ICONE31

31st International Conference on Nuclear Engineering

CONFERENCE
Aug. 4–8, 2024

Hilton Prague
Prague, Czech Republic

Program

https://event.asme.org/ICONE

The American Society of Mechanical Engineers®
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SETTING THE STANDARD

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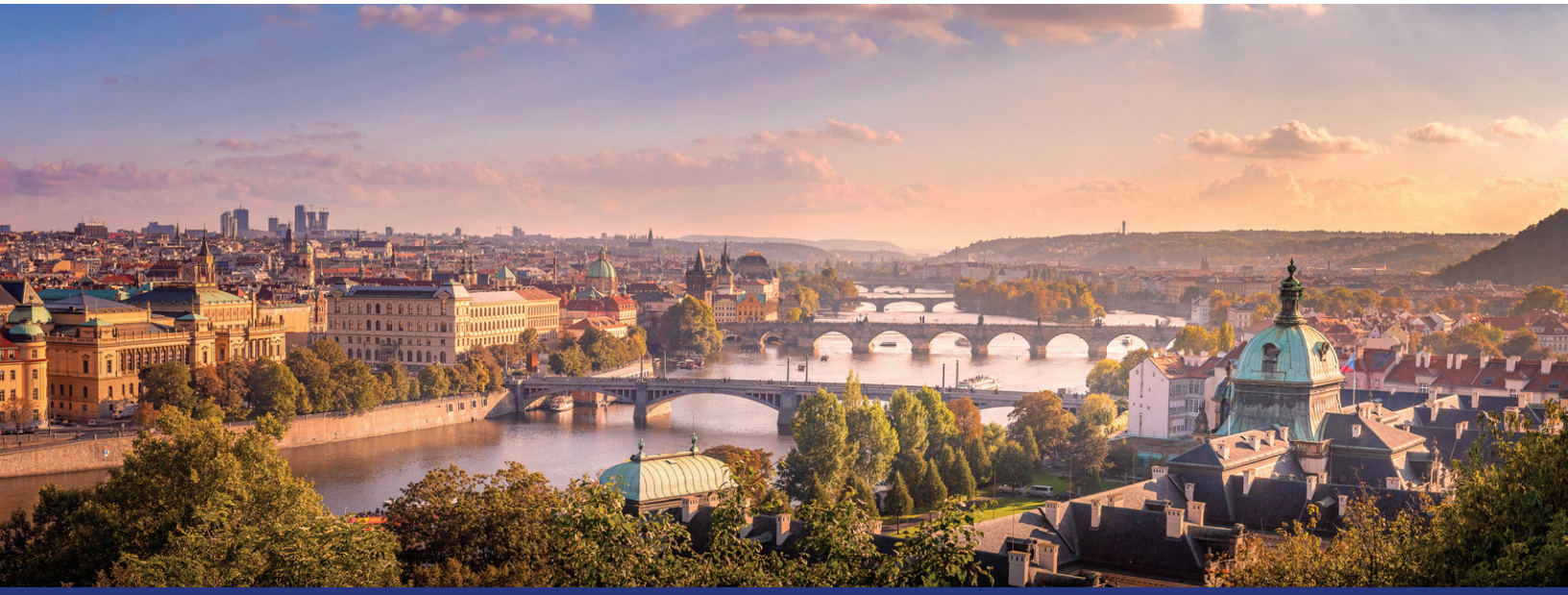


Dear Colleagues

On behalf of the ICONE 31 organizing committee, I would like to extend my wholehearted welcome to the 31st International Conference on Nuclear Engineering. During the COVID-19 pandemic, the ICONE meetings were mainly held virtually. Since ICONE 30, we are back to a fully in-person conference with all its substantial benefits with regard to professional and social networking opportunities, interaction between presenters & attendees during the workshops, plenary speeches, panel discussions, and of course technical paper presentations unhindered by the time zone constraints during the virtual meetings.

The first annual ICONE conference was held in Tokyo in 1991 with the American Society of Mechanical Engineers (ASME) and the Japan Society of Mechanical Engineers (JSME) as the conference sponsors. In 2005, the Chinese Nuclear Society (CNS) joined as a sponsor with the ICONE meeting held in Beijing. As has been a long ICONE tradition, the ASME Nuclear Engineering Division is delighted to continue our collaboration with our long-time partners JSME and CNS.

The theme of the ICONE 31 conference is ”24/7 Clean Nuclear Energy – Solution for Global Warming.” As per the U.S. National Oceanic and Atmospheric Administration (NOAA), Earth’s average land and ocean surface temperature in 2023 was the highest global temperature among all years in NOAA’s 1850–2023 climate records. Solving global warming is critical for the survival and well-being of the human race, and Nuclear Energy is one of the key technologies that can be of significant help. We, the nuclear community, must work together to promote a global nuclear resurgence. Through ICONE collaboration, ASME, JSME, and CNS continue to be a strong global voice in support of Nuclear Energy utilization.

