nuclear Power Research Institute Co.,Ltd.

Peng Lin - Suzhou Nuclear Power Research Institute Co.,Ltd.
Wentao Fang - Suzhou Nuclear Power Research Institute Co.,Ltd.

.....
Regional HYSPLIT simulation of atmospheric transport of 137Cs following the Fukushima accident release source term generated by severe accident codes

Technical Paper Publication: ICONE32-1069

Wujie Zhang-Harbin Engineering University
Zehua Guo - Harbin Engineering University
 Xiaxin Cao- Harbin Engineering University
 Ming Ding- Harbin Engineering University

.....
GPU-QES for local- and small-scale atmospheric dispersion modeling in complex terrain and building layouts: a wind tunnel experiment validation

Technical Paper Publication: ICONE32-1370

Zhaoyang Wang - North China Electric Power University
Li Yang - North China Electric Power University
Cunyou Wang - North China Electric Power University
Sheng Fang - Tsinghua University
Xinpeng Li - North China Electric Power University
Yixue Chen - North China Electric Power University

Track 5-3 Safety Analysis and Assessment

8:30 am –10:00 am , C-108A

Session Chair:

Session Co-Chair:

Research on the Calculation Method of Radioactive Nuclide Decay in Level 3 Probabilistic Safety Assessment of Nuclear Power Plants

Technical Paper Publication: ICONE32-0195

Qun Cao - China Nuclear Power Engineering Co., Ltd
Mengxi Wang - China Nuclear Power Engineering Co., Ltd
Liang Long - China Nuclear Power Engineering Co., Ltd
Hongtao Lin - China Nuclear Power Engineering Co., Ltd
Jiemin Zhang - China Nuclear Power Engineering Co., Ltd

RESEARCH ON OPTIMIZATION OF SAFETY CLASSIFICATION FOR POOL TYPE SFRS BASED ON SSG-30 SAFETY CLASSIFICATION METHOD

Technical Paper Publication: ICONE32-1267

Jun Yang - China Institute of Atomic Energy
Areai Nuerlan - China Institute of Atomic Energy
Jin Wang - China Institute of Atomic Energy
Xisi Zhang - China Institute of Atomic Energy
Ting Wang - China Institute of Atomic Energy

.....
A REVIEW OF DYNAMIC PROBABILISTIC RISK ASSESSMENT WITH INTELLIGENCE ALGORITHMS FOR NUCLEAR SAFETY ANALYSIS

Technical Paper Publication: ICONE32-1372

Zihan Zhou - Shenzhen University
Anqi Xu - Shenzhen University
Xiaomeng Dong - Shenzhen University
Ming Yang - Shenzhen University
Lin Feng Li - Shenzhen University
Ting Wen - Shenzhen University
Ziwei Weng - Shenzhen University
Guoming Yin - Shenzhen University

.....
Research on Safety Assurance Methods for Nuclear Power Industry Model Assets

Technical Paper Publication: ICONE32-1397

Minmin Cheng - CNPO, HUST
Menghan Zhu - CNPO
Kangli Niu - HUST

.....
Discussion on Criticality Safety Management of Non-Reactor Nuclear Fuel Cycle Facilities

Technical Paper Publication: ICONE32-1595

Junning Wang - Nuclear and Radiation Safety Center, Ministry of Ecology and Environment
Dan Lyu - Nuclear and Radiation Safety Center, Ministry of Ecology and Environment
Yuntao Liu - Nuclear and Radiation Safety Center, Ministry of Ecology and Environment

Xiaowei Yang - Nuclear and Radiation Safety Center, Ministry of Ecology and Environment

Zhihui Liu - Nuclear and Radiation Safety Center, Ministry of Ecology and Environment

.....
A New Methodology for Developing Phenomena Identification and Ranking Tables (PIRT) Using Text Mining Techniques

Technical Paper Publication: ICONE32-1786

Jianing Zhao - North China Electric Power University

Lehan Sun - North China Electric Power University

Tengjun Geng - North China Electric Power University

Hong Wei - North China Electric Power University

Xueqing Ma - North China Electric Power University

Shengfei Wang - North China Electric Power University

.....
Track 5-4 Reactor Design and Safety

8:30 am –10:00 am , C-108B

Session Chair:

Session Co-Chair:

Preliminary Study On Security Scheme of Floating Reactor

Technical Paper Publication: ICONE32-0027

CHE JUAN - China Nuclear Power Technology Research Institute Co.

.....
FEASIBILITY STUDY FOR MAIN STEAM SYSTEM PIPE AND MAIN FEEDWATER PIPE LAYOUT IN THE SAME COMPARTMENT IN HPR1000 NUCLEAR STATION

Technical Paper Publication: ICONE32-0691

Haoyang Chen - China Nuclear Power Engineering Co.Ltd.

Danfeng Zhao - China Nuclear Power Engineering Co.Ltd.

.....
STUDY ON PARTIAL FLOW BLOCKAGE OF A FUEL ASSEMBLY OF CIADS

Technical Paper Publication: ICONE32-1440

Huiping Ouyang - China Institute of Atomic Energy

Yonggang Cao - China Institute of Atomic Energy

Lixia Wang - China Institute of Atomic Energy

Jiyue Liang - China Institute of Atomic Energy

Shuo Chen - China Institute of Atomic Energy

Qiao Pengrui - China Institute of Atomic Energy

.....
A REVIEW: RESEARCH STATUS AND DEVELOPMENT TRENDS OF PASSIVE RESIDUAL HEAT REMOVAL SYSTEMS

Technical Paper Publication: ICONE32-1520

Yunfeng Li - Naval University of Engineering

Lei Yu - Naval University of Engineering

Jianli Hao - Naval University of Engineering

Yuxian Rao - Naval University of Engineering

.....
Conceptual Design of a Passive Residual Heat Removal System for Megawatt-Class Nuclear Power Units in Unmanned Underwater Vehicles

Technical Paper Publication: ICONE32-1557

zhenpeng wang - Institute of Nuclear Physics and Chemistry, China Academy of Engineering Physics

xiaoyu guo - Institute of Nuclear Physics and Chemistry, China Academy of Engineering Physics

yuchuan guo - Institute of Nuclear Physics and Chemistry, China Academy of Engineering Physics

simao guo - Institute of Nuclear Physics and Chemistry, China Academy of Engineering Physics

guanbo wang - Institute of Nuclear Physics and Chemistry, China Academy of Engineering Physics

jie fan - Institute of Nuclear Physics and Chemistry, China Academy of Engineering Physics

yan yang - Institute of Nuclear Physics and Chemistry, China Academy of Engineering Physics

xuanting xie - Institute of Nuclear Physics and Chemistry, China Academy of Engineering Physics

Bin Tang - Institute of Nuclear Physics and Chemistry, China Academy of Engineering Physics

Study on the Influence of Primary Frequency Modulation Capacity Range Up to [-6%,+3%] for Reactor Safety in HPR1000 Nuclear Power Plant

Technical Paper Publication: ICONE32-1655

Qiubai Li - China Nuclear Power Technology Research Institute

Chaohao Shang - China Nuclear Power Technology Research Institute

Xinjie Zhai - China Nuclear Power Technology Research Institute

Kun Xiong - China Nuclear Power Technology Research Institute

Track 5-5 Fuel and Core Behavior

8:30 am –10:00 am , C-109A

Session Chair:

Session Co-Chair:

Experimental study on two-phase distribution characteristics of passive ERVC channel in full height IVR testing facility

Technical Paper Publication: ICONE32-0411

Ziwei Zhang - Shanghai Jiao Tong University

Pengfei Liu - Shanghai Jiao Tong University

Hua Zhu - Shanghai Jiao Tong University

EXPERIMENTAL STUDY OF METAL LAYER OF THE STRATIFIED MOLTEN CORIUM POOL: THE METAL MELT POOL EXPERIMENTAL SETUP

Technical Paper Publication: ICONE32-1081

Mengyi Wang - CNNC Key Laboratory for Severe Accident Research in Nuclear Power Safety, China Nuclear Power Engineering Co., Ltd

Fengyang Quan - CNNC Key Laboratory for Severe Accident Research in Nuclear Power Safety, China Nuclear Power Engineering Co., Ltd

Pengya Guo - Tsinghua University

Jie Pei - CNNC Key Laboratory for Severe Accident Research in Nuclear Power Safety, China Nuclear Power Engineering Co., Ltd

Wei Li - CNNC Key Laboratory for Severe Accident Research in Nuclear Power Safety, China Nuclear Power Engineering Co., Ltd

Yidan Yuan - CNNC Key Laboratory for Severe Accident Research in Nuclear Power Safety, China Nuclear Power Engineering Co., Ltd

Investigation on the Mechanism of Ovality Impact on Creep Collapse Evolution Behavior of Zr-4 Cladding Tubes During Irradiation

Technical Paper Publication: ICONE32-1522

Changbing Tang - National Key Laboratory of Nuclear Reactor Technology, Nuclear Power Institute of China

Yuanming Li - National Key Laboratory of Nuclear Reactor Technology, Nuclear Power Institute of China

Zhong Xiao - National Key Laboratory of Nuclear Reactor Technology, Nuclear Power Institute of China

Preliminary Study on the Evolution Mechanism of Blister Size in UMo-Zr Monolithic Fuel Elements

Technical Paper Publication: ICONE32-1532

Changbing Tang - National Key Laboratory of Nuclear Reactor Technology, Nuclear Power Institute of China

Study on the layered structure of molten pool based on multi-physical field coupling

Technical Paper Publication: ICONE32-1627

ShiLei Dun - Southeast University

ZongYan Bai - Southeast University

Peng Liu - Southeast University

HaoLei Zhang - Southeast University

Tao Zhou - Southeast University

EXPERIMENTAL STUDY OF SODIUM-WATER REACTION PROTECTION SYSTEM FOR LARGE LEAKAGE OF SODIUM-COOLED FAST REACTORS

Technical Paper Publication: ICONE32-1728

Jundong Qian - China Institute of Atomic Energy

Bin Hou - China Institute of Atomic Energy

Huanjun Zhu - China Institute of Atomic Energy

Track 12-1 Innovative Nuclear Power Plant Design-I

8:30 am –10:00 am , C-109B

Session Chair:

Session Co-Chair:

Hierarchical energy management strategy of the heat pipe cooled reactor – battery hybrid energy system for ships

Technical Paper Publication: ICONE32-0427

Ziyin LIU - Shanghai Jiao Tong University

Limin LIU - Shanghai Jiao Tong University

Ziang GUO - Shanghai Jiao Tong University

Kuaiyuan FENG - Shanghai Jiao Tong University

Hui GUO - Shanghai Jiao Tong University

Hanyang GU - Shanghai Jiao Tong University

Research on Frequency Regulation and Peak Shaving with Steam Supply Safety System for Nuclear Power-Molten Salt Thermal Energy Storage

Technical Paper Publication: ICONE32-0721

Ma Zihan - Xi'an Thermal Power Research Institute

Zhao Mingzhe - Xi'an Thermal Power Research Institute

Ma Xiaolong - Xi'an Thermal Power Research Institute

Han Chuangao - Xi'an Thermal Power Research Institute

Qi Peiyao - Xi'an Thermal Power Research Institute

Wei Lin - Xi'an Thermal Power Research Institute

Li Minghao - Xi'an Thermal Power Research Institute

Wu Shougui - Xi'an Thermal Power Research Institute

STUDY ON THE COUPLED OPERATION CHARACTERISTICS OF SMALL SODIUM COOLED FAST REACTOR AND STIRLING POWER CONVERSION SYSTEM

Technical Paper Publication: ICONE32-0805

Linjie Zhou - China Institute of Atomic Energy

Jun Yang - China Institute of Atomic Energy

Zhongxiao Guo - China Institute of Atomic Energy

Xin Zhang - China Institute of Atomic Energy

Jin Wang - China Institute of Atomic Energy

Yujie Guo - China Institute of Atomic Energy

Weiping Hong - China Institute of Atomic Energy

Systematic study and thermodynamic analysis of combined cooling, heating, power generation (CCHP) and desalination of nuclear-powered ships

Technical Paper Publication: ICONE32-0929

Min Liu - Sun Yat-sen University

Guopeng Yu - Sun Yat-sen University

Energy Consumption Analysis of Cogeneration Schemes for the CAP1400 PWR Nuclear Power Plant

Technical Paper Publication: ICONE32-1040

Baoguo Zhang - State Nuclear Power Demonstration Plant Co., Ltd(SNPDP)

Chunguang Liu - SNPDP

Weiyang Meng - State Nuclear Electric Power Planning Design & Research Institute Co.,Ltd SNPDR

Yufeng Shi - SNPDP

Xu Li - SNPDP

Study on Nuclear Power Regulation System of a Gas-Cooled Microreactor

Technical Paper Publication: ICONE32-1279

Changhao Wu - Xi'an Jiaotong University

Ying Li - China Nuclear Power Engineering Co.

Mingyue Jiang - China Nuclear Power Engineering Co.

Shengyong Liao - China Nuclear Power Engineering Co.

Peiwei Sun - Xi'an Jiaotong University

Xinyu Wei - Xi'an Jiaotong University

RESEARCH ON COMBINED NUCLEAR POWER GENERATION TECHNOLOGY OF PRESSURIZED WATER REACTOR AND HIGH TEMPERATURE GAS-COOLED REACTOR

Technical Paper Publication: ICONE32-2096

Aijun Yan - Xi'an Thermal Engineering Research Institute Co. LTD

Hongyong Cheng - China Huaneng Group

Junyi Wu - China Huaneng Group

Guifang Shen - Huaneng Xiapu Nuclear power Co., LTD

Feng Wang - Huaneng Shandong Shidaowan Nuclear Power Co., LTD

Jun Wen - Huaneng Nuclear Energy Technology Research Institute Co., LTD

Jiancheng Han - Huaneng Shandong Shidaowan Nuclear Power Co., LTD

Yitong Li - China Huaneng Group

Yang Yu - China Huaneng Group

Zhidong Fan - Xi 'an Thermal Engineering Research Institute Co. LTD

Chenlong Zhou - Xi 'an Thermal Engineering Research Institute Co. LTD

Track11-2 Condition Selection for Beyond Design Basis Events and Analysis of Cr-coated Alloy

8:30 am –10:00 am , C-112

Session Chair:

Session Co-Chair:

A grand-potential based multi-phase-field model for simulating the evolution of intermetallic phases in Cr-coated Zry-4 alloys

Technical Paper Publication: ICONE32-0005

Menghui Wanga—Sino-French Institute of Nuclear Engineering and Technology, Sun Yat-Sen University

Lin Chena—Sino-French Institute of Nuclear Engineering and Technology, Sun Yat-Sen University

RESEARCH ON DESIGN EXTENSION CONDITIONS WITHOUT SIGNIFICANT FUEL DEGRADATION LIST OF INTEGRATED SMALL PRESSURIZED NUCLEAR POWER PLANT

Technical Paper Publication: ICONE32-0282

CHURAN FENG - China Nuclear Power Engineering Co., LTD

BIN LIU - China Nuclear Power Engineering Co., LTD

GUO CHEN - Nuclear Power Institute of China

LINGZHI LI - China Nuclear Power Engineering Co., LTD

JIAN YANG - China Nuclear Power Engineering Co., LTD

MEIRU LIU - China Nuclear Power Engineering Co., LTD

Oxidation and degradation of Cr-coated zirconium alloy: Effect of Cr thickness

Technical Paper Publication: ICONE32-1332

Martin Steinbrueck - KIT

Injae Lee - KIT

Selection and Analysis of CAP1400 Design Extension Conditions Based on New Revision of Design Safety of Nuclear Power Plants

Technical Paper Publication: ICONE32-1497

Guobao Shi - Shanghai Nuclear Engineering Research and Design Institute Co., LTD.,

Tianting Lu - Shanghai Nuclear Engineering Research and Design Institute Co., LTD.,

Kun Zhang - Shanghai Nuclear Engineering Research and Design Institute Co., LTD.,

Yajun Yang - Shanghai Nuclear Engineering Research and Design Institute Co., LTD.,

Gaofeng Huang - Shanghai Nuclear Engineering Research and Design Institute Co., LTD.,

Research and Implementation of Sequence Selection Method for Design Extension Conditions with Core Melting

Technical Paper Publication: ICONE32-1763

Jing Liu - CNPE

Cong Wang - CNPE

Yun Yu - CNPE

Wei wei - CNPE

Xinli Yu - CNPE

Research on Requirement and Practice of Mobile Equipment Configuration in U.S. Nuclear Power Plants and its Implications

Technical Paper Publication: ICONE32-1790

Yun YU - China Nuclear Power Engineering Company

Yu LIU - China Nuclear Power Engineering Co. Ltd

Cong WANG - China Nuclear Power Engineering Co. Ltd

Jingyi LIANG - China Nuclear Power Engineering Co. Ltd

Xinli YU - China Nuclear Power Engineering Co. Ltd

Research on Electrical Design Strategies for Spent Fuel Reprocessing Plant Based on Beyond Design Basis External Events

Technical Paper Publication: ICONE32-1972

Meng Wang - China Nuclear Power Engineering Co., Ltd.

Shizhong Tian - China Nuclear Power Engineering Co., Ltd.

Shuo Gao - China Nuclear Power Engineering Co., Ltd.

Track 12-2 Innovative Nuclear Power Plant Design-II

8:30 am –10:00 am , C-113

Session Chair:

Session Co-Chair:

Study on Postulated Siting Accident Source Terms and Dose Consequence Assessment in the Advanced Nuclear Power Plants Design

Technical Paper Publication: ICONE32-0148

Ya Liu - China Nuclear Power Engineering Co., Ltd.,

Mengxi Wang - China Nuclear Power Engineering Co., Ltd.,

Jiaxuan Gao - China Nuclear Power Engineering Co., Ltd.,

Jiemin Zhang - China Nuclear Power Engineering Co., Ltd.,

Nan Wu - China Nuclear Power Engineering Co., Ltd.,

Na Xue - China Nuclear Power Engineering Co., Ltd.,

Lin Qiu - China Nuclear Power Engineering Co., Ltd.,

SIMULATION ANALYSIS OF FLOW CHARACTERISTICS DURING THE PARAFFINE WAX MELTING PROCESS

Technical Paper Publication: ICONE32-0198

Adnan Muhammad - Harbin Engineering University, Harbin, 150001, China

Hui Wang - China Nuclear Power Engineering Co., Ltd, Beijing, 100840, China

Wang Yanlu - Harbin Engineering University, Harbin, 150001, China

Cao Xiaxin - Harbin Engineering University, Harbin, 150001, China

Research on Multi-Objective Radiation Complex Core Coordination Design Program and Optimization Method for HFETR

Technical Paper Publication: ICONE32-0281

Chang Liu - Nuclear Power Institute of China

Changhu Kang - Nuclear Power Institute of China

Yuhao He - Nuclear Power Institute of China

Jiyang Song - Nuclear Power Institute of China

Runqi Liu - Nuclear Power Institute of China

Liqing Qiu - Nuclear Power Institute of China

Yi Xia - Nuclear Power Institute of China

Yufei Guo - Nuclear Power Institute of China

Yao Lu - Nuclear Power Institute of China

Yutong Zou - Nuclear Power Institute of China

Yutong Zou - Nuclear Power Institute of China

EXPERIMENTAL STUDY ON FRICTION COEFFICIENT OF GRAPHITE FOR HTGR OVER THE TEMPERATURE INTERVAL 100°C TO 1300°C

Technical Paper Publication: ICONE32-0375

Zeliang Chen - China Nuclear Power Technology Research Institute Co.,Ltd.(CNPRI)

Nan Gui - Institute of Nuclear and New Energy Technology (INET)

Xingtuan Yang - Institute of Nuclear and New Energy Technology (INET)

Shengyao Jiang - Institute of Nuclear and New Energy Technology (INET)

RESEARCH ON HEAT PIPE CONDUCTION DEVICE OF CONTAINMENT DOME

Technical Paper Publication: ICONE32-0519

Jing LIU - China Nuclear Power Engineering Co., LTD.

Bei Hu - China Nuclear Power Engineering Co., LTD.

Shanshan Qiu - China Nuclear Power Engineering Co., LTD.

Xueying Sun - Harbin Institute of Technology, China

Wenke Zheng - Harbin Institute of Technology, China

Numerical Analysis of Flow and Heat Transfer Characteristics of Liquid LBE in Horizontal Honeycomb Fuel Assembly

Technical Paper Publication: ICONE32-0710

Cong Zhang - Naval University of Engineering

Ling Chen - Naval University of Engineering

Yongfa Zhang - Naval University of Engineering

Song Li - Naval University of Engineering

Xiaolong Wang - Naval University of Engineering

Experimental and Simulation Optimization Study on Dynamic Airflow Organization of Intelligent Variable Air Volume System on Nuclear Island

Technical Paper Publication: ICONE32-0793

Fenglin Zhang - China Nuclear Power Engineering Co., Ltd, China

Mingfang Chen - China Nuclear Power Engineering Co., Ltd, China

Bei Hu - China Nuclear Power Engineering Co., Ltd, China

Xin Tong - China Nuclear Power Engineering Co., Ltd, China

Tiansheng Wang - Jianke EET Co.,Ltd, China

Track1-8 Finite Element Calculation

10:30 am –12:00 pm , C-101AB

Session Chair:

Session Co-Chair:

ANALYSIS AND RESEARCH ON PILE FOUNDATION SHEAR FORCE NONUNIFORMITY OF AP1000 NUCLEAR ISLAND BUILDING

Technical Paper Publication: ICONE32-0283

Xiaokun LI - China Nuclear Power Engineering Co., Ltd

Jingsen LI - China Nuclear Power Engineering Co., Ltd

Min LIU - China Nuclear Power Engineering Co., Ltd

Qingxun KONG - China Nuclear Power Engineering Co., Ltd

Jianhua YANG - China Nuclear Power Engineering Co., Ltd

STRUCTURAL INTEGRITY ASSESSMENT OF NUCLEAR POWER PLANT CONTAINMENT BASED ON TIME-DEPENDENT PRESTRESSING

Technical Paper Publication: ICONE32-0308

Kaixing Liao - Tongji University

Ying Huang - Suzhou Nuclear Power Research Institute Co., Ltd

Zhijie Tang - Suzhou Nuclear Power Research Institute Co., Ltd

Jiapei Xu - Suzhou Nuclear Power Research Institute Co., Ltd

Weiping Zhang - Tongji University

Yong Zhou - Tongji University

Analysis on the Three-Dimensional Seismic Isolation Scheme of Nuclear Engineering Plant Buildings

Technical Paper Publication: ICONE32-0368

Hehuan Ren - China Nuclear Power Engineering Co., LTD.

Jian Chen - Department of Civil Engineering, Tsinghua University

Chencheng Shi - China Nuclear Power Engineering Co., LTD.

Xiaoying Sun - China Nuclear Power Engineering Co., LTD.

Xiaoyi Yang - China Nuclear Power Engineering Co., LTD.

Research on the Calculation of Nuclear Pipes Based on Nonlinear Supports

Technical Paper Publication: ICONE32-0418

Zhe Lyu - China Nuclear Power Engineering Co.,Ltd.

Lihui Jiao - China Nuclear Power Engineering Co.,Ltd.

Xipeng Ma - China Nuclear Power Engineering Co.,Ltd.

AN EQUIVALENTLY SIMPLIFIED POINT-BEAM MODEL CALCULATION FOR THE INTERNAL STRUCTURE OF REACTOR BUILDING

Technical Paper Publication: ICONE32-0558

LIU Yuanda-China Nuclear Power Engineering Co.,Ltd

Zhang Chunlong - China Nuclear Power Engineering Co.,Ltd

Wu Xiting - China Nuclear Power Engineering Co.,Ltd

Finite Element Analysis-Based Service Life Calculation of Recirculation Valve Springs in Nuclear Power Plant Emergency Core Cooling Systems

Technical Paper Publication: ICONE32-0700

Yiqian Sun - College of Smart Energy, Shanghai Jiao Tong University

Chunjing Song - Shanghai Nuclear Engineering Research & Design Institute Co.

Yanhua Yang - College of Smart Energy, Shanghai Jiao Tong University

Meng Zhao - College of Smart Energy, Shanghai Jiao Tong University

Track2-8 Reactor Physics and Core Design (III)

10:30 am –12:00 pm , C-102

Session Chair:

Session Co-Chair:

DERIVATION OF CRITERIA FOR PREVENTING CORE MELTING DURING UTOP USING ASYMPTOTIC STATE IN SODIUM-COOLED FAST REACTOR

Technical Paper Publication: ICONE32-0035

Satoshi Takeda - The University of Osaka

Takanori Kitada - The University of Osaka

Takafumi Okita - The University of Osaka

Eiji Hoashi - The University of Osaka

Multi-Pass Refueling Analysis of the HTR-PM with Burnable Poison Particles

Technical Paper Publication: ICONE32-0082

Bing Xia - Tsinghua University

Ding She - Tsinghua University

Chunlin Wei - Tsinghua University

Jiong Guo - Tsinghua University

Jian Zhang - Tsinghua University

Fu Li - Tsinghua University

An Angle-Dependent Variance Reduction method for Monte Carlo Deep-Penetration Particle Transport Calculations

Technical Paper Publication: ICONE32-0278

Lu Yiran - Nuclear Power Institute of China

Lyu Huanwen - Nuclear Power Institute of China

Wang Xueqing - Nuclear Power Institute of China

Calculation of nuclear thermal coupling of fuel assemblies and analysis of nuclear data uncertainty

Technical Paper Publication: ICONE32-0289

Di Wu—Nuclear Power Institute of China

Ziyan Li—Nuclear Power Institute of China

Technical and Economic Feasibility Study on Establishing Secondary Supply of Natural Uranium in China

Technical Paper Publication: ICONE32-0307

Jijun MAO - CGNPC Uranium Resources Co.Ltd

Xueying MA - CGNPC Uranium Resources Co.Ltd

CONTINUOUS-ENERGY MOC FOR NEUTRON-TRANSPORT CALCULATION

Technical Paper Publication: ICONE32-0773

Xiaoyu Wen - Xi'an Jiaotong University

Yunzhao Li - Xi'an Jiaotong University

Haopo Liu - Xi'an Jiaotong University

Liangzhi Cao - Xi'an Jiaotong University

PRELIMINARY RESEARCH ON COMPARISON AND SELECTION OF TYPES OF FUEL FOR FAST REACTOR

Technical Paper Publication: ICONE32-1707

Xiaochun Jia - China institute of atomic energy

Yun Hu - China institute of atomic energy

Track 7-8 Multiphase flow

10:30 am –12:00 pm , C-103

Session Chair:

Session Co-Chair:

Preliminary Results on Experimental and Numerical Study on Characteristics of Lead-Bismuth Gas-Liquid Two-Phase Flow

Technical Paper Publication: ICONE32-0590

Kefan Geng - Shenzhen University

Qi Jia - Shenzhen University

Xi Huang - Shenzhen University

Bo Pang - Shenzhen University

Yasushi Saito - Kyoto University

NUMERICAL STUDY ON THERMOHYDRAULICS OF HIGHLY UNDER-EXPANDED FLASHING JET

Technical Paper Publication: ICONE32-0748

Zhizhou Zhu - School of Mechanical Engineering, Shanghai Jiao Tong University, China

Lili Tong - School of Mechanical Engineering, Shanghai Jiao Tong University, China

Xuewu Cao - School of Mechanical Engineering, Shanghai Jiao Tong University, China

Study on the Migration and Deposition Characteristics of Insoluble Particles in LBE within the Single-Wire Wrapping Channel

Technical Paper Publication: ICONE32-0997

Xiaochang Li - Harbin Engineering University

Jiming Lin - China Nuclear Power Technology Research Institute Co., Ltd

Puzhen Gao - Harbin Engineering University

Sichao Tan - Harbin Engineering University

A novel multiphase lattice boltzmann model considering contact angle: no interfacial velocity slip and unphysical density layer

Technical Paper Publication: ICONE32-1350

Junren Hou - Department of Engineering Physics, Tsinghua University

Shunli Jiang - Department of Engineering Physics, Tsinghua University

Yugao Ma - Nuclear Power Institute of China

Guodong Liu - Department of Engineering Physics, Tsinghua University

Shanfang Huang - Department of Engineering Physics, Tsinghua University

Kan Wang - Department of Engineering Physics, Tsinghua University

Investigation of interface distribution characteristics of vapour/water bubbly flow in a helically coiled tube

Technical Paper Publication: ICONE32-1491

Xinxin Wu - INET, Tsinghua university

Xiaowei Li - INET, Tsinghua university

Hongye Zhu - INET, Tsinghua university

Simulation on thermal-hydraulic characteristics inside a Pressurized-Containment under steam release conditions containing non-condensable gases

Technical Paper Publication: ICONE32-1887

Anchi Li - North China Electric Power University

Jibin Xu - North China Electric Power University

Yu Yang - State Power Investment Corporation Research Institute

Yuhao Zhang - North China Electric Power University

Daogang Lu - North China Electric Power University

Track 8-8 Particle Behavior

10:30 am –12:00 pm , C-104A

Session Chair:

Session Co-Chair:

NUMERICAL SIMULATION OF PARTICULATE CORROSION PRODUCT DEPOSITION IN PWR COOLANT SYSTEM

Technical Paper Publication: ICONE32-0629

Bing Dong - Nuclear power operations research institute

Feng Yi - Nuclear power operations research institute

Weimin Liang - Nuclear power operations research institute

Enwei Shen - Nuclear power operations research institute

Yikun Zang - Nuclear power operations research institute

Kouhong Xiong - Nuclear power operations research institute

Effect of corrosion products deposition on flow and heat transfer in plate fuel assembly

Technical Paper Publication: ICONE32-0914

yushun LU - Shanghai University of Electric Power

rui ZHANG - Shanghai University of Electric Power

Jianquan LIU - Shanghai University of Electric Power

Numerical simulation study on the behavior of aerosol particles in confined spaces

Technical Paper Publication: ICONE32-0952

Cao Chengque-China Nuclear Power Technology Research Institute

Lu Changdong - China Nuclear Power Technology Research Institute

Xu Peng - China Nuclear Power Technology Research Institute

Numerical simulation of Gas-Solid Flow Characteristics in Industrial-Scale Denitrification Fluidized Bed

Technical Paper Publication: ICONE32-1010

Jian Zhou - China National Nuclear Industry Corporation 404

Bingzheng Ke - China National Nuclear Industry Corporation 404

Caibing Liu - China National Nuclear Industry Corporation 404

Numerical Simulation Research on the Erosion of Oxide Film Layers by Lead-Bismuth Local Flow based on the DPM Model

Technical Paper Publication: ICONE32-1364

Gaoxiang Xu - China Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd

Wan Zhang - Weihai Ocean Vocational College

Chengfang Xu - Wenergy Hefei Electric Power Co., Ltd

Study of dense particle flow in high-temperature gas-cooled reactors

Technical Paper Publication: ICONE32-1564

Hewei Wang - North China Electric Power University

Yixian Zhou - North China Electric Power University

Yijun Huang - Huaneng Shidao Bay Nuclear Power Development Co., Ltd.