As the premier nuclear engineering technical conference, ICONE is for nuclear professionals who want to stay technically current and on top of industry trends and developments. This is especially true as new reactors of various sizes are being developed, not only for electrical power production but also for energy required for non-electric generation uses. As always, the success of ICONE is due to the contribution of numerous professionals from industry, government, academia, and technical societies from around the world. We, at the ASME Nuclear Engineering Division, would like to thank the Track and Session leaders who helped organize the technical papers presented. This conference will cover a wide range of topics in multiple tracks including: Operating Plant Challenges, Successes, and Lessons Learned; Nuclear Plant Engineering; Advanced Reactors and Fusion; Small Modular and Micro-Reactors Technologies; Nuclear Fuels, Research, and Fuel Cycle; Nuclear Codes & Standards; Thermal Hydraulics; Computational Fluid Dynamics (CFD); Verification and Validation; Advanced Methods of Manufacturing (AMM) for Nuclear Reactors and Components; Decontamination, Decommissioning, and Radioactive Waste Management; Beyond Design Basis and Nuclear Safety; Risk Informed Management and Regulation; and supporting the future of our Industry, the Student Paper Competition.

In addition to about six hundred technical presentations, ICONE 31 will present multiple plenary and panel sessions. We welcome the keynote speaker, Petr Tresnak, who is the Deputy Minister of Trade in the Czech Republic Government. The plenary and panel speakers/sessions will address key technical challenges and business issues facing the nuclear industry, featuring discussions with leaders from industry, academia, and government.

We will also hold a number of technical workshops to expand the knowledge base of our professionals. Lectures and discussions in these workshops will target a wide range of practitioners and young engineers to provide the basic principles, requirements, codes, standards, and best industry practices. Recognizing the growing importance of Artificial Intelligence, in ICONE 31 we are introducing a new workshop topic entitled “Advanced Technology-Artificial Intelligence (AI), Advanced Manufacture (AM), High-Performance Computing (HPC) in Nuclear Engineering.” This will be in addition to our four traditional workshops.

Our thanks to our Conference Sponsors for their continued support of the Nuclear Industry in general and ICONE in particular. Special thanks go to the ASME staff without whose support, it would not be possible to organize the logistics of this conference. I would also like to extend my sincere thanks to the technical paper reviewers for assuring that these papers meet the high standards set by ICONE. Finally, we recognize, honor, and say thank you to all the authors, keynote and plenary speakers, panel participants, and workshop tutors who are the major contributors to the success of the conference. I cordially invite all of you to participate and support the ICONE 31 activities. Together, we will make the conference a triumph and continue the success of our great industry as well as the Nuclear Community as a whole.

Asif Arastu
Asif Arastu, Ph.D., ASME Fellow
Chair
ASME Nuclear Engineering Division Conference

Hidehito Mimaki
Hidehito Mimaki, MHI
Chair
Japan Society of Mechanical Engineers

Jianqiao LIU
Jianqiao LIU, CNS
Chair
Chinese Nuclear Society

ASME Nuclear Engineering Division Committee Members

Asif Arastu
Unisont Inc.