Daogang Lu - North China Electric Power University

Yu Liu - North China Electric Power University

Trank 9-8 Radiation Protection and Safety Management-I
10:30 am –12:00 pm , C-104B

Session Chair:

Session Co-Chair:

Impact of Actinide Radiotoxicity on Radioactive Waste Management Strategies for Reprocessing Facilities

Technical Paper Publication: ICONE32-0752

Shuai Liu - CNNC Long'an Co. Ltd.

Meng Wei - CNNC Long'an Co. Ltd.

Jianquan Liu - CNNC Long'an Co. Ltd.

Xipeng Zhang - School of Physics, Sun Yat-sen University, China

Preparation and Performance of Structural-Functional Integrated Shielding Composites Material with WC Particle Matrix and High-Entropy Alloy Binder

Technical Paper Publication: ICONE32-0783

Chengxin Li - China Nuclear Power Technology Research Institute Co., Ltd

Shao He - China Nuclear Power Technology Research Institute Co., Ltd

Feng Liu - China Nuclear Power Technology Research Institute Co., Ltd

Yulong Li - China Nuclear Power Technology Research Institute Co., Ltd

Li Li - China Nuclear Power Technology Research Institute Co., Ltd

Xiajie Liu - China Nuclear Power Technology Research Institute Co., Ltd

Jinhuang Yan - China Nuclear Power Technology Research Institute Co., Ltd

Shielding Design Of Modular Gas-cooled Reactor Zero-power Experimental Device

Technical Paper Publication: ICONE32-1700

Qiujuan Zhao - China Nuclear Power Engineering Co., Ltd

Yingnan Tian - China Nuclear Power Engineering Co., Ltd

Defeng Yang - China Nuclear Power Engineering Co., Ltd

Xuesong Liu - China Nuclear Power Engineering Co., Ltd

Xiaoxia Wang - China Nuclear Power Engineering Co., Ltd

Shielding Design For VVER Spent Fuel Transport Container

Technical Paper Publication: ICONE32-1767

Xuesong Liu - China Nuclear Power Engineering Co., Ltd.

Zonghuan Chen - China Nuclear Power Engineering Co., Ltd.

Bingheng Wang - China Nuclear Power Engineering Co., Ltd.

Lin Yao - China Nuclear Power Engineering Co., Ltd.

IMPACT OF OXYGEN VACANCIES ON STRUCTURAL STABILITY AND CS IMMOBILIZATION IN TITANATE HOLLANDITE

Technical Paper Publication: ICONE32-1799

Guanxiang Yang - School of Nuclear Science and Engineering, North China Electric Power University, China

Qiang zhao - School of Nuclear Science and Engineering, North China Electric Power University, China

Ligang Wang - School of Nuclear Science and Engineering, North China Electric Power University, China

Yangyang Li - School of Nuclear Science and Engineering, North China Electric Power University, China

Xiaoping Ouyang - Northwest Institute of Nuclear Technology, China

Research on the Metering Methods of Radioactive Waste Resin

Technical Paper Publication: ICONE32-1924

Dong Li - China Nuclear Power Engineering Co.,Ltd

Xinghuan Luo - China Nuclear Power Engineering Co.,Ltd

Xueyuan Deng - China Nuclear Power Engineering Co.,Ltd

Track1-17 Artificial Intelligence and Simulation Control(MIX) II

10:30 am –12:00 pm , C-105A

Session Chair:

Session Co-Chair:

Development of the Hitachi Advanced Plant Performance Diagnosis System for Nuclear Power Plant Performance Monitoring: Instrument error evaluation for core thermal power management

Technical Paper Publication: ICONE32-0085

Akinori Tamura - Hitachi, Ltd

Nobuyuki Shinohara - Hitachi-GE, Ltd.

Kenji Sasaki - Hitachi-GE, Ltd.

Norikazu Hamaura - Hitachi-GE, Ltd.

Seiji Nemoto - Hitachi-GE, Ltd.

Risk prevention and improvement of operation caused by high temperature in nuclear power plants

Technical Paper Publication: ICONE32-0309

cheng guo - Daya Bay nuclear power operations and management CO.,LTD

TSLP: A Cloud-Edge Integration Time Series Data Processing Platform for Nuclear Power Industrial Internet

Technical Paper Publication: ICONE32-0480

Huajian Fang - China Nuclear Power Operation Technology Corporation, Ltd.

Minmin Cheng - China Nuclear Power Operation Technology Corporation, Ltd.

Yinggang Jing - China Nuclear Power Operation Technology Corporation, Ltd.

Kui Xu - China Nuclear Power Operation Technology Corporation, Ltd.

Xianying Liu - China Nuclear Power Operation Technology Corporation, Ltd.

Min Li - China Nuclear Power Operation Technology Corporation, Ltd.

OPERATION OPTIMIZATION OF NUCLEAR ISLAND EQUIPMENT OF CPR1000 UNIT UNDER HIGH TEMPERATURE OF SEA WATER

Technical Paper Publication: ICONE32-0661

Yangyu Yang - Yangjiang Nuclear Power Co.,Ltd.

Qiuyang Chen - Suzhou Nuclear Power Research Institute Co., Ltd.

Hui Shao - Suzhou Nuclear Power Research Institute Co., Ltd.

Jian Zhang - Suzhou Nuclear Power Research Institute Co., Ltd.

Research on the Nuclear Power Plant Operation Trend Prediction Method Based on Phase Space Reconstruction

Technical Paper Publication: ICONE32-0890

Longfei Shan - Harbin Engineering University

Yongkuo Liu - Harbin Engineering University

Xin Ai - Harbin Engineering University

Jiarong Gao - Harbin Engineering University

Repair of weld crack defects in the water chamber spacer plate of a high-pressure heater of a nuclear power plant

Technical Paper Publication: ICONE32-1568

Yuanping Yang - Huaneng Shandong Shidao Bay Nuclear Power Co. Ltd.

Gang Ma - Huaneng Shandong Shidao Bay Nuclear Power Co. Ltd.

Xiao Chen - Huaneng Shandong Shidao Bay Nuclear Power Co. Ltd.

An Xu - Huaneng Shandong Shidao Bay Nuclear Power Co. Ltd.

Huafeng Xu - Huaneng Shandong Shidao Bay Nuclear Power Co. Ltd.

Haixuan Sun - Huaneng Shandong Shidao Bay Nuclear Power Co. Ltd.

Research on the Risk-informed Integrated Operational Decision-making Method for Nuclear Power Plants

Technical Paper Publication: ICONE32-1768

Yingfei Ma - Harbin Engineering University

Qiang Zhao - Harbin Engineering University

Wenkai Wei - Harbin Engineering University

He Wang - Harbin Engineering University

Track2-17 Nuclear Fuel Cycle (II)

10:30 am –12:00 pm , C-105B

Session Chair:

Session Co-Chair:

Searching For a Suitable Fuel for TRU Utilization and MA Transmutation in PWR

Technical Paper Publication: ICONE32-0051

Bin Ye - Southwest University of Science and Technology

Junyan Liu - Southwest University of Science and Technology

Feng Zhu - Southwest University of Science and Technology

Shiyu Liu - Southwest University of Science and Technology

Junjie Mao - Southwest University of Science and Technology

Xiaoqian Dai - Southwest University of Science and Technology

Research and Suggestions on Technical Requirements for Spent Fuel Package Loading and Unloading Docks

Technical Paper Publication: ICONE32-0141

Zhong Gui - CGNPC Uranium Resources Co., Ltd.

Zi Yao Du - CGNPC Uranium Resources Co., Ltd.

RESEARCH PROJECTS OF ENGINEERING SCALE EXTRACTATION CHROMATOGRAPHY SYSTEM FOR MA(III) RECOVERY

Technical Paper Publication: ICONE32-0323

Kenta hasegawa - Japan Atomic Energy Agency

Yoichi Arai - Japan Atomic Energy Agency

Yuichi Sano - Japan Atomic Energy Agency

Masayuki Takeuchi - Japan Atomic Energy Agency

Preliminary Design Study on Maintenance Container for Nuclear Centrifugal Extractor

Technical Paper Publication: ICONE32-0553

Huo Mingqing - CNNC Long'an Co., Ltd.

Wei Meng - CNNC Long'an Co., Ltd.

Liu Haijun - CGNPC Uranium Resources Co., Ltd.

SELECTIVE ADSORPTION AND RADIATION RESISTANCE OF POTASSIUM CADMIUM FERROCYANIDE FOR PALLADIUM

Technical Paper Publication: ICONE32-0639

Zhennan Wu - Shanghai Jiao Tong University

Jianing Xing - Shanghai Jiao Tong University

Yan Wu - Shanghai Jiao Tong University

Yuezhou Wei - Shanghai Jiao Tong University

STUDY ON EXTRACTION OF RUTHENIUM(III) FROM NITRIC ACID USING A TRIAMIDE LIGAND: NTAAMIDE(N-OCT)

Technical Paper Publication: ICONE32-0644

Jianing Xing - Shanghai Jiao Tong University

Luyu Zhang - Shanghai Jiao Tong University

Hanyue Ma - Shanghai Jiao Tong University

Hao Wu - Shanghai Jiao Tong University

Yan Wu - Shanghai Jiao Tong University

Track1-20 Nuclear Power Management System(MIX) II

10:30 am –12:00 pm , C-106A

Session Chair:

Session Co-Chair:

Research on Airtightness Test of Habitable Zone in Main Control Room of HPR1000

Technical Paper Publication: ICONE32-0641

FUNAN XU - East China Branch of China Nuclear Power Engineering Co., Ltd.

ZHANSHUANG YU - School of Energy and Power Engineering, Chongqing University

YING WU - School of Energy and Power Engineering, Chongqing University

Research on construction cost risk management of nuclear power engineering

Technical Paper Publication: ICONE32-0732

Yi Li - China Nuclear Power Engineering Co., Ltd.; University of International Business and Economics

Peng Liu - China Nuclear Power Engineering Co.,Ltd.

Discussion on Risk Management of the First Nuclear Power Demonstration Project of “Hualong One”

Technical Paper Publication: ICONE32-0963

Peng Liu - China Nuclear Power Engineering Co.,Ltd.

Yi Li - China Nuclear Power Engineering Co.,Ltd. ; University of International Business and Economics

Operational Analysis And Optimization of the Pebble Bed HTGR Fuel Burnup Measurement System

Technical Paper Publication: ICONE32-0968

Huimin Sun - Huaneng Nuclear Energy Technology Research Institute Co.,LTD

Jifeng Han - Sichuan University

Tingting He - Huaneng Shandong Shidao Bay Nuclear Power Station

Dongdong Wang - Huaneng Shandong Shidao Bay Nuclear Power Co.,LTD

Chen Wang - Huaneng Shandong Shidao Bay Nuclear Power Co.,LTD

Jingkai Dong - Huaneng Shandong Shidao Bay Nuclear Power Co.,LTD

Shengyu Sang - Huaneng Shandong Shidao Bay Nuclear Power Co.,LTD

Xiaotao Xing - Huaneng Shandong Shidao Bay Nuclear Power Co.,LTD

The Construction and Operation of Fourth-Generation Nuclear Power High-Temperature Gas-Cooled Reactors from the Perspective of Inherent Safety

Technical Paper Publication: ICONE32-1190

Gang Ma - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd.

Yuanping Yang - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd.

xiao Chen - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd.

Risk Quantitative Assessment And Management Of Nuclear Power Plant EPC General Contracting Measuring Instruments

Technical Paper Publication: ICONE32-1604

Song DAI - China Nuclear Power Engineering Co., Ltd.

xingguo LU - China Nuclear Power Engineering Co., Ltd.

Track 7-17 Advanced simulation methods

10:30 am –12:00 pm , C-106B

Session Chair:

Session Co-Chair:

DEVELOPMENT OF A SYSTEM-CFD COUPLING METHOD BASED ON PRESSURE CORRECTION ITERATION FOR MULTI-SCALE SIMULATION IN REACTOR THERMAL-HYDRAULIC ANALYSIS

Technical Paper Publication: ICONE32-0219

Youlai Zeng - Xi'an Jiaotong University

Junli Gou - Xi'an Jiaotong University

PREDICTION TECHNIQUE FOR HEAT TRANSFER IN HELICALLY COILED TUBES ACROSS A WIDE RANGE VIA ARTIFICIAL NEURAL NETWORKS

Technical Paper Publication: ICONE32-0569

Guitao Yang - Shanghai Jiao Tong University

Wei Zhang - Shanghai Jiao Tong University

Bo Yuan - Shanghai Jiao Tong University

Junsen Fu - Shanghai Jiao Tong University

Yao Xiao - Shanghai Jiao Tong University

Hanyang Gu - Shanghai Jiao Tong University

Numerical Investigation of Debris Bed Formation and Coolability Based on the Optimized MPS-DEM Method

Technical Paper Publication: ICONE32-0577

Wen Ding - Xi'an Jiaotong University

Xinkun Xiao - Xi'an Jiaotong University

Ronghua Chen - Xi'an Jiaotong University

Wenxi Tian - Xi'an Jiaotong University

Suizheng Qiu - Xi'an Jiaotong University

APPLICATION OF MACHINE LEARNING MODELS IN THE ANALYSIS OF SUPERCRITICAL CARBON DIOXIDE CYCLE SYSTEM

Technical Paper Publication: ICONE32-0612

Donghui ZHANG - CNNP Xiapu Nuclear Power Co., Ltd

Yang YU - Naval University of Engineering

Yongfa ZHANG - Naval University of Engineering

Prediction of Frozen Startup Temperature in High-Temperature Alkali Metal Heat Pipes Based on Feedforward Neural Network

Technical Paper Publication: ICONE32-0982

Changhe Liu - Shanghai Jiao Tong University

Ziang Guo - Shanghai Jiao Tong University

Ziyin Liu - Shanghai Jiao Tong University

Fengjun Zhong - Beihang University

Limin Liu - Shanghai Jiao Tong University

Hanyang Gu - Shanghai Jiao Tong University

Evolutionary Multi-criterion Optimization of Operational Parameters for Ocean Nuclear Power Plants Based on Surrogate Models

Technical Paper Publication: ICONE32-1805

Zhen Liu - Harbin Engineering University

Biao Liang - Harbin Engineering University

Jiangkuan Li - Harbin Engineering University

Peng Ding - China Nuclear Power Technology Research Institute Co., Ltd.

Chengjie Duan - China Nuclear Power Technology Research Institute Co., Ltd.

Ruifeng Tian - Harbin Engineering University

Sichao Tan - Harbin Engineering University

Jiaoshen Xu - China Nuclear Power Engineering Co., Ltd.

A Simplified ANN Approach for Interfacial Area Concentration Prediction in Rod Bundles Using SHAP Feature Selection

Technical Paper Publication: ICONE32-1813

Mohamed Salem Taaryet - Harbin Engineering University

Xu Han - Harbin Engineering University

Jianjun Wang - Harbin Engineering University

Track 7-21 Fusion and research reactors

10:30 am – 12:00 pm , C-107A

Session Chair:

Session Co-Chair:

Experimental Study of the Behavioral Characteristics of Microbubble Swarms in a Solution Reactor

Technical Paper Publication: ICONE32-0057

Xutong Lang - Harbin Engineering University

Yu Liu - Nuclear Power Institute of China

Ziqiang Zou - Nuclear Power Institute of China

Dong Liu - Harbin Engineering University

Junming Zhang - Harbin Engineering University

Ming Ding - Harbin Engineering University

Xiaxin Cao - Harbin Engineering University

Zhifang Qiu - Nuclear Power Institute of China

RESEARCH ON THE RECONSTRUCTION METHOD OF HFETR CORE POWER DISTRIBUTION BASED ON BP NEURAL NETWORK

Technical Paper Publication: ICONE32-0298

Yutong Zou - Nuclear Power Institute of China

Liqing Qiu - Nuclear Power Institute of China

Guohua Wang - Nuclear Power Institute of China

Chang Liu - Nuclear Power Institute of China

Yuhao He - Nuclear Power Institute of China

Calculation and analysis of frictional work heat generation and heat dissipation in supercritical carbon dioxide pipe network simulation

Technical Paper Publication: ICONE32-0584

Lingbo Meng - Harbin Engineering University

Yiming Xiong - Harbin Engineering University

Yingjie Li - Harbin Engineering University

Ali Ayaz - Harbin Engineering University

Jilin Sun - Harbin Engineering University

Genglei Xia - Harbin Engineering University

A topology-optimized leaf vein-like heat sink based on natural convection substitution model

Technical Paper Publication: ICONE32-0648

ChunBo Zhang - Harbin Engineering University

GeNing He - Nuclear Power Institute of China

DongHui Li - Nuclear Power Institute of China

ZiWei Zhang - Harbin Engineering University

JiDong Cong - Harbin Engineering University

ZhaoMing Meng - Harbin Engineering University

Research on the multi-physical coupling characteristics of neutronics, thermal-hydraulics, and material corrosion in the MTR Research Reactor

Technical Paper Publication: ICONE32-0709

Qiuxia Xie - China Nuclear Power Technology Research Institute

Yijun Zhang - China Nuclear Power Technology Research Institute

Xiang Chai - School of Nuclear Science and Engineering, Shanghai Jiao Tong University

Sitao Peng - China Nuclear Power Technology Research Institute

Xiaojing Liu - School of Nuclear Science and Engineering, Shanghai Jiao Tong University

ANALYSIS ON THE LOCA ACCIDENT OF WATER COOLED SOLID BREEDER BLANKET OF THE FUSION REACTOR UNDER PWR CONDITIONS

Technical Paper Publication: ICONE32-1427

Shuaiyu Han - Nuclear Power Institute of China

Chao Tian - Nuclear Power Institute of China

Futing Jing - Nuclear Power Institute of China

Jie Cheng - Harbin Engineering University

Track 5-6 Materials and Chemistry

10:30 am –12:00 pm , C-107B

Session Chair:

Session Co-Chair:

THE STUDY OF THE CORROSION BEHAVIOR OF HAYNES H214 ALLOY IN KCl-MgCl₂ MOLTEN SALT

Technical Paper Publication: ICONE32-0253

Xiao Zeng - China Nuclear Power Engineering CO., LTD

Fengyang Quan - China Nuclear Power Engineering CO., LTD

Wei LI - China Nuclear Power Engineering CO., LTD

Yidan YUAN - China Nuclear Power Engineering CO., LTD

CHARACTERIZATION AND APPLICATION OF HYDROGEN IONS IN SMALL-SCALE SODIUM-WATER REACTION TESTS

Technical Paper Publication: ICONE32-1533

Yichi Li - China institute of atomic energy

Bin Hou - China institute of atomic energy

Yan Zhao - China institute of atomic energy

Jianxiang Yao - China institute of atomic energy

A Summary of Adsorption of Fission Products on the Graphite Dust in HTGRs

Technical Paper Publication: ICONE32-1643

Rui Nie - Institute of Nuclear and New Energy Technology, Collaborative Innovation Center of Advanced Nuclear Energy Technology, Key Laboratory of Advanced Reactor Engineering and Safety of Ministry of Education, Tsinghua University, China

Yu Wang - Institute of Nuclear and New Energy Technology, Collaborative Innovation Center of Advanced Nuclear Energy Technology, Key Laboratory of Advanced Reactor Engineering and Safety of Ministry of Education, Tsinghua University, China

Ziling Zhou - Institute of Nuclear and New Energy Technology, Collaborative Innovation Center of Advanced Nuclear Energy Technology, Key Laboratory of Advanced Reactor Engineering and Safety of Ministry of Education, Tsinghua University, China

Naizhe Zhang - Institute of Nuclear and New Energy Technology, Collaborative Innovation Center of Advanced Nuclear Energy Technology, Key Laboratory of Advanced Reactor Engineering and Safety of Ministry of Education, Tsinghua University, China

Xuegang Liu - Institute of Nuclear and New Energy Technology, Collaborative Innovation Center of Advanced Nuclear Energy Technology, Key Laboratory of Advanced Reactor Engineering and Safety of Ministry of Education, Tsinghua University, China

Feng Xie - Institute of Nuclear and New Energy Technology, Collaborative Innovation Center of Advanced Nuclear Energy Technology, Key Laboratory of Advanced Reactor Engineering and Safety of Ministry of Education, Tsinghua University, China

Jianzhu Cao - Institute of Nuclear and New Energy Technology, Collaborative Innovation Center of Advanced Nuclear Energy

Technology, Key Laboratory of Advanced Reactor Engineering and Safety of Ministry of Education, Tsinghua University, China

Minghua Lyu - Department of Nuclear Environmental Science Research, China Institute for Radiation Protection

Peng Li - School of Physics and Electronics Engineering, Shanxi University, China

Study on the phase equilibria of the U-Zr-O ternary system with CALPHAD method

Technical Paper Publication: ICONE32-1670

Fengyue zhao - China Nuclear Power Technology Research Institute, China

Yangli Chen - China Nuclear Power Technology Research Institute, China

Yong Ouyang - China Nuclear Power Technology Research Institute, China

Xinhai Zhao - China Nuclear Power Technology Research Institute, China

Yuncong Ding - School of Nuclear Science and Engineering, Shanghai Jiao Tong University, China

A first-principles study of the adsorption behavior of fission product Cs on U₃Si₂ surfaces

Technical Paper Publication: ICONE32-1679

ZhongYi Zou - East China University of Technology

Chuan Li - Tsinghua University

Aixing Wang - East China University of Technology

LiJing Huang - Tsinghua University

WenYi Wang - Tsinghua University

Research progress of cement radioactivity in China

Technical Paper Publication: ICONE32-2144

Chuncen Wu - School of Energy and Power Engineering, Chongqing University, China

Feng Wang - Key Laboratory of Low-Grade Energy Utilization Technology and System Education, Chongqing University, China

Zhong Wu - Chongqing Radiation Environment Supervision and Management Station, China

Shang Geng - School of Energy and Power Engineering,

Chongqing University, China

Hengyan Du - Chongqing Radiation Environment Supervision and Management Station, China

Yifan Song - School of Energy and Power Engineering, Chongqing University, China

Yuhang Wang - School of Energy and Power Engineering, Chongqing University, China

Dongyi Xiao - School of Energy and Power Engineering, Chongqing University, China

Chen Yang - Chongqing Radiation Environment Supervision and Management Station, China

Mingxiao Wang - Chongqing Radiation Environment Supervision and Management Station, China

Guoqiang Wang - Key Laboratory of Low-Grade Energy Utilization Technology and System Education, Chongqing University, China

Tianya Huang - Chongqing Radiation Environment Supervision and Management Station, China

Xue Zhao - Chongqing Radiation Environment Supervision and Management Station, China

Fei Li - Chongqing Radiation Environment Supervision and Management Station, China

Guang Li - Chongqing Radiation Environment Supervision and Management Station, China

Track 5-7 Nuclear Security and Radiation Detection

10:30 am –12:00 pm , C-108A

Session Chair:

Session Co-Chair:

Electronic System Design on the n/γ Signal Pulse Shape Discrimination (PSD) for SiPM-array based CLYC Detector

Technical Paper Publication: ICONE32-0314

Ximin Zhang - Xian Jiaotong University

Shuhuan Liu - Xian Jiaotong University

Yunfeng Sun - Xian Jiaotong University

Fanjuan Meng - Xian Jiaotong University

Shijie Zhu - Xian Jiaotong University

Xuan Wang - Xian Jiaotong University

Chao Wang - Xian Jiaotong University

Tian Xing - Xian Jiaotong University

Rami Ahmed - Xian Jiaotong University

Junye Zhou - Xian Jiaotong University

Zhiliang Hu - China Spallation Neutron Source

Guang Hu - Xian Jiaotong University

INTENSE RADIOLUMINESCENCE FROM ARGON EXCITED BY ALPHA PARTICLES IN SOLAR BLIND REGION

Technical Paper Publication: ICONE32-0403

Shengqiang Chen - Harbin Engineering University

Yushou Song - Harbin Engineering University

Jichao Tang - Harbin Engineering University

Mingqi Zhang - Harbin Engineering University

Huilan Liu - Harbin Engineering University

LARGE-SIZE CSPBBR3 COMPOSITE FILMS PREPARED BY IN-SITU GROWTH METHOD FOR FLEXIBLE, STABLE AND HIGH-PERFORMANCE X-RAY SCINTILLATORS

Technical Paper Publication: ICONE32-0531

yuanjie Sun - Harbin Engineering University

yue Zhang - Harbin Engineering University

zhe Liu - Heilongjiang Institute of Atomic Energy

zhigang Li - Harbin Engineering University

hongtao Zhao - Harbin Engineering University

RADIATION SOURCE SEARCH STRATEGY BASED ON REINFORCEMENT LEARNING WITH SPIKING RESPONSE MODEL

Technical Paper Publication: ICONE32-0684

Jianwen Huo - Southwest University of Science and Technology, China

Yunlei Guo - Southwest University of Science and Technology, China

Xiaolu Li - Southwest University of Science and Technology, China

Zhonbing Zhou - Southwest University of Science and Technology, China

Autonomous Radiation Field Reconstruction and Localization Method Using a Mobile Robot Based on Sparse Measurement Data

Technical Paper Publication: ICONE32-0946

HongWei Liu - School of Information Engineering, Southwest University of Science and Technology

Zhongbing Zhou - School of Information Engineering, Southwest University of Science and Technology

Xulin Hu - School of Information Engineering, Southwest University of Science and Technology

Jianwen Huo - School of Information Engineering, Southwest University of Science and Technology

Application Analysis of AIoT in the Field of Nuclear Security

Technical Paper Publication: ICONE32-1060

Sun Lizhi - HuaNeng ShanDong ShiDao Bay Nuclear Power Co.Ltd

Design and Optimization of an Isotope Identification System Based on Inverse Compton Scattering and Nuclear Resonance Fluorescence for Non-Destructive Testing

Technical Paper Publication: ICONE32-1381

Hongze Zhang - Tsinghua University

Zhijun Chi - Tsinghua University

Yingchao Du - Tsinghua University

Wenhui Huang - Tsinghua University

Chuanxiang Tang - Tsinghua University

Track 5-8 Cybersecurity and Instrumentation &&& Control

10:30 am –12:00 pm , C-108B

Session Chair:

Session Co-Chair:

Research on risk assessment method of industrial control system of nuclear facilities based on analytic Hierarchy process

Technical Paper Publication: ICONE32-0146

xiaocong zhang - The Fourth Research and Design Engineering Corporation of CNNC, Nuclear Security Technology Innovation Center of Hebei Province

min xie - China National Nuclear Corporation

Liang Ma - The Fourth Research and Design Engineering Corporation of CNNC, Nuclear Security Technology Innovation Center of Hebei Province

chenliang Yuan - The Fourth Research and Design Engineering Corporation of CNNC, Nuclear Security Technology Innovation Center of Hebei Province

meixuan Wang - The Fourth Research and Design Engineering Corporation of CNNC, Nuclear Security Technology Innovation Center of Hebei Province

GNN-BASED TRANSIENT FAULT DETECTION FOR HTR-PM ABNORMAL FEEDWATER FLOW

Technical Paper Publication: ICONE32-0702

Wenji Zhang - Institute of Nuclear and New Energy Technology of Tsinghua University

Tianhao Zhang - Institute of Nuclear and New Energy Technology of Tsinghua University

Duo Li - Institute of Nuclear and New Energy Technology of Tsinghua University

Chao Guo - Institute of Nuclear and New Energy Technology of Tsinghua University

Jitao Li - Institute of Nuclear and New Energy Technology of Tsinghua University

Xiaojin Huang - Institute of Nuclear and New Energy Technology of Tsinghua University

Cybersecurity Design For Non-classified DCS In High Temperature Reactor Nuclear Power Plants

Technical Paper Publication: ICONE32-0768

Yuan XIANG - China Nuclear Control System Engineering Co.,Ltd

ATTENTION-BASED DISCRIMINATIVE FEATURE LEARNING FOR FAULT DIAGNOSIS IN NUCLEAR POWER PLANTS

Technical Paper Publication: ICONE32-1076

Jize Guo - Tsinghua university

Chao Guo - Tsinghua university

Tianhao Zhang - Tsinghua university

Xiaojin Huang - Tsinghua university

Research on Cybersecurity Regulatory Policies and Standards for Nuclear Power Instrumentation and Control Systems

Technical Paper Publication: ICONE32-1214

YUN GUO - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd

YUEYONG HOU - Huaneng Shandong Shidao Bay Nuclear Power Co., Ltd

XIANGCHEN MI - Tianjin huaneng yangliuqing power CO.,Ltd

JING QIAN - Zhejiang huaneng power supply CO.,Ltd

Research on DCS Related Optimizations and its Impact on Nuclear Safety

Technical Paper Publication: ICONE32-2031

Haibo Zhang - China Nuclear Power Engineering Co., LTD.

Chunyong WU - China Nuclear Power Engineering Co., LTD.

Teng Teng - China Nuclear Power Engineering Co., LTD.

Track 5-9 Human Factors and Operational Experience

10:30 am –12:00 pm , C-109A

Session Chair:

Session Co-Chair:

DEVELOPMENT OF THE EVALUATION PROCESS AND AUTOMATED SOFTWARE FOR NUCLEAR SUPPORTS BASED ON NUCLEAR STANDARDS

Technical Paper Publication: ICONE32-0333

Jiayi Tian - Zhejiang Yuansuan Technology Co., Ltd.

Yujiang Xie - Zhejiang Yuansuan Technology Co., Ltd.

Yu Tan - Zhejiang Yuansuan Technology Co., Ltd.

Yang Dai - Zhejiang Yuansuan Technology Co., Ltd.

Jiesheng Min - Zhejiang Yuansuan Technology Co., Ltd.

Yonggeng Zhang - Zhejiang Yuansuan Technology Co., Ltd.

The Development of Nuclear Industry in China Aiming at Carbon Peaking and Neutrality: Value, Risks and the Response of Law

Technical Paper Publication: ICONE32-0686

Jiu Liu - Harbin Engineering University

Yuming Shang - Harbin Engineering University

Yuetong Gao - Harbin Engineering University

Yi Liu - Harbin Engineering University

Zhengyi Zhang - Harbin Engineering University

Siyan Chen - Harbin Engineering University

Le Shen - Anhui University

PROTECTION STRATEGY FOR HICS AGAINST INTERNAL HAZARDS BASED ON ALARP IN UK HPR1000 NUCLEAR POWER PLANT

Technical Paper Publication: ICONE32-0837

Xiaoming Tang - China Nuclear Power Plant Engineering Co.,

He Zhu - State Key Laboratory of Nuclear Power Safety Technology and Equipment, China Nuclear Power Plant Engineering Co.