Leon Cizelj
Jozef Stefan Institute

Yassin Hassan
Texas A&M University

Rosa LoFrano
University of Pisa

Shripad Revankar
Purdue University

Hitesh Bindra
Purdue University

Jovica Riznic
Canadian Nuclear Safety Commission

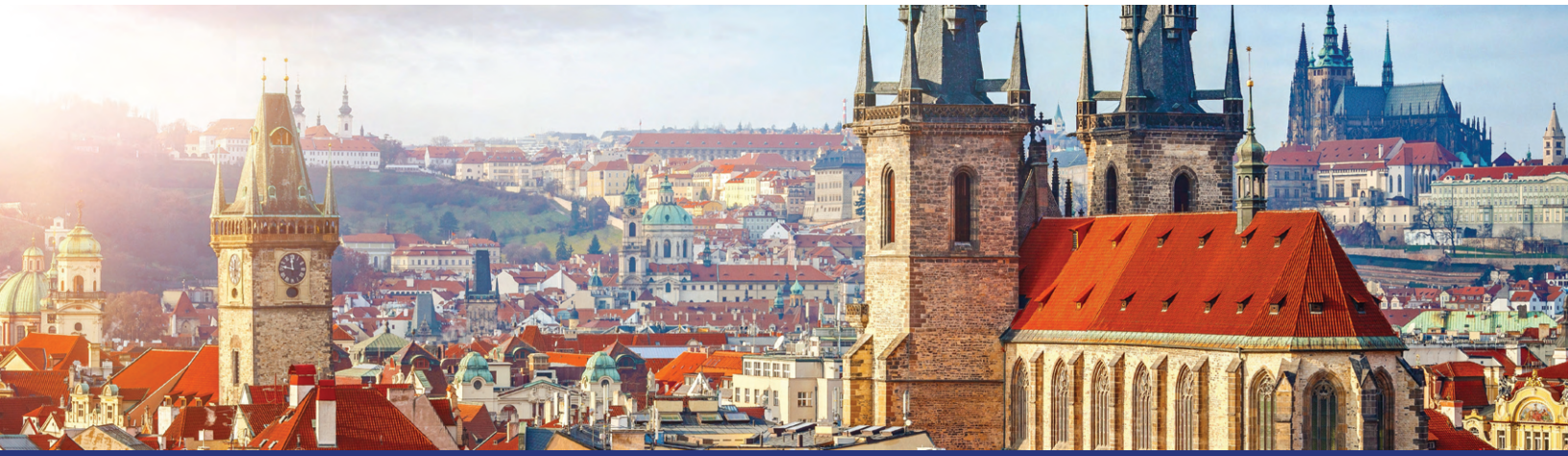
Richard Schultz
Idaho State University

Guogiang Wang
PNNL

Tom Vogan
Retired

ICONE 31 Conference Organizing Committee

	ASME	JSME	CNS
Conference Chair	Asif Arastu, Unisont Inc.	Hidehito Mimaki, MHI	Jianqiao Liu, CNS
Conference Co-Chair	Yassin Hassan, Texas A&M University		
Conference Secretary		Toshitake Kurashige, MHI	Yanyan Zhu, CNS
Technical Program Chair	Shripad Revankar, Purdue University	Kimitoshi Yoneda, CRIEPI	Guanghui Su, Xi'an Jiaotong University
Technical Program Co-Chair	Leon Cizelj, Jozef Stefan Institute		Xiaojing Liu, Shanghai Jiao Tong University
Technical Program Secretary	Hitesh Bindra, Purdue University	Yuta Uchiyama, CRIEPI	Zhenchao Liu, Xi'an Jiaotong University
Steering Committee Chair	Jovica Riznic, Canadian Nuclear Safety Commission	Tetsuaki Takeda, University of Yamanashi	Jianqiao Liu, CNS
Steering Committee Vice Chair	Richard Schultz		
Organizing Committee Chair	Rosa Lo Frano, University of Pisa	Hidehito Mimaki, MHI	Suyuan Yu, Tsinghua University
Organizing Committee Co-Chair			Sichao Tan, Harbin Engineering University
Organizing Committee Secretary		Toshitake Kurashige, MHI	Yanyan Zhu, CNS
Student Program Chair	Shripad Revankar, Purdue University	Satoshi Takeda, Osaka University	Suyuan Yu, Tsinghua University
Student Program Co-Chair		Hideharu Takahashi, Tokyo Institute of Technology	Liangming Pan, Chongqing University, Guizhou Institute of Technology
Award Committee Chair	Jovica Riznic, Canadian Nuclear Safety Commission	Tetsuaki Takeda, University of Yamanashi	Jianqiao Liu, CNS
Award Committee Co-Chair	Guoqiang Wang, PNNL		



Time	Sunday, August 4
8:00AM - 6:00PM	Registration
9:00AM - 4:30PM	ICONE Workshops
5:00PM - 6:00PM	Entrance Meeting - Closed Meeting

Time	Monday, August 5
7:00AM - 6:30PM	Registration
8:30AM - 10:00AM	ICONE Opening and Keynote Session
10:00AM - 10:30AM	Refreshment Break
10:00AM - 8:00PM	EXPO Open
10:30AM - 12:00PM	Plenary Session 1: Current Status of Nuclear Power
12:00PM - 1:00PM	Ticketed Lunch
1:00PM - 2:30PM	ICONE Technical Session
2:30PM - 3:00PM	Refreshment Break & Poster Session
3:00PM - 4:30PM	ICONE Technical Session
4:45PM - 6:15PM	ICONE Technical Session
6:30PM - 8:00PM	ICONE Welcome Reception

Time	Tuesday, August 6
7:30AM - 5:30PM	Registration
8:30AM - 10:00AM	Plenary Session 2 : The Future of Nuclear Power
10:00AM - 4:00PM	EXPO Open
10:00AM - 10:30AM	Refreshment Break
10:30AM - 11:45AM	Plenary Session 3: Small Modular Reactor -Global Perspective
12:00PM - 1:00PM	Ticketed Lunch
1:00PM - 2:30PM	ICONE Technical Session
2:30PM - 3:00PM	Refreshment Break
3:00PM - 4:30PM	Panel Sessions
5:00PM - 6:30PM	ICONE Technical Session
7:00PM - 9:00PM	ICONE Banquet