Research on the risk management of equipment transportation in Nuclear Power Plant Project

Technical Paper Publication: ICONE32-1314

kaili WANG - China Nuclear Power Engineering Co., Ltd

Ninghui HAN - China Nuclear Power Engineering Co., Ltd

RESEARCH ON EQUIPMENT RELIABILITY IMPROVEMENT BASED ON EXTERNAL EXPERIENCE FEEDBACK MANAGEMENT

Technical Paper Publication: ICONE32-1321

Shuang Zhang - Suzhou Nuclear Power Research Institute Co., Ltd.

Wenwen Zhao - Suzhou Nuclear Power Research Institute Co., Ltd.

Shuaifei Guo - Suzhou Nuclear Power Research Institute Co., Ltd.

Research and Practice on Closed-loop Management of Experience Feedback from Operation to Engineering in NPPS

Technical Paper Publication: ICONE32-1689

Wenwen zhao - Suzhou Nuclear Power Research Institute Co., Ltd.

Shuang zhang - Suzhou Nuclear Power Research Institute Co., Ltd.

Kuan zhang - Suzhou Nuclear Power Research Institute Co., Ltd.

Track 12-3 Equipment Design and Seismic Resistance Analysis

10:30 am –12:00 pm , C-109B

Session Chair:

Session Co-Chair:

Study on the Difference between the Site of HPR1000 NX and the Standard Seismic Design

Technical Paper Publication: ICONE32-0068

Qing Da Liang - CNPE Hebei Branch

Bing Han - CNPE Hebei Branch

Xi Yang - CNPE Hebei Branch

Jian Hui Liu - CNPE Hebei Branch

Study on the differences in coupling of nuclear safety-class plant

Technical Paper Publication: ICONE32-0069

Liang Qingda - CNPE Hebei Branch

Wang Yan - CNPE Hebei Branch

Zhang Xiongqian - CNPE Hebei Branch

Liu Jianhui - CNPE Hebei Branch

MULTI-OBJECTIVE OPTIMAL DESIGN OF STEAM GENERATOR IN NUCLEAR POWER PLANT

Technical Paper Publication: ICONE32-0086

Zheng Liu - Wuhan Second Ship Design and Research Institute

Yong Li - Wuhan Second Ship Design and Research Institute

Zesheng Niu - Wuhan Second Ship Design and Research

Institute

Shaoyou Liu - Wuhan Second Ship Design and Research Institute

Jianjun Wang - Harbin Engineering University

Sichao Tan - Harbin Engineering University

Strength analysis of large-span dome steel formwork based on different construction schemes

Technical Paper Publication: ICONE32-0110

Guozhen xu - China Nuclear Power Engineering Co., Ltd.

Zhimao Feng - China Nuclear Power Engineering Co., Ltd.

Lijian Cai - China Nuclear Power Engineering Co., Ltd.

Ying Ma - China Nuclear Power Engineering Co., Ltd.

Xiaoyi Yang - China Nuclear Power Engineering Co., Ltd.

Design and Dynamic Response Analysis of Base Isolation for Nuclear Island Building

Technical Paper Publication: ICONE32-0271

Xiaoyi Yang - China Nuclear Power Engineering Co., Ltd.

Jian Chen - China Nuclear Power Engineering Co., Ltd.

Dan Zhao - China Nuclear Power Engineering Co., Ltd.

Chencheng Shi - China Nuclear Power Engineering Co., Ltd.

Hehuan Ren - China Nuclear Power Engineering Co., Ltd.

Study on the application of vibration resistance mass in pipe vibration optimization

Technical Paper Publication: ICONE32-0521

Shuai Liu - The nuclear power institute of china

Wanyou Li - Harbin Engineering University

Rui Zhang - The nuclear power institute of china

Furui Xiong - The nuclear power institute of china

Xiaoming Bai - The nuclear power institute of china

Xiaozhou Jiang - The nuclear power institute of china

Xuan Huang - The nuclear power institute of china

Research on parameter configuration and equipment layout optimization of nuclear island cold chain system

Technical Paper Publication: ICONE32-2074

Zhirui Liu - Harbin Engineering University

Di Wu - Harbin Engineering University

Jincheng Su - China Nuclear Power Engineering Co.,Ltd.

Xiaopan Jia - China Nuclear Power Engineering Co.,Ltd.

Jie Cheng - Harbin Engineering University

Jianjun Wang - Harbin Engineering University

Track11-3 Research on Fission Products or Analysis of HPR 1000

10:30 am –12:00 pm , C-112

Session Chair:

Session Co-Chair:

Research on the Threshold of Habitable Radiation Dose Rate for Emergency Facilities in Nuclear Power Plants

Technical Paper Publication: ICONE32-0025

Qian Chen - Suzhou Nuclear Power Research Institute Co.,Ltd.

Yichao Huang - Suzhou Nuclear Power Research Institute Co.,Ltd.

Yuhao Yin - Suzhou Nuclear Power Research Institute Co.,Ltd.

Li Cao - Yangjiang Nuclear Power Co.,Ltd.

Daming Feng - Yangjiang Nuclear Power Co.,Ltd.

DEVELOPMENT OF POWER LOSS OPERATING PROCEDURE IN HPR1000 NUCLEAR POWRE PLANTS

Technical Paper Publication: ICONE32-0290

zhang jianwen - State Key Laboratory of Nuclear Power Safety Monitoring Technology and Equipment, China

fu rushi - State Key Laboratory of Nuclear Power Safety Monitoring Technology and Equipment, China

wang taike - China Nuclear Power Engineering Company, LTD

kong kaihe - China Nuclear Power Engineering Company, LTD

jiao zhenying - China Nuclear Power Engineering Company, LTD

wang zhenying - China Nuclear Power Engineering Company, LTD

tian baocong - China Nuclear Power Engineering Company, LTD

Numerical Simulation of Fission Products Release Following Fuel Cladding Failure in the Lead-based Fast Reactor

Technical Paper Publication: ICONE32-0715

Yining Wang - Xi'an Jiaotong University

Rongxiao Hu - Xi'an Jiaotong University

Xinkun Xiao - Xi'an Jiaotong University

Ronghua Chen - Xi'an Jiaotong University

Wenxi Tian - Xi'an Jiaotong University

Research on code development and application in simulating Molten Corium-Concrete Interaction (MCCI) during severe accident

Technical Paper Publication: ICONE32-0957

Zijie Wu - China Nuclear Power Technology Research Institute

Xinhai Zhao - China Nuclear Power Technology Research Institute

Yabing Li - China Nuclear Power Technology Research Institute

Chao Guo - China Nuclear Power Technology Research Institute

shaoxiong Xia - China Nuclear Power Technology Research Institute

Yangli Chen - China Nuclear Power Technology Research Institute

Yong Ouyang - China Nuclear Power Technology Research Institute

EFFECT OF SUBMERGENCE DEPTH ON REMOVAL EFFICIENCY OF AEROSOL POOL SCRUBBING IN DIFFERENT FLOW PATTERNS

Technical Paper Publication: ICONE32-1249

Qiang Lv - Shanghai Jiao Tong University

Yichen Chen - China Nuclear Power Technology Research Institute Co., Ltd.

Lily Tong - Shanghai Jiao Tong University

Xuewu Cao - Shanghai Jiao Tong University

Severe Accident Equipment Availability Analysis for HRP1000 Nuclear Power Plant

Technical Paper Publication: ICONE32-1681

Cong Wang - China Nuclear Power Engineering Co., Ltd

Jing Liu - China Nuclear Power Engineering Co., Ltd

Yu Liu - China Nuclear Power Engineering Co., Ltd

Gaopeng Wang - China Nuclear Power Engineering Co., Ltd

Xinli Yu - China Nuclear Power Engineering Co., Ltd

Shipeng Niu - China Nuclear Power Engineering Co., Ltd

Track 12-4 Fault Diagnosis and Alarm System Design

10:30 am –12:00 pm , C-113

Session Chair:

Session Co-Chair:

RESEARCH ON THE DESIGN OF THE INTELLIGENT FIRE PROTECTION SYSTEM FOR NUCLEAR POWER PLANT

Technical Paper Publication: ICONE32-0008

Chen Zhang - China Nuclear Power Engineering Co., Ltd., China

Linna Zhang - China Nuclear Power Engineering Co., Ltd., China

Research on Data Acquisition System for Monitoring and Early Warning of Disaster-Causing Blockages in Thermal Traps of Nuclear Power Plants

Technical Paper Publication: ICONE32-0549

Hongyi Chen - China Nuclear Power Engineering Co., Ltd.

Wenjie Zhang - China Nuclear Power Engineering Co., Ltd.

Yazhuo Zhao - China Nuclear Power Engineering Co., Ltd.

Yushan Li - China Nuclear Power Engineering Co., Ltd.

Research on a robust temporal fault diagnosis method for nuclear power plants based on post interpretability enhancement

Technical Paper Publication: ICONE32-0850

Shiqi Zhou - Shanghai Jiao Tong University

Meng Lin - Shanghai Jiao Tong University

Shilong Huang - Shanghai Nuclear Reactor Engineering
Simulation Technology Co., Ltd

Kai Xiao - Nuclear Power Institute of China

Research on Compound Fault Diagnosis Model of Rotating Equipment in Nuclear Power Plant based on ResNet

Technical Paper Publication: ICONE32-0869

Wenhao Ran - Key Laboratory of Nuclear Safety and
Advanced Nuclear Energy Technology, Ministry of Industry and
Information Technology, Harbin Engineering University

Hong Xia - Key Laboratory of Nuclear Safety and Advanced
Nuclear Energy Technology, Ministry of Industry and
Information Technology, Harbin Engineering University

Chunjie Zhao - Key Laboratory of Nuclear Safety and
Advanced Nuclear Energy Technology, Ministry of Industry and
Information Technology, Harbin Engineering University

Yihu Zhu - Key Laboratory of Nuclear Safety and Advanced
Nuclear Energy Technology, Ministry of Industry and
Information Technology, Harbin Engineering University

Peiqi Jiang - Key Laboratory of Nuclear Safety and Advanced
Nuclear Energy Technology, Ministry of Industry and
Information Technology, Harbin Engineering University

Research on Simplifying the Artificial Intelligence Algorithms Development for Status Monitoring and Fault Diagnosis of Typical Nuclear Equipment

Technical Paper Publication: ICONE32-1063

Haidong Wang - Shanghai Nuclear Engineering Research &
Design Institute Co., Ltd.

Junwei Hou - Shanghai Nuclear Engineering Research & Design
Institute Co., Ltd.

Zhaosheng Zhang - Shanghai Nuclear Engineering Research &
Design Institute Co., Ltd.

Xiaochen Shi - Shanghai Nuclear Engineering Research &
Design Institute Co., Ltd.

Research on Performance Test of Intelligent Alarm System for Nuclear Power Plant Based on Multi-Level Flow Model

Technical Paper Publication: ICONE32-1155

Chenxi ZHANG - Shenzhen University

Ming YANG - Shenzhen University

Sijuan CHEN - Shenzhen University

Jianhua CHEN - Shenzhen University

Faqlang QIAN - Shenzhen University

Track1-9 Operation and Maintenance Mode Optimization
3:30 pm –5:00 pm , C-101AB

Session Chair:

Session Co-Chair:

MIGRATION AND DISTRIBUTION OF FOREIGN OBJECTS IN THE STEAM GENERATORS SECONDARY SIDE AT PRESSURIZED WATER REACTOR NUCLEAR POWER PLANTS

Technical Paper Publication: ICONE32-0243

Liu Yong - Suzhou nuclear power institute Co., Ltd
Chen Jie - China nuclear power operation Co.,Ltd
Zhao Qingsen - Suzhou nuclear power institute Co., Ltd
Tian Fujun - China nuclear power operation Co.,Ltd
Peng Weidi - Suzhou nuclear power institute Co., Ltd
Xia Peng - China nuclear power operation Co.,Ltd
Chen Yujia - Suzhou nuclear power institute Co., Ltd

The Research Of Operation Condition Analysis And Comprehensive Experimen Debugging Technology In VVER Nuclear Power Unit After Cogeneration

Technical Paper Publication: ICONE32-0319

Bing Huang - Jiangsu Nuclear Power Corporation
Hongye Yang - Jiangsu Nuclear Power Corporation
Xianggui Zhang - Jiangsu Nuclear Power Corporation
Yujun Bao - Jiangsu Nuclear Power Corporation
Chenliang Zhao - Jiangsu Nuclear Power Corporation

RESEARCH ON LIMITING CONDITION FOR OPERATION AND MONITORING METHODS OF CONTAINMENT AIR AVERAGE TEMPERATURE

Technical Paper Publication: ICONE32-0360

Zongqiang Yang - China Nuclear Power Engineering Co., Ltd., China
Hong Huang - China Nuclear Power Engineering Co., Ltd., China
Di Yang - China Nuclear Power Engineering Co., Ltd., China
Zhuangzhuang Yu - China Nuclear Power Engineering Co., Ltd., China
Ke Fan - CGN Huizhou Nuclear Power Co., Ltd.

Study on Nuclear Power Plant Optimal Recovery Guideline Validation Method and Key Technology

Technical Paper Publication: ICONE32-0482

QIAN SUN - China Nuclear Power Engineering Co., Ltd.
YA XU - China Nuclear Power Engineering Co., Ltd.

RESEARCH ON COMPUTER-BASED PROCEDURES WITH PROCEDURE-BASED AUTOMATION IN NUCLEAR POWER PLANT

Technical Paper Publication: ICONE32-0528

jie chen - China Nuclear Power Engineering Co.,Ltd
shaohua wang - China Nuclear Power Engineering Co.,Ltd
sui fan - China Nuclear Power Engineering Co.,Ltd

Research on the Optimization of Equipment Cooling Water / Service Water System Maintenance Windows in Nuclear Power Plants

Technical Paper Publication: ICONE32-0587

Qiang Wang - Suzhou Nuclear Power Research Institute Co.,Ltd.
Shijun Chen - Suzhou Nuclear Power Research Institute Co.,Ltd.
Peifeng Chen - Suzhou Nuclear Power Research Institute Co.,Ltd.
Chuang Yin - Suzhou Nuclear Power Research Institute Co.,Ltd.
Zichun Wang - Suzhou Nuclear Power Research Institute Co.,Ltd.
Lihui Chen - Suzhou Nuclear Power Research Institute Co.,Ltd.
Jian Zhang - Suzhou Nuclear Power Research Institute Co.,Ltd.
changsheng cheng - Suzhou Nuclear Power Research Institute Co.,Ltd.