Time	Wednesday, August 7
7:30AM - 5:30PM	Registration
8:30AM - 10:00AM	ICONE Technical Session
10:00AM - 4:00PM	EXPO Open
10:00AM - 10:30AM	Refreshment Break
10:30AM - 12:00PM	Panel Sessions
12:00PM - 1:00PM	Ticketed Lunch
1:00PM - 2:30PM	Panel Sessions
2:30PM - 3:00PM	Refreshment Break
3:00PM - 4:30PM	ICONE Technical Session
4:45PM - 6:15PM	ICONE Technical Session
6:00PM - 7:30PM	Student Awards and Track Chair Reception

Time	Thursday, August 8
7:30AM - 5:00PM	Registration
8:30AM - 10:00AM	ICONE Technical Session
10:00AM - 10:30AM	Refreshment Break
10:30AM - 12:00PM	ICONE Technical Session
12:00PM - 1:00PM	Ticketed Lunch
1:00PM - 2:30PM	Panel Sessions
2:30PM - 3:00PM	Refreshment Break
3:00PM - 4:30PM	ICONE Technical Session
4:45PM - 6:15PM	ICONE Technical Session
4:45PM - 5:45PM	Exit Meeting - Closed Meeting

General Information

ASME SWAPCARD APP

Download the ASME Conference App and hold the entire program in the palm of your hand! The ASME Conferences App allows you to easily look up sessions, search for abstracts or people, message with other attendees, and create your own schedule. An email with the login instructions was emailed to you. Be sure to download the app for the latest information.

App Assistance Hours

Sunday, August 4	8:00AM–6:00PM
Monday, August 5	7:30AM–4:00PM
Tuesday, August 6	7:30AM–4:00PM
Wednesday, August 7	7:30AM–4:00PM

General Conference Registration

Czech Republic VAT will be applied to registration at checkout.

Registration Type	Onsite Registration (rates are excluding 21% VAT)
Member	$1,140EUR
Non-Member	$1,340EUR
Student Member	$400EUR
Student Non-Member	$450EUR
Life Member	$400EUR
One Day Member: Mon–Thu	$600EUR
One Day Non-Member: Mon–Thu	$700EUR

Guest Registration

Guests can purchase tickets for the Opening reception for $70EUR plus VAT and $100EUR plus VAT for the banquet.

Attendee Information

Acknowledgment

The 31st International Conference on Nuclear Engineering is sponsored by the American Society of Mechanical Engineers (ASME), the Chinese Nuclear Society (CNS), the Japan Society of Mechanical Engineers (JSME), and the Czech Nuclear Society (CNS). The conference is hosted by the ASME Nuclear Division. Conference organizers would also like to acknowledge the cooperation of the following organizations:

Chinese Nuclear Society
Japan Society of Mechanical Engineers
Czech Nuclear Society

PUBLICATIONS: ICONE31 CONFERENCE PAPERS AND PROCEEDINGS

Technical papers accepted for publication for ICONE31 will be available through a dedicated Online Papers site available to all fully paid attendees beginning a week before the conference.

- The ISO batch file and two zip files also will be made available on the Online Papers site prior to the conference, so that users may download to their personal computer systems.
- Post-conference, papers presented at the conference will be published as the official Proceedings of the conference on The ASME Digital Collection (asmedigitalcollection.asme.org).

Authors may refer to The Digital Collection for DOI links and citation information for their papers.

All ASME conference Proceedings are disseminated worldwide and submitted for indexing to SCOPUS, COMPENDEX, the ISI Conference Proceedings Citation Index, Web of Science (Clarivate), and Google Scholar. For further information about ASME Publications, please contact conferencepubs@asme.org.

Registration

The Registration Desk is located in the Congress Hall Foyer, Lower Level, Hilton Prague and is open during the following hours:

Sunday, August 4	8:00AM–6:00PM
Monday, August 5	7:30AM–5:30PM
Tuesday, August 6	7:30AM–5:30PM
Wednesday, August 7	7:30AM–5:30PM
Thursday, August 8	7:30AM–5:00PM

Name Badges: In addition to being a means of identification to colleagues, you are required to wear your name badge for admission to conference sessions and events. Room monitors will check name badges before allowing anyone into the session or event.

Daily Registration: Attendees who have paid the one-day registration fee qualify for a badge representing the day they have selected to attend. Attendees wearing this badge are entitled to the following on the day they have selected to attend: admission to conference sessions, refreshment breaks, and the Exhibition. Daily attendees will also receive a conference bag and online paper access.

Accompanying Person: Guest tickets are available for purchase for the Opening Reception and Conference Banquet only. Prepurchased tickets will be included in the registration package of the attending registrant.