Feasibility Study on Water Filling of Primary Circuit and Reactor Cavity by Low-Head Safety Injection Pump of Nuclear Power Unit

Technical Paper Publication: ICONE32-1821

Shu-qiang Wang - Daya Bay Nuclear Power Operations and Management Co., Ltd.
Zhao Zhang - Suzhou Nuclear Power Research Institute
Jun Li - Daya Bay Nuclear Power Operations and Management Co., Ltd.
Feng Xue - Suzhou Nuclear Power Research Institute
Ting Luo - Suzhou Nuclear Power Research Institute

Track2-9 Fast Reactor Physics (IV)

3:30 pm –5:00 pm , C-102

Session Chair:

Session Co-Chair:

High-Fidelity Source Term Calculation Approach for Liquid-Fueled Molten Salt Reactors via Multi-Physics Coupling

Technical Paper Publication: ICONE32-1232

Xiaojie Xuan - Shanghai Institute of Applied Physics, Chinese Academy of Sciences

Shaopeng Xia - Shanghai Institute of Applied Physics, Chinese Academy of Sciences

Maosong Cheng - Shanghai Institute of Applied Physics, Chinese Academy of Sciences

Measurement of key nuclides in thorium-based fuels based on white light neutron sources

Technical Paper Publication: ICONE32-1291

Yongjie Luo - Shanghai Institute of Applied Physics (SINAP), CAS

Jianhui Wu - Shanghai Institute of Applied Physics (SINAP), CAS

Xiangzhou Cai - Shanghai Institute of Applied Physics (SINAP), CAS

Jifeng Hu - Shanghai Institute of Applied Physics (SINAP), CAS

Jingen Chen - Shanghai Institute of Applied Physics (SINAP), CAS

Experiment Research and Data Benchmarking of YBS Critical Experiment Facility Lead reactor core

Technical Paper Publication: ICONE32-1376

Xingjian LI - China Institute Of Atomic Energy

Qingfu ZHU - China Institute Of Atomic Energy

Qi ZHOU - China Institute Of Atomic Energy

ZHAODONG XIA - China Institute Of Atomic Energy

tong NING - China Institute Of Atomic Energy

zhenyang ZHANG - China Institute Of Atomic Energy

zihan DU - China Institute Of Atomic Energy

Optimization of Calculation Methods for the Production Yield of ⁹⁹Mo in Research Reactor Irradiation

Technical Paper Publication: ICONE32-1544

yan yang - Institute of Nuclear Physics and Chemistry, China Academy of Engineering Physics

xiaoyu guo - Institute of Nuclear Physics and Chemistry, China Academy of Engineering Physics

simao guo - Institute of Nuclear Physics and Chemistry, China Academy of Engineering Physics

yuchuan guo - Institute of Nuclear Physics and Chemistry, China Academy of Engineering Physics

guanbo wang - Institute of Nuclear Physics and Chemistry, China Academy of Engineering Physics

jie fan - Institute of Nuclear Physics and Chemistry, China Academy of Engineering Physics

zhenpeng wang - Institute of Nuclear Physics and Chemistry, China Academy of Engineering Physics

xuanting xie - Institute of Nuclear Physics and Chemistry, China Academy of Engineering Physics

bin tang - Institute of Nuclear Physics and Chemistry, China Academy of Engineering Physics

CONCEPTUAL DESIGN OF A LOW EXCESS REACTIVITY HEAT PIPE COOLED REACTOR CORE

Technical Paper Publication: ICONE32-1692

Kunfeng Ma - Shanghai Jiao Tong University

Shengtao Han - Shanghai Jiao Tong University

Ruixiang Wang - Shanghai Jiao Tong University

Qufei Song - Shanghai Jiao Tong University

Hui Guo - Shanghai Jiao Tong University

Hanyang Gu - Shanghai Jiao Tong University

Optimization Design of High Throughput Reactor Detector

Technical Paper Publication: ICONE32-1715

Fan WANG - China Institute of Atomic Energy

Shixi WANG - China Institute of Atomic Energy

Qiang YANG - China Institute of Atomic Energy

Yong YANG - China Institute of Atomic Energy

Track 7-9 Nuclear reactor safety analysis (I)

3:30 pm –5:00 pm , C-103

Session Chair:

Session Co-Chair:

RESEARCH ON INNUENCE FACTORS OF HEAT TRANSFER PERFORMANCE OF CLOSED-LOOP PASSIVE CONTAINMENT COOLING SYSTEM BASED ON

Technical Paper Publication: ICONE32-1729

Weiyu Chu - Harbin Engineering University

Guoqiang Zhang - China Nuclear Power Engineering Co.,Ltd

Qiwei Tian - China Nuclear Power Engineering Co.,Ltd

Zhaoming Meng - Harbin Engineering University

Hui Liang - Harbin Engineering University

Zhongning Sun - Harbin Engineering University

Haifu Shi - China Nuclear Power Engineering Co.,Ltd

Accident Sequence Analysis Study of Deep Pool Reactors under Loss of Flow Accident

Technical Paper Publication: ICONE32-1758

Feng Shou - Harbin Engineering University

Zhang Yankun - Harbin Engineering University

Zhu Di - Harbin Engineering University

Sun Rulei - Harbin Engineering University

Gao Puzhen - Harbin Engineering University

Tian Ruifeng - Harbin Engineering University

Tan Sichao - Harbin Engineering University

Preliminary study on spray cooling under the engineering conditions of IVR strategy

Technical Paper Publication: ICONE32-1780

Qiang Guo - CNPE

Yong Guo - CNPE

Zhuo Liu - CNPE

Wei Li - CNPE

Yidan Yuan - CNPE

Yu Jin - CNPE

Xiao Zhao - CAS

Research on Diverse Protection of Typical Reactivity Faults in DBC-2 of HPR1000

Technical Paper Publication: ICONE32-1927

Yingjie Feng - China Nuclear Power Technology Research Institute

Kaiwen Liang - China Nuclear Power Technology Research Institute

Yuting Wu - China Nuclear Power Technology Research Institute

Kun Xiong - China Nuclear Power Technology Research Institute

RESEARCH ON REACTOR SYSTEM LOCA MODELING ON DYNAMIC ANALYSIS

Technical Paper Publication: ICONE32-2003

Jianhao Zhang - The nuclear power institute of china

Shuai Liu - The nuclear power institute of china

Furui Xiong - The nuclear power institute of china

Xuan Huang - The nuclear power institute of china

Zhipeng Feng - The nuclear power institute of china

Xiaoming Bai - The nuclear power institute of china

Crud Related Risk Assessment Methodology Development under PWR Conditions

Technical Paper Publication: ICONE32-2092

Guoqiang WANG-PNNL

Track 8-9 Magnetohydrodynamics

3:30 pm –5:00 pm , C-104A

Session Chair:

Session Co-Chair:

The Study of Amplitude Effect on Added Mass and Fluid Damping Based on Eccentric Cylindrical Annulus

Technical Paper Publication: ICONE32-0157

Gang Rong - CNPRI

Shibin Zhu - CNPRI

ANALYSIS OF TEMPERATURE FIELD CHARACTERISTICS AND INFLUENCING FACTORS INSIDE ELECTROMAGNETIC PUMP

Technical Paper Publication: ICONE32-0204

Zhanming Zhou - Harbin Engineering University

Xiaobo Zeng - Harbin Engineering University

Yinyuan Tang - Harbin Engineering University

Jie Cheng - Harbin Engineering University

Jianjun Wang - Harbin Engineering University

Numerical simulation of heat transfer phenomenon of helical cruciform fuel under subcooled boiling and CHF

Technical Paper Publication: ICONE32-0292

Yuanjie Zhang - Southeast University

Bin Han - Southeast University

Xiaoliang Zhu - Southeast University

Numerical study of magnetohydrodynamics based on the recursive regularized lattice Boltzmann method

Technical Paper Publication: ICONE32-0896

Ziyi Xiong - Sino-French Institute of Nuclear Engineering and Technology, Sun Yat-sen University

Lili Zhang - Sino-French Institute of Nuclear Engineering and Technology, Sun Yat-sen University

Shaolong Guo - Sino-French Institute of Nuclear Engineering and Technology, Sun Yat-sen University

Analysis of fluid pressure fluctuation of main helium fan and study on high disturbance immunity control of magnetic suspension bearing

Technical Paper Publication: ICONE32-1371

Honglei Sha - School of Aerospace Engineering, Tsinghua University

Zhanbo Du - Tianjin EMAGING Technology Limited

Yuxin Ren - School of Aerospace Engineering, Tsinghua University

Yu Hu - Tianjin EMAGING Technology Limited

SIMULATION OF THE ELECTROMAGNETIC COIL TEMPERATURE DISTRIBUTION IN A CYLINDRICAL LINEAR INDUCTION PUMP

Technical Paper Publication: ICONE32-1516

Lixin Yang - Beijing Jiaotong University

Heyao Li - Beijing Jiaotong University

Zhenhua Yang - Beijing Jiaotong University

**Track 9-9 Radiation Protection and Safety Management-II
3:30 pm –5:00 pm , C-104B**

Session Chair:

Session Co-Chair:

Research on radiation field and dose assessment of pressure vessel opening operation for HPR1000 nuclear plant

Technical Paper Publication: ICONE32-0004

Yingnan Tian - China Nuclear Power Engineering Company

Yedi Chang - China Nuclear Power Engineering Company

Jingyi Shen - China Nuclear Power Engineering Company

Aijun Mi - China Nuclear Power Engineering Company

Yawei Mao - China Nuclear Power Engineering Company

Xiaoxia Wang - China Nuclear Power Engineering Company

Bingheng Wang - China Nuclear Power Engineering Company

Siyang Xie - China Nuclear Power Engineering Company

Ya Xu - China Nuclear Power Engineering Company

Yuqi Wang - China Nuclear Power Engineering Company

Research and Application on Optimization Design Method for Radiation Protection of HPR1000 Nuclear Power Plant

Technical Paper Publication: ICONE32-0020

Yonghai Zhou - China Nuclear Power Engineering Co., Ltd

Weifeng Lyu - China Nuclear Power Engineering Co., Ltd

Jie Liu - China Nuclear Power Engineering Co., Ltd

Runchun Guo - China Nuclear Power Engineering Co., Ltd

Guanghao Zeng - China Nuclear Power Engineering Co., Ltd

Radiation Protection design for the replace of evaporation system of radioactive waste liquid

Technical Paper Publication: ICONE32-0071

Yongkang Zhang- Nuclear Power Institute of China

Maomao Liu- Nuclear Power Institute of China

Analysis of the Impact on Iron Dosimeter Missing in a Reactor Vessel Surveillance Capsule

Technical Paper Publication: ICONE32-0183

Zhongming Fu - Shandong Nuclear Power Plant Company

Hao Wang - Shandong Nuclear Power Plant Company

Jun Qi - Shandong Nuclear Power Plant Company

Tao Cui - Shandong Nuclear Power Plant Company

Guojian Li - State Nuclear Power Plant Service Company

Liangzhi Cao - School of Nuclear Science and Technology, Xi'an Jiaotong University

Yaping Zhang - School of Nuclear Science and Technology, Xi'an Jiaotong University

A Preliminary Deep Learning Framework for Predicting Multi-Group Photon Fluence Buildup Factors in Radiation Shielding

Technical Paper Publication: ICONE32-0602

Junyi Chen - Tsinghua University

Chenghao Cao - Tsinghua University

Ruihan Li - Tsinghua University

Ben Qi - Tsinghua University

Jingang Liang - Tsinghua University

Third Generation PWR Radiation Environmental Condition Optimization

Technical Paper Publication: ICONE32-1699

Jingyi Shen - China Nuclear Power Engineering Co., LTD

Yingnan Tian - China Nuclear Power Engineering Co., LTD

Wei You - China Nuclear Power Engineering Co., LTD

Xiaoxia Wang - China Nuclear Power Engineering Co., LTD

Guiling Gao - China Nuclear Power Engineering Co., LTD

Track1-18 Optimization of Operation and Maintenance Methods (MIX)

3:30 pm –5:00 pm , C-105A

Session Chair:

Session Co-Chair:

Analysis of The Influence of Different Foundation Conditions on the Floor Response Spectrum of Nuclear Island Plant Buildings

Technical Paper Publication: ICONE32-0087

ZHONG HU - Hualong Nuclear Power Technology Co.,Ltd.

JUNFENG WANG - Hualong Nuclear Power Technology Co.,Ltd.

YATING ZHANG - Hualong Nuclear Power Technology Co.,Ltd.

Research and Application of Dynamic Vibration Absorber in Noise Control of AP1000 Nuclear Power Unit Main Control Room

Technical Paper Publication: ICONE32-0238

Mingli Liu - Shandong Nuclear Power Co.Ltd

Huanhuan Bai - Nuclear and Radiation Safety Center of MEE

Hao Wang - Shandong Nuclear Power Co.Ltd

Huiren Zhang - Shandong Nuclear Power Co.Ltd

Chuandong Li - Shandong Nuclear Power Co.Ltd

Modal and Seismic Analyses for Nuclear-Grade HVAC Damper in Nuclear Power Plant

Technical Paper Publication: ICONE32-0369

Zhe Lyu - China Nuclear Power Engineering Co.,Ltd. Zhengzhou Branch

Xipeng Ma - China Nuclear Power Engineering Co.,Ltd. Zhengzhou Branch

Lihui Jiao - China Nuclear Power Engineering Co.,Ltd. Zhengzhou Branch

APPLICATION OF OPERABILITY AND MAINTAINABILITY IN NUCLEAR POWER PLANT LAYOUT DESIGN

Technical Paper Publication: ICONE32-0476

Yuanxia ZHOU - CNPDC

Wenhua NIU - CNPDC

Weiting HE - CNPDC

Yikun ZHOU - CNPDC

.....
**Numerical Simulation Study on Environmental
Conditions in the Habitable Area of the Main Control
Room of a Nuclear Power Station**

Technical Paper Publication: ICONE32-1034

SHANSHAN QIU - China Nuclear Power Engineering Co., Ltd.

LILI ZHANG - China Nuclear Power Engineering Co., Ltd.

.....
**ANALYSIS OF THE CAUSE OF R ROD
PERTURBATION AND SOLUTION RESEARCH
BASED ON CPR1000 NUCLEAR POWER PLANT**

Technical Paper Publication: ICONE32-1649

Desheng Jin - CNPRI

Wei Zhang - CNPRI

Yating Tian - CNPRI

Tianming Ruan - CNPRI

Xiong Zheng - CNPRI

.....
**CANDU FUEL CHANNEL LIFE EXTENSION –
CANADIAN PERSPECTIVE**

Technical Paper Publication: ICONE32-2235

Alex Vlahov - Kinectrics

Andy Wallace - Kinectrics

Nick Brekel - Kinectrics

Tanya Hunt - Kinectrics

Steven Xu - Kinectrics

.....
**Track1-19 Outage Optimization and Power Supply
Reliability**

3:30 pm –5:00 pm , C-105B

Session Chair:

Session Co-Chair:

**ANALYSIS OF SINGLE-TRAIN FAST STARTING
TECHNOLOGY FOR EMERGENCY DIESEL
GENERATORS IN NUCLEAR POWER PLANTS**

Technical Paper Publication: ICONE32-0030

Hongzhou Li - Commissioning Center of China Nuclear Power
Engineering Co., Ltd. China

.....
**RESEARCH ON TRANSIENT CHARACTERISTICS
DURING THE RELOADING PROCESS OF
EMERGENCY DIESEL GENERATOR SETS IN
NUCLEAR POWER PLANTS**

Technical Paper Publication: ICONE32-0774

Jiaru XIE - China Nuclear Power Engineering Co.,Ltd.

Zhi WANG - School of Software Engineering, Xi'an Jiaotong
University

Yi LUO - China Nuclear Power Engineering Co.,Ltd.

.....
**Study on project risk assessment and management of
island nuclear plant**

Technical Paper Publication: ICONE32-0814

Jianbin Niu - China Nuclear Power Engineering Corporation

Hong Gao - China Nuclear Power Engineering Corporation

Dong Zhao - China Nuclear Power Engineering Corporation

.....
**RESEARCH ON APPLICATION OF WIRELESS
COMMUNICATION TECHNOLOGY IN
MAINTENANCE OPERATION OF NUCLEAR
POWER PLANT UNDER RADIATION
ENVIRONMENT**

Technical Paper Publication: ICONE32-0817

Long Tang - China Nuclear Operation and Maintenance
Technology Co., LTD

Xiangen Lou - China Nuclear Operation and Maintenance
Technology Co., LTD

Binghan Gao - CNNC Nuclear Power Operation Management
Co., LTD

Junfu Zhan - China Nuclear Operation and Maintenance
Technology Co., LTD

The Feasibility Study of CNP1000 Nuclear Power Plant Refueling Outage Path Optimization Based on Mid-loop Condition

Technical Paper Publication: ICONE32-0930

sheng zhu - Nuclear Power Operations Research Institute
Qianwen Qin - Nuclear Power Operations Research Institute
Jianjun Wang - Nuclear Power Operations Research Institute
Zhongwu Chen - Nuclear Power Operations Research Institute
Fenglin Tian - Nuclear Power Operations Research Institute

Research on Dynamic Programming of Equipment Load Power Supply Sequence for PWR in Response to DEC

Technical Paper Publication: ICONE32-0965

Yi Ke - China Nuclear Power Engineering Co., Ltd.