MEMBERSHIP TO ASME
Registrants who paid the non-member conference registration fees will receive a four-month complimentary ASME Membership. ASME will automatically activate this complimentary membership for qualified attendees. Please allow approximately four weeks after the conclusion of the conference for your membership to become active. Visit **www.asme.org/membership** for more information about the benefits of ASME Membership.

Conference Hotel

All meetings and social events take place at the Hilton Prague.

Wi-Fi

Complimentary Wi-Fi is available throughout the Hilton Prague meeting space. To access the Wifi service log onto the Hilton network and follow the prompts in your browser.

Network Name: Hilton Honors
Password: prague24

Smoking

Smoking is not permitted anywhere within the Hilton Prague. Smoking is permitted outside.

Tipping Etiquette

At restaurants in the Czech Republic a gratuity or service charge is usually included. If it is there should be no need to leave a tip. If no service charge is included, it is good etiquette to tip the server 10% to 15%.

Speaker Practice Room

Florenc 1

If you are a presenter, please be in the session room 15 minutes prior to the start of the first presentation of your session in order to meet with the session chair. Florence 1 is on the Mezzanine Floor and will be available to all conference participants as a presentation "practice" room. The room will be equipped with two LCD projectors, two computers, and two screens, and will be open during the following hours. Authors are encouraged to use this facility to meet with their co-authors and review presentations.

Sunday, August 4	2:00PM–5:30PM
Monday, August5	7:00AM–5:30PM
Tuesday August 6	7:00AM–5:30PM
Wednesday, August 7	7:00AM–5:30PM
Thursday, August 8	7:00AM–5:00PM

Meeting Room Protocol

Every effort will be made to ensure that all sessions start and end on time. Presenters and attendees are all asked to work together to achieve this. This may mean having to cut short a valuable discussion; however, conference organizers request your cooperation for the benefit of all attendees. Please turn your cell phone and other noise-making devices off or set it to vibrate.

Student and Track Leader Awards

Akiyama Medal

Best Student Award in ICONE Student Competition

At every ICONE conference, the Akiyama Medal is presented to the best paper award winner from the student paper competition of ASME, CNS, and JSME. The award was established in memory of Prof. Mamoru Akiyama (1935–2009). Prof. Akiyama was a professor emeritus at the Department of Nuclear Engineering at the University of Tokyo, and he was one of the founding members of the ICONE conference.

Student Awards

Five "Best Paper" and five "Best Poster" awards in each of the following regions will be presented during this session: North America, Japan/Asia, China, and Europe.

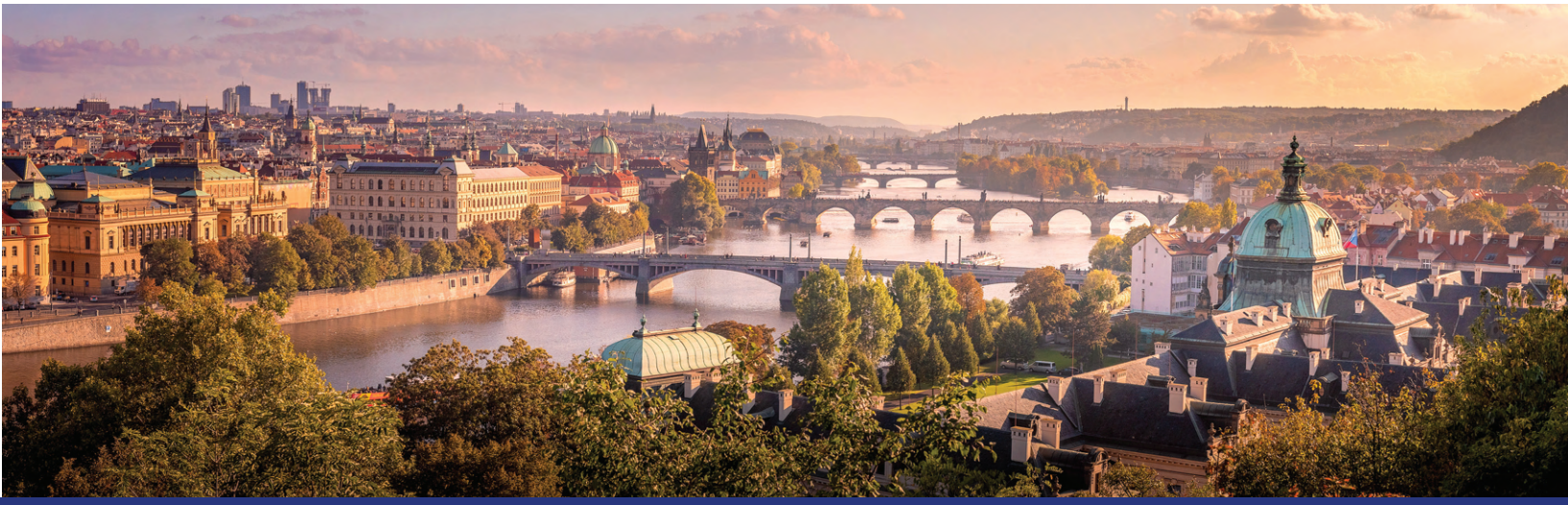
Journal Editor Award- Igor Pioro, Ontario Tech

NED Service Award

The Nuclear Engineering Division presents the NED Service Award to the following individuals in recognition of their efforts in organizing ICONE31.