Research on the Application Strategies of Periodic Safety Review for HPR1000

Technical Paper Publication: ICONE32-1458

Xuelong LI - China Nuclear Power Engineering Co., Ltd.
Yuanli LIU - China Nuclear Power Engineering Co., Ltd.
Haiying LUO - China Nuclear Power Engineering Co., Ltd.
Jinkai WANG - China Nuclear Power Engineering Co., Ltd.
Qing SHI - China Nuclear Power Engineering Co., Ltd.

Trank 9-10 Radiation Protection and Safety Management-III

3:30 pm –5:00 pm , C-106A

Session Chair:

Session Co-Chair:

Optimization of LASSO Reconstruction Scheme to Identify Radioactive Sources based on Monitoring Air Dose Rates

Technical Paper Publication: ICONE32-0124

Wei Shi - City University of Hong Kong
Masahiko Machida - Japan Atomic Energy Agency
Susumu Yamada - Japan Atomic Energy Agency
Koji Okamoto - The University of Tokyo

Study on Treatment Technology of Radioactive Laundry Wastewater

Technical Paper Publication: ICONE32-0320

Weixi Guo - CNNC No.7 Research and Design Institute Co. Ltd
Huan Wang - CNNC No.7 Research and Design Institute Co. Ltd
Xutao Pei - CNNC No.7 Research and Design Institute Co. Ltd
Xiaomin Ma - CNNC No.7 Research and Design Institute Co. Ltd

KEY RADTIONUCLIDES IMPACT ANALYSIS ON IRRADIATION DOSE ASSESSMENT IN REACTOR BUILDINGS AFTER SEVERE ACCIDENTS

Technical Paper Publication: ICONE32-0808

Zhou Jing - China Nuclear Power Design Co., Ltd.
Pan Xiangni - Nuclear Chemistry and Nuclear Fuel Engineering, School of Nuclear Science and Technology, University of South China

Niu Wenhua - China Nuclear Power Design Co., Ltd.
Lv Weifeng - China Nuclear Power Design Co., Ltd.
Zhou Yonghai - China Nuclear Power Design Co., Ltd.

IMPACT ANALYSIS ON THE COLLECTIVE DOSE CAUSED BY ZIRCONIUM OXIDE PEELING OFF FROM FUEL CLADDING

Technical Paper Publication: ICONE32-1271

Shuhua YIN - China Nuclear Power Engineering Co., Ltd
Jie LIU - China Nuclear Power Engineering Co., Ltd
Jing ZHOU - China Nuclear Power Engineering Co., Ltd

FEM methodologies for the simplified thermal analysis of waste package for ILW radioactive waste

Technical Paper Publication: ICONE32-1425

Francesco Rizzo - Sapienza DIAEE
Domenico Rosa - Sapienza DICMA
Franco Medici - Sapienza DICMA
Luca Di Palma - Sapienza DICMA
Andrea Tonti - INAIL
Fabio Giannetti - Sapienza DIAEE
Gianfranco Caruso - Sapienza DIAEE

Development of a Radiation Protection Training System Based on Three-Dimensional Dose Field and Virtual Reality Technology

Technical Paper Publication: ICONE32-1757

Shuhua Yin - China Nuclear Power Engineering Co., Ltd.

Xuehu Wei - China Nuclear Power Engineering Co., Ltd.

Jing Zhou - China Nuclear Power Engineering Co., Ltd.

Track 7-18 Small modular reactors and Gen IV reactors (I)3:30 pm –5:00 pm , C-106B

Session Chair:

Session Co-Chair:

Numerical simulation of thermal fluctuation characteristics for liquid lead-bismuth in T-junction tube

Technical Paper Publication: ICONE32-1067

Shuqi Meng - Harbin Engineering University

Yisong Hu - China Nuclear Power Technology Research Institute Co.,Ltd

Jiming Lin - China Nuclear Power Technology Research Institute Co.,Ltd

Dechang Cai - China Nuclear Power Technology Research Institute Co.,Ltd

Li Li - Harbin Engineering University

Sub-Channel Model-Based Simulation of Flow Channel Blockage Accidents in Liquid Heavy Metal Cooled Fast Reactor Assemblies

Technical Paper Publication: ICONE32-1140

Hanhong Zhao - China Nuclear Power Technology Research Institute Co.,Ltd.

Fang Chen - China Nuclear Power Technology Research Institute Co.,Ltd.

Yating Tian - China Nuclear Power Technology Research Institute Co.,Ltd.

Bin Qiu - China Nuclear Power Technology Research Institute Co.,Ltd.

Shuqi Meng - China Nuclear Power Technology Research

Institute Co.,Ltd.

PILOT STUDY OF DETECTION SYSTEM FOR SMALL LEAKAGE OF SODIUM WATER ACCIDENT IN MULTI-MODULE STEAM GENERATOR-Abstract

Technical Paper Publication: ICONE32-1630

Jundong Qian - China Institute of Atomic Energy

Bin Hou - China Institute of Atomic Energy

Huanjun Zhu - China Institute of Atomic Energy

Experimental study on natural circulation characteristics of decay heat removal of penetrating decay heat exchanger in pool-type fast reactor

Technical Paper Publication: ICONE32-1661

Weilong Gao - China Institute of Atomic Energy

Daoxi Cheng - China Institute of Atomic Energy

Mingdi Xing - China Institute of Atomic Energy

Shicheng Fan - China Institute of Atomic Energy

Weiming Zhai - China Institute of Atomic Energy

Ping Zhou - China Institute of Atomic Energy

Song Yu - China Institute of Atomic Energy

Xiaoyao Ma - China Institute of Atomic Energy

Ruizhi Li - China Institute of Atomic Energy

Model Research of Effective Thermal Conductivity Calculation for High-Temperature Gas-cooled Pebble-bed Reactor

Technical Paper Publication: ICONE32-1796

Maoping Ran - Chongqing University

Xiaoyong Wu - China Nuclear Energy S&T Limited

Bo Yuan - Chongqing University

Qinglong Wen - Chongqing University

ANALYSIS AND IMPROVEMENT OF NATURAL CIRCULATION CAPACITY OF LIQUID METAL COOLANTS

Technical Paper Publication: ICONE32-1949

Zongyan Bai - Southeast University, China.

Shilei Dun - Southeast University, China.

Track 7-22 Thermal-hydraulic HX and equipment (I)

3:30 pm –5:00 pm , C-107A

Session Chair:

Session Co-Chair:

EFFECT OF KEY PARAMETERS ON REACTOR COOLANT PUMP SELECTION IN MILLION KILOWATT NUCLEAR POWER PLANT

Technical Paper Publication: ICONE32-0861

ShaoBin LI - China Nuclear Power Design Co.,Ltd.

Hanping LI - China United Gas Turbine Technology CO.,LTD

Yubin ZHANG - China Nuclear Power Design Co.,Ltd.

Dingqing GUO - China Nuclear Power Design Co.,Ltd.

Qin ZHOU - China Nuclear Power Design Co.,Ltd.

Ziyang HUANG - China Nuclear Power Design Co.,Ltd.

Bosen XIE - China Nuclear Power Design Co.,Ltd.

NUMERICAL INVESTIGATION ON TURBULENT MIXING CHARACTERISTICS OF CLOSED PARALLEL LONGITUDINAL SINUSOIDAL WAVY NARROW CHANNELS

Technical Paper Publication: ICONE32-1029

Ruizhi Hao - Beijing University of Chemical Technology

Tao Lu - Beijing University of Chemical Technology

Qi Lu - Nuclear Power Institute of China

Jian Deng - Nuclear Power Institute of China

STUDY ON PINCH POINT ISSUES IN SUPERCRITICAL CARBON DIOXIDE BRAYTON SIMPLE RECUPERATIVE CYCLE

Technical Paper Publication: ICONE32-1472

Jingsong Li - China Nuclear Power Operation Technology Corporation, LTD.

Tianqing Zhang - China Nuclear Power Operation Technology Corporation, LTD.

Zijian Wang - China Nuclear Power Operation Technology Corporation, LTD.

Wei Zhang - China Nuclear Power Operation Technology

Corporation, LTD.

Numerical Simulation and Performance Optimization of Wire Mesh Demisters

Technical Paper Publication: ICONE32-1792

Shuting Zhong - Harbin Engineering University

Zhen Liu - Harbin Engineering University

Yuang Tan - Harbin Engineering University

Rulei Sun - Harbin Engineering University

Ruifeng Tian - Harbin Engineering University

Sichao Tan - Harbin Engineering University

Multi-objective Optimization of Printed Circuit Heat Exchanger with Response Surface Model and NSGAII

Technical Paper Publication: ICONE32-1811

Qianglong Wang - Wuhan Second Ship Design and Research Institute

Hao Xie - Wuhan Second Ship Design and Research Institute

Shuaijie Lu - Wuhan Second Ship Design and Research Institute

Feifei Song - Wuhan Second Ship Design and Research Institute

Han Xu - Xi'an Jiaotong University

Zhexian Liu - Wuhan Second Ship Design and Research Institute

Wenxi Tian - Xi'an Jiaotong University

RESEARCH ON THE OPTIMIZATION OF TPMS STRUCTURES HEAT EXCHANGERS AND HEAT TRANSFER PERFORMANCE

Technical Paper Publication: ICONE32-1956

NAILIANG ZHUANG - Nanjing University of Aeronautics and Astronautics

KAIWEN QIN - Nanjing University of Aeronautics and Astronautics

XIAOPENG ZHAO - AVIC Xi'an Flight Automatic Control Research Institute

HANGBIN ZHAO - Nanjing University of Aeronautics and Astronautics

Numerical Study on the Cooling Performance of Triply Periodic Minimal Surface-based Sandwich Plate Heat Exchanger

Technical Paper Publication: ICONE32-2126

Yang Xianyin - Zhejiang University

Chen Lihua - Zhejiang University

Qiu Yunlong - Huanjiang Laboratory

Track 5-10 Simulation and Data-Driven Methods

3:30 pm –5:00 pm , C-107B

Session Chair:

Session Co-Chair:

Multi-robot collaborative source searching method based on information exploration and exploitation

Technical Paper Publication: ICONE32-0188

Mingrun Ling - Southwest University of Science and Technology

Junling Wang - Southwest University of Science and Technology

Xiaolu Li - Southwest University of Science and Technology

Jianwen Huo - Southwest University of Science and Technology

Review of the application of principal component analysis technology in nuclear power plant accident diagnosis and equipment fault monitoring

Technical Paper Publication: ICONE32-0189

Jianfa Li - China Nuclear Power Engineering Co., Ltd

Guangming Fan - Harbin Engineering University

Xiaobo Zeng - Harbin Engineering University

Zhaoming Meng - Harbin Engineering University

HYBRID DE-CPO OPTIMIZED BACKPROPAGATION NEURAL NETWORK FOR ACCURATE SOURCE TERM ESTIMATION IN SEVERE NUCLEAR ACCIDENTS

Technical Paper Publication: ICONE32-0842

Jiayue Song - North China Electric Power University

Li Yang - North China Electric Power University

Hao Zhou - North China Electric Power University

Sheng Fang - Tsinghua University

Xinpeng Li - North China Electric Power University

An intelligent analysis approach for identifying the flow patterns in porous media based on principal component analysis

Technical Paper Publication: ICONE32-0994

Jiabin Gui - Xi'an Jiaotong University

Liangxing Li - Xi'an Jiaotong University

Yiwen Guo - Xi'an Jiaotong University

Zhenxin Lei - Xi'an Jiaotong University

Shang Shi - Xi'an Jiaotong University

Xiangyu Li - Royal Institute of Technology

PI-KAN: A Physics-Data Dual-Driven Algorithm for LOCA Scenario Prediction and Solution

Technical Paper Publication: ICONE32-1248

Yufei Xie - Sino-German College of Intelligent Manufacturing, Shenzhen Technology University; Sun Yat-sen University

Gejia Zhu - China Resources Power Investment Co., Ltd. Northern Branch

Yue Li - Sino-German College of Intelligent Manufacturing, Shenzhen Technology University

Lei Zhang - Sino-German College of Intelligent Manufacturing, Shenzhen Technology University

Wenlin Wang - Sino-German College of Intelligent Manufacturing, Shenzhen Technology University

Guohua Wu - Sino-German College of Intelligent Manufacturing, Shenzhen Technology University

Ping Zheng - China Great Wall Technology Group Co., Ltd

Haichuan Zhang - Sino-German College of Intelligent Manufacturing, Shenzhen Technology University

Introduction and Application of an Integrated Accident Diagnosis Method for Nuclear Emergency

Technical Paper Publication: ICONE32-1605

Fangqing YANG - china nuclear power engineering Co., Ltd

Yanhua CHENG - china nuclear power engineering Co., Ltd

Danjing WEI - china nuclear power engineering Co., Ltd

Yuan HU - china nuclear power engineering Co., Ltd

Track 5-11 Structural Integrity and Transport Safety

3:30 pm –5:00 pm , C-108A

Session Chair:

Session Co-Chair:

RESEARCH ON THE INFLUENCE OF PRESTRESS ON THE IMPACT RESISTANCE PERFORMANCE OF REINFORCED CONCRETE STRUCTURES IN NUCLEAR ENGINEERING

Technical Paper Publication: ICONE32-0589

Ge GAO - China Nuclear Power Engineering Co.,Ltd.

MengYan SONG - China Nuclear Power Engineering Co.,Ltd.

MengSha LIU - China Nuclear Power Engineering Co.,Ltd.

RongPeng LI - China Nuclear Power Engineering Co.,Ltd.

Di JIANG - China Nuclear Power Engineering Co.,Ltd.