Guoqiang Wang, Pacific Northwest National Laboratory
Asif Arastu
Michal Kuna, ČEZ



ICONE Long Service Award

Ivo Kljenak, PhD.,
Institut Jozef Stefan, Slovenia

Ivo Kljenak has been active in the field of severe accidents in light water reactors since 1995. His main interests have been related to containment phenomena (hydrogen distribution and combustion, as well as aerosol behaviour). He has also been involved in research on phenomena in the reactor pressure vessel (reactor core melt behaviour in the lower plenum). In both topics, he was involved in the early use of description on the local instantaneous scale. Currently, he is involved in European projects related to severe accidents, including the use of artificial intelligence to enable the development of a severe accidents simulator.

Dr. Prof. Xiaojing Liu
Shanghai Jiao Tong University (SJTU)

Dr. Prof. Xiaojing Liu is the Vice Dean/Professor of the College of Smart Energy at Shanghai Jiao Tong University (SJTU). He is the Yangtze River Scholar and National Science Fund for Outstanding Young Scholars in China. He serves as a board member of the Nuclear Reactor Thermal-Hydraulics Division of the Chinese Nuclear Society, editor of Nuclear Science and Techniques. He obtained his Ph.D. degree from SJTU in 2010, and he was a postdoctoral fellow at the Karlsruhe Institute of Technology (KIT) in Germany from 2012 to 2013. He is the director of the Shanghai integrating innovation center for digital reactors, leader of the Innovative Nuclear System Laboratory (INSL) in SJTU and has long been engaged in research on advanced and digital nuclear energy systems. Currently, he has published over 200 papers in renowned journals such as Applied Energy, Energy Conversion and Management, and Annals of Nuclear Energy.

He started to attend International Conference on Nuclear Engineering (ICONE) from 2005 in Beijing when he was a graduate student. After that, he has deeply involved in ICONE conference as active author and reviewer. In the last ten years, he submitted over fifty papers and reviewed hundreds of manuscripts for ICONE. He served as session chair/track leader/workshop organizer of ICONE over twenty times. This year he serves as TPC co-chair of ICONE31.

Mr. Kenichi SATO
Chief Project Manager, Hitachi-GE Nuclear Energy, Ltd. (until October 2023)

He graduated Kyushu University Nuclear Engineering Department in March 1986 and joined Hitachi, Ltd. He had been assigned in Nuclear Power Plant Engineering Department in Hitachi Works, Nuclear Systems Division (NSD) from 1986 to 2005. He was in charge of safety systems design and safety related studies including Probabilistic Safety Assessment and Severe Accident Analysis, and he was promoted to Senior Engineer in Nuclear Reactor Engineering Section in the department in 2000. After spending about two years at Headquarter of Hitachi, Ltd. in Tokyo (NSD had been changed to Hitachi-GE Nuclear Energy, Ltd. (Hitachi-GE) in 2007), he moved to United States for an assignment at newly created Joint Venture with General Electric, GE Hitachi Nuclear Energy for about three years. After joining several global projects, he then moved to United Kingdon to manage UK ABWR Generic Design Assessment from 2013 to 2019, where Hitachi-GE obtained the first clearn Design Acceptance Certificate from Office for Nuclear Regulation with the shortest duration. He reruned to Japan in March 2019 and has been assigned to develop BWRX-300.

Contributions to past ICONE Conferences:

Track Leaders:
ICONE-12 (2004): Track 5 Safety and Security
ICONE-13 (2005): Track 5 Safety and Security
ICONE-14 (2006): Track 6 Safety and Security
ICONE-15 (2007): Track 6 Safety and Security
ICONE-16 (2008): Track 6 Safety and Security

Organizing Committee Members:
ICONE-11 (2003): Assistant Technical Program Chair
ICONE-28 (2021): Steering Committee member
ICONE-29 (2022): Steering Committee member
ICONE-30 (2023): Steering Committee member

Workshops

All workshops will be held on Sunday, August 4.

9:00AM–4:30PM

CFD (Computational Fluid Dynamics)

The CFD seminar will target young researchers and engineers to provide the basis and results for selection of several CFD applications for certain thermal-hydraulic problems. Wide variety knowledge and up-to-date information on CFD will be presented by international CFD specialists. The presentations may begin with the fundamental equations and numerical solution methods, and then continue to recent developments and some practice guidelines of CFD for nuclear engineering applications. Informal discussions and questions will be conducted.

Chair: Yassin Hassan, Texas A&M University
Co-Chair: Wenxi Tian, Xi'an Jiaotong University
Co-Chair: Hiroyuki Yoshida, JAEA

Speakers:

Yassin Hassan, Texas A&M University
Wenxi Tian, Xi'an Jiaotong University
Hiroyuki Yoshida, JAEA
Elia Merzari, Penn State University
Guangliang Chen, Harbin Engineering University
Sofiane Benhamdouche, EDF

9:00AM–4:30PM

Thermal Hydraulic Methods, Experimentation, and Safety Analysis

This workshop will present an overview of some of the key Thermal-Hydraulic methodologies, experimentation procedure, and its application to nuclear power plants. The relevant computer code model and theory will be described, and real experimental work will be presented and discussed. Meanwhile, computer code simulations of experiments and benchmarking will both be presented. For exchanging information and experience purposes, this workshop is applicable to both students/professors and engineers in the relevant industry fields.

Chair: Guoqiang Wang,
Pacific Northwest National Laboratory
Co-Chair: Liangming Pan, Chongqing University

Speakers:

Guoqiang Wang, Pacific Northwest National Laboratory
Liangming Pan, Chongqing University
Akiko Kaneko, University of Tsukuba
Ivan Otic, Karlsruhe Institute of Technology
Shripad Revankar, Purdue University
Xiong Jinbiao, Shanghai Jiao Tong University
Asif Arastu, Unisont Engineering, Inc.
Kral Pavel, UJV Rez

1:30PM–5:00PM

Nuclear Codes & Standards

This workshop will promulgate an open technical exchange of information and sharing of lessons learned in response to current codes and standards' needs. All interested stakeholders will contribute toward the development and modification of codes, standards, and conformity assessment activities and help identify international collaboration efforts.

Chair: Dale Matthews, Framatome

Co-Chair: Shi Wei, Shanghai Nuclear Engineering Research and Design Institute
Co-Chair: Keiji Matsunaga, Toshiba ESS

Speakers:

Bob Keating
Shi Wei, Shanghai Nuclear Engineering Research and Design Institute
Keiji Matsunaga, Toshiba ESS
Makoto Nakajima, Mitsubishi Heavy Industries
Pascal Durant, Framatome

9:00AM–4:30PM

Advanced Technology-Artificial Intelligence (AI), Advanced Manufacture (AM), & High-Performance Computing (HPC) in Nuclear Engineering

This workshop will cover Advanced Technology such as Artificial Intelligence (AI), Advanced Manufacture (AM), &High-Performance Computing (HPC) used in Nuclear Engineering. The topics include AI methods in handling and processing large data, and decision making, advanced manufacturing employed for nuclear components such as heat exchangers, and reactor cores, high-performance computing to simulate reactor dynamics, and integrated systems.

Chair: Jovica Riznic, Canadian Nuclear Safety Commission
Co-Chair: Tan Sichao, Harbin Engineering University
Co-Chair: Kimitoshi Yoneda

Speakers:

Jiejuan Tong, Tsinghua University
Atsushi Ui, CRIEPI (Central Research Institute of Electric Power Industry)
Longxiang Zhu, Chongqing University
Chen Hao, Harbin Engineering University
Paul Cheng, FuseRing

9:00AM–12:30PM

Verification & Validation Activities in Nuclear Systems

Verification and validation (V&V) are part of the development process and are directly related to the quality assurance (QA) process. V&V include a strong element of checking and leads to remedial action. Verification and validation are essential components of the nuclear data development process, and software package or computer code development process, since only those data or codes that have been demonstrated to accurately simulate real-life applications can be relied upon for those applications. The workshop will cover the basics of V&V methodologies, techniques, and tools used in nuclear systems that will include the code development cycle, data validation, and related topics.

Chair: Yassin Hassan, Texas A&M University
Co-Chair: Yanhua Yang, Shanghai Jiao Tong University
Co-Chair: Masaaki Tanaka, JAEA

Speakers:

Yanhua Yang, Shanghai Jiao Tong University
Sofiane Benhamdouche, EDF
Shuhui Zhang, Shanghai Nuclear Engineering Research and Design Institute
Elia Merzari, Penn State University
Masaaki Tanaka, JAEA

Opening Ceremony & Keynote

Monday, August 5, 2024 | 8:30AM–10:00AM

Opening Ceremony & Keynote Session

Opening Ceremony
Asif Arastu, Chair ICONE31
Hidehito Mimaki, C- Chair ICONE31
Jianqiao LIU, Co-Chair ICONE31

Welcome Remarks

Thomas Costabile, P.E., FASME
Executive Director / CEO

WANG Shoujun, President of Chinese Nuclear Society (CNS)
Chikako Iwaki, President-elect of The Japan Society of Mechanical Engineers (JSME)

Leon Cizelj, Jožef Stefan Institute

Fellow ASME. Associate member of the Engineering Academy of Slovenia.