Research on the Ultimate Bearing Capacity of the Containment of a Third Generation Nuclear Power Plant Coupled with High Temperature and High Pressure

Technical Paper Publication: ICONE32-1021

jintao zhao - China Nuclear Power Engineering Co.,LTD

jian meng - China Nuclear Power Engineering Co.,LTD

Modeling method for design of turbine missile protection system based on MBSE

Technical Paper Publication: ICONE32-1092

Shimin Sun - China General Nuclear Clean Energy Company

Hong Lv - China General Nuclear Design Company

CALIBRATION OF THE 2D PLANAR NEUTRON IMAGING DETECTOR

Technical Paper Publication: ICONE32-1293

Yiyang Long - Institute of Nuclear Science & Technology, Sichuan University

Penghui Wang - Institute of Nuclear Science & Technology, Sichuan University

Guofeng Qu - Institute of Nuclear Science & Technology, Sichuan University

Jifeng Han - Institute of Nuclear Science & Technology, Sichuan University

STRUCTURAL PERFORMANCE STUDY OF A GENERATION III NUCLEAR POWER PLANT REACTOR PIT STRUCTURE UNDER STEAM EXPLOSION LOADS

Technical Paper Publication: ICONE32-1443

ziquiao liu - China Nuclear Power Engineering Co., Ltd

yulin liu - China Nuclear Power Engineering Co., Ltd

Research on weak areas of steel containment penetrating sleeve under complex conditions

Technical Paper Publication: ICONE32-1726

chunlong zhang - China Nuclear Power Engineering Co.,LTD

jintao zhao - China Nuclear Power Engineering Co.,LTD

jian meng - China Nuclear Power Engineering Co.,LTD

yu liu - China Nuclear Power Engineering Co.,LTD

SENSITIVITY ANALYSIS OF SHIELDING EFFECT BY PARAMETER CHANGES IN DUCTILE IRON TRANSPORT CASK FOR SPENT FUEL ASSEMBLIES

Technical Paper Publication: ICONE32-1933

Nanfeng Cao - China Nuclear Power Engineering Co., Ltd

Wenhua Niu - China Nuclear Power Engineering Co., Ltd

Yujia Chen - China Nuclear Power Engineering Co., Ltd

Huaisen Mo - China Nuclear Power Engineering Co., Ltd

Quan Gong - China Nuclear Power Engineering Co., Ltd

Track 5-12 Facility Specific and Environmental Considerations

3:30 pm –5:00 pm , C-108B

Session Chair:

Session Co-Chair:

Analysis of Polydisperse Aerosol Concentration Attenuation Characteristics within the Containment Vessel

Technical Paper Publication: ICONE32-0120

Junyan Chen - Nuclear Power Institute of China

Chao Tian - Nuclear Power Institute of China

Zian Zhai - Nuclear Power Institute of China

Haifeng Gu - Harbin Engineering University

THE RESEARCH ON HYDROCHEMICAL ENVIRONMENT ESTABLISHMENT OF CONTAINMENT SUMP IN POST ACCIDENT

Technical Paper Publication: ICONE32-0264

Yanlin CHEN - China Nuclear Power Engineering Co., Ltd

Jiaqi PAN - China Nuclear Power Engineering Co., Ltd

Guangfei WANG - China Nuclear Power Engineering Co., Ltd

Yu FENG - China Nuclear Power Engineering Co., Ltd

Huiyun MA - China Nuclear Power Engineering Co., Ltd

Ting HOU - China Nuclear Power Engineering Co., Ltd

RESEARCH ON FIRE FIGHTING DESIGN OF NUCLEAR ISLAND CABLE IN NUCLEAR POWER PLANT

Technical Paper Publication: ICONE32-0355

Zhijing Li - China Nuclear Power Engineering

Meiyi Lv - China Nuclear Power Engineering

Hui Bai - China Nuclear Power Engineering

Research on dynamics of travelling fire and fixed fire in a shaft of nuclear power plants

Technical Paper Publication: ICONE32-0447

Haiqing Deng - China Nuclear Power Design Co., Ltd.

Guanghua Yang - China Nuclear Power Design Co., Ltd.

STUDY ON THE POSITION RECONSTRUCTION ALGORITHM OF 2D PLANAR NEUTRON DETECTOR BASED ON ARTIFICIAL NEURAL NETWORKS

Technical Paper Publication: ICONE32-1289

Penghui Wang - Institute of Nuclear Science & Technology, Sichuan University

Yiyang Long - Institute of Nuclear Science & Technology, Sichuan University

Guofeng Qu - Institute of Nuclear Science & Technology, Sichuan University

Jifeng Han - Institute of Nuclear Science & Technology, Sichuan University

Study on the Force Test of the Water Intake Sewage Interception Facilities of Coastal Nuclear Power Plant

Technical Paper Publication: ICONE32-1351

YING QIU - China Nuclear Power Engineering Co., Ltd.

XIAONA ZHANG - China Nuclear Power Engineering Co., Ltd.

ZHITAO GUAN - China Nuclear Power Engineering Co., Ltd.

YANLONG WANG - China Nuclear Power Engineering Co., Ltd.

WEI BAI - China Nuclear Power Engineering Co., Ltd.

JING LI - China Nuclear Power Engineering Co., Ltd.

Track 5-13 Radiation, Source Term, and Diverse Topics

3:30 pm –5:00 pm , C-109A

Session Chair:

Session Co-Chair:

Inverse modelling of radionuclide releases following Fukushima accident using multi-source observations

Technical Paper Publication: ICONE32-0140

Sheng Fang - Tsinghua University

Xinwen Dong - Tsinghua University

Yuhan Xu - Tsinghua University

Hao Hu - Tsinghua University

Development of Seismic-induced fire assessment method for HPR1000 Nuclear Power Plants

Technical Paper Publication: ICONE32-0821

Zhaoying REN - China Nuclear Power Design Co.,ltd(ShenZhen)

Xujia CHEN - China Nuclear Power Design Co.,ltd(ShenZhen)

Study on analysis method of low temperature protection for nuclear power plant in severe cold area

Technical Paper Publication: ICONE32-0881

Yi YANG - China Nuclear Power Engineering Co.,Ltd

Siyang XIE - China Nuclear Power Engineering Co.,Ltd

Depeng ZHAO - China Nuclear Power Engineering Co.,Ltd

Jialing LIU - China Nuclear Power Engineering Co.,Ltd

Research on the Radiochemical Analysis Method for Plutonium Content in Aerosol Samples Based on the NH₄HF₂ Dissolution Method

Technical Paper Publication: ICONE32-1470

Qimeng Fan - Xi'an Research Institute of Hi-tec

Hanlin Li - Xi'an Research Institute of Hi-tec

Chen Xie - Xi'an Research Institute of Hi-tec

Kuo Zhao - Xi'an Research Institute of Hi-tec

Tao Xiong - Xi'an Research Institute of Hi-tec

Investigation of source term research in high flux reactor

Technical Paper Publication: ICONE32-1869

Xiaoyuan Zheng - Tsinghua University

Yu Wang - Tsinghua University

Rui Nie - Tsinghua University

Feng Xie - Tsinghua University

Jiaozhu Cao - Tsinghua University

Lei Shi - Tsinghua University

Current situation of physical thermal safety analysis for radioisotope production

Technical Paper Publication: ICONE32-2040

Li Zhaobing - Key Laboratory of Radiation Physics and Technology of the Ministry of Education, Institute of Nuclear Science and Technology, Sichuan University

Luo Yong - Huaneng Nuclear Energy Technology Research Institute

Fu Baoqin - Key Laboratory of Radiation Physics and Technology of the Ministry of Education, Institute of Nuclear Science and Technology, Sichuan University

Zhang Xingtian - Huaneng Nuclear Energy Technology

Research Institute

Wei Wenbin - Huaneng Nuclear Energy Technology Research Institute

Track 12-5 Intelligent and Digital Design-I

3:30 pm –5:00 pm , C-109B

Session Chair:

Session Co-Chair:

Research on Autonomous Monitoring Technology for Nuclear Power Plants Based on Deep Learning

Technical Paper Publication: ICONE32-0031

Jing Zhang - China Nuclear Power Engineering Co., Ltd.

Mingqian Li - China Nuclear Power Engineering Co., Ltd.

Jinxiao Yuan - China Nuclear Power Engineering Co., Ltd.

Research on the Implementation Method of Intelligent Terminals in Nuclear Power Plants Based on Edge Computing

Technical Paper Publication: ICONE32-0400

Jing Zhang - China Nuclear Power Engineering Co., Ltd.

Na Yang - China Nuclear Power Engineering Co., Ltd.

Lei Song - China Nuclear Power Engineering Co., Ltd.

Yilong Liu - Xi'an Jiaotong University

PLANNING, DESIGN AND PRACTICE OF PHM TECHNOLOGY APPLICATION IN SMART NUCLEAR POWER PLANTS

Technical Paper Publication: ICONE32-0143

Decheng Yu - China Nuclear Power Engineering Co., Ltd.

Mingqian Li - China Nuclear Power Engineering Co., Ltd.

DEVELOPMENT OF AI AUTOMATIC PIPING LAYOUT DESIGN SYSTEM

Technical Paper Publication: ICONE32-0235

Shiro Takahashi - Hitachi

Keita Okuyama - Hitachi

Tomoyasu Inoue - Hitachi-GE

Michiaki Kurosaki - Hitachi-GE

Eisuke Wakabayashi - Hitachi-GE

Shonosuke Yukita - Hitachi Industry & Control Solutions

RESEARCH ON AUTOMATIC ANNOTATION TECHNOLOGY OF NUCLEAR ISLAND PIPELINE BASED ON E3D

Technical Paper Publication: ICONE32-0436

bing li - China Nuclear Power Engineering Co., Ltd

haijing tian - China Nuclear Power Engineering Co., Ltd

DESIGN OF A SMART CENTRALIZED CONTROL AND MANAGENMENT PLATFORM FOR A NUCLEAR POWER PLANT FRESHWATER PLANT

Technical Paper Publication: ICONE32-0497

Cao Chengyan - China Nuclear Power Engineering Co.,Ltd.

Li Xichen - China Nuclear Power Engineering Co., Ltd.

Chen Jun - China Nuclear Power Engineering Co., Ltd.

Research on Annual Intelligent Fresh Air Ventilation, Cold and Heat Recovery, Dehumidification Technology for Nuclear Power Plants

Technical Paper Publication: ICONE32-0794

Fenglin Zhang - China Nuclear Power Engineering Co., Ltd, China

Jie Wang - China Nuclear Power Engineering Co., Ltd, China

Bei Hu - China Nuclear Power Engineering Co., Ltd, China

Yanni Xu - Zhuhai Gree Electric Appliance Co., China

Track11-4 Macro Control and Consequence Assessment of Accidents

3:30 pm –5:00 pm , C-112

Session Chair:

Session Co-Chair:

Research on the Long-term Time Series Prediction Method for Nuclear Accident Management

Technical Paper Publication: ICONE32-0100

Guoyang Ma - China Nuclear Power Operation Technology

Corporation, LTD.

Xiong Huang - China Nuclear Power Operation Technology
Corporation, LTD.

Mingliang Xie - China Nuclear Power Operation Technology
Corporation, LTD.

Yanqing Pan - Fujian Fuqing Nuclear Power Co.,Ltd.

Fanpeng Kong - Fujian Fuqing Nuclear Power Co.,Ltd.

Qing Li - China Nuclear Power Operation Technology
Corporation, LTD.

A Study of the Trends in the Response of Nuclear Power Plants to Extreme External Natural Hazards

Technical Paper Publication: ICONE32-0119

HAIFU SHI - China Nuclear Power Engineering Co., Ltd

GUOQIANG ZHANG - China Nuclear Power Engineering Co.,
Ltd

HUIJUAN WANG - CNNC Changan Insurance Brokers Co.,
Ltd.

YIJIE QIAN - China Nuclear Power Engineering Co., Ltd

SONGWEI LI - China Nuclear Power Engineering Co., Ltd

Identification and protection of accident monitoring information under fire condition in nuclear power plants

Technical Paper Publication: ICONE32-0384

zhang jianwen - State Key Laboratory of Nuclear Power Safety
Monitoring Technology and Equipment, China

ma tingwei - China Nuclear Power Engineering Company, LTD

wang taike - China Nuclear Power Engineering Company, LTD

kong kaihe - China Nuclear Power Engineering Company, LTD

wang zhenying - China Nuclear Power Engineering Company,
LTD

tian baocong - China Nuclear Power Engineering Company,
LTD

liu zhiyun - State Key Laboratory of Nuclear Power Safety
Monitoring Technology and Equipment, China

Research and application of automatic diagnosis system for nuclear power plant accident response based on intelligence and digitalization

Technical Paper Publication: ICONE32-0764

Li wei - Jiangsu Nuclear Power Co. LTD

Gu minqiang - Jiangsu Nuclear Power Co. LTD

Uncertainty and Sensitivity Analysis for Potential Accident Consequence Assessment with CEIRA

Technical Paper Publication: ICONE32-0803

Qian Chen - Suzhou Nuclear Power Research Institute Co.,Ltd.

Yuhao Yin - Suzhou Nuclear Power Research Institute Co.,Ltd.

Yuanyuan Zhang - Suzhou Nuclear Power Research Institute Co.,Ltd.

Tianhan Xu - Suzhou Nuclear Power Research Institute Co.,Ltd.

Study of Multiple Main Steam Lines Break Accident Based on Risk-informed for Nuclear Power Plants

Technical Paper Publication: ICONE32-1015

Mengying LIU - China Nuclear Power Engineering Co., Ltd

Xianwen ZENG - China Nuclear Power Engineering Co., Ltd

Dekui ZHAN - China Nuclear Power Engineering Co., Ltd

Dingqing GUO - China Nuclear Power Engineering Co., Ltd

Xiaoshuang ZHAO - China Nuclear Power Engineering Co., Ltd

Track 12-6 Intelligent and Digital Design-II

3:30 pm –5:00 pm , C-113

Session Chair:

Session Co-Chair:

Application Development of Core Damage Assessment System Based on Artificial Intelligence Algorithms on Nuclear Power Plant

Technical Paper Publication: ICONE32-0108

Xiong Huang - China Nuclear Power Operation Technology Corporation

Yunfeng Gu - China Nuclear Power Operation Technology Corporation

Yanqing Pan - Fujian Fuqing Nuclear Power Co. Ltd

Guoyang Ma - China Nuclear Power Operation Technology Corporation

Mingliang Xie - China Nuclear Power Operation Technology Corporation

Fanpeng Kong - Fujian Fuqing Nuclear Power Co. Ltd

Jiaqing Chen - CNNP Operations Maintenance Technology Co. Ltd

Xiaolong Li - CNNP Operations Maintenance Technology Co. Ltd

Qing Li - China Nuclear Power Operation Technology Corporation

Research on Digital Transformation of Quality Management

Technical Paper Publication: ICONE32-0573

Zhe LV - China Nuclear Power Engineering Co.,LTD.

Xingguo LU - China Nuclear Power Engineering Co.,LTD.

The Construction and Practice of Digital Transformation in Nuclear Power Engineering

Technical Paper Publication: ICONE32-0797

Minghua ZHU - China Nuclear Power Engineering Co., Ltd.

Shouqin ZHANG - China Nuclear Power Engineering Co., Ltd.

Xidao MAO - China Nuclear Power Engineering Co., Ltd.

Yuanfan MAO - Nuclear Power Institute of China

RESEARCH AND APPLICATION OF ELECTRICAL DIGITAL DESIGN SYSTEM IN NUCLEAR POWER PLANTS

Technical Paper Publication: ICONE32-0909

Long SHENG - China Nuclear Power Engineering Co., Ltd.

Jiaru XIE - China Nuclear Power Engineering Co., Ltd.

Zhi WANG - School of Software Engineering, Xi'an Jiaotong University

Xiaobin ZHOU - China Nuclear Power Engineering Co., Ltd.

RESEARCH ON DATA ASSET MANAGEMENT TECHNOLOGY FOR NUCLEAR POWER DIGITAL TWIN

Technical Paper Publication: ICONE32-1573

Min Li - China Nuclear Power Operation Technology Corporation Limited

Xu Gong - China Nuclear Power Operation Technology Corporation Limited

Huajian Fang - China Nuclear Power Operation Technology Corporation Limited

RESEARCH ON DIGITAL METHODS FOR EQUIPMENT DYNAMIC LOAD TESTING

Technical Paper Publication: ICONE32-1824

Shuai Liu - The nuclear power institute of china

Wanyou Li - Harbin Engineering University, China

Furui Xiong - The nuclear power institute of china

Xuan Huang - The nuclear power institute of china

Yixiong Zhang - The nuclear power institute of china

Zhipeng Feng - The nuclear power institute of china

Xiaoming Bai - The nuclear power institute of china

Xiaozhou Jiang - The nuclear power institute of china