Head of Reactor Engineering Division of the Jožef Stefan Institute, Ljubljana, Slovenia (http://r4.ijs.si/en). Responsible for the strategic and operational leadership of the division active in the field of nuclear engineering and safety of nuclear installations. Activities include research, postgraduate education, technical and scientific support to the Slovenian nuclear regulatory body and technical and scientific consulting to end users.

Full professor of nuclear engineering at the University of Ljubljana, Slovenia, Faculty of mathematics and physics.

President of the ENEN (European Nuclear Education Network www.ENEN.eu) 2016-2020 and European Nuclear Society 2022-23.

Member of the Board of Sustainable Nuclear Energy Technology Platform (www.SNETP.eu) and European Technical Safety Organization Network (www.ETSON.eu)

Member of the editorial boards of Nuclear Engineering and Design and Science and Technology of Nuclear Installations.

Ph. D. in Physics 1993, University of Ljubljana, Slovenia.

Author or coauthor of more than 950 publications more than 200 interventions in the Slovenian mainstream media (energy, nuclear energy, COVID-19 epidemics).

Plenary Sessions

Monday, August 5, 2024 | 10:30AM–12:00PM

Current Status of Nuclear Power

The Plenary is on the current status of nuclear power, including the operating reactors built since 1970s, new constructions, new designs including advanced reactors, nuclear power share in electricity production, nuclear industry initiatives, challenges, and opportunities

Chair: Shripad Revankar, Purdue University
Co-Chair: Suyuan Yu, Tsinghua University
Co-Chair: Hidehito Mimaki, Mitsubishi Heavy Industries
Co-Chair: Rosa Lo Frano, Pisa University

Speakers:
Hongxing Yu, Nuclear Power Institute of China
Satoru Yasuraoka, Agency for Natural Resources and Energy, METI

Tuesday, August 6, 2024 | 8:30AM–10:00AM

The Future of Nuclear Power

The plenary on the future of nuclear power examines the roles of nuclear power in energy production in the future to address global warming, new designs, and capability to cater new demands in energy including non-applications, varied applications of nuclear power including propulsion and transport, chemical and hydrone production, and integrated system with renewables.

Chair: Yassin Hassan, Texas A&M University
Co-Chair: Sichao Tan, Harbin Engineering University
Co-Chair: Tomio Okawa, The University of Electro-Communications
Co-Chair: Guoqiang Wang, Pacific Northwest National Laboratory

Speakers
Shi Wei, Shanghai Nuclear Engineering Research and Design Institute
Hideki Masui, JAIF (Japan Atomic Industrial Forum)
Jiří Duspiva, Czech Nuclear Society

Tuesday, August 6, 2024 | 10:00AM–12:00PM

Small Modular Reactor – Global Perspective

The plenary on Small Modular Reactor – Global Perspective examines SMR development, types of SMRs, international collaborations, construction potentials, economic impacts, and SMR applications.

Chair: Leon Cizelj, Jožef Stefan Institute
Co-Chair: Xiaojing Liu, Shanghai Jiao Tong University
Co-Chair: Kimitoshi Yoneda, CRIEPI (Central Research Institute of Electric Power Industry)
Co-Chair: Jovica Riznic, Canadian Nuclear Safety Commission

Speakers:
Igor Pioro, OntarioTech University
Liu Baoting, CGN Clean Energy Technology
Hiroyuki Sato, JAEA
Petr Vácha, UJV Řež

Panels

Construction of New Nuclear Plants

Tuesday, August 6, 2024 | 3:00PM–4:30PM

The panel will delve into the intricate processes and challenges involved in building these complex facilities. Experts will discuss various construction methodologies, safety protocols, and technological advancements shaping the future of nuclear power plant development. Key topics include project management strategies, regulatory considerations, and environmental impacts associated with nuclear power plant construction.

Chair: Brian Fant, Bechtel Corporation
Co-Chair: Yuxiang Wu, China National Nuclear Corporation/China Nuclear Power Engineering Co., Ltd.

Speakers:
Sam Peach, Bechtel Corporation
Yuxiang Wu, China National Nuclear Corporation/China Nuclear Power Engineering Co., Ltd.
Petr Závodský, ČEZ EDUI

Women in Nuclear Engineering

Tuesday, August 6, 2024 | 3:00PM–4:30PM

In this panel session of Women in Nuclear Engineering, female engineers, scientists and other experts will talk and discuss their roles in the nuclear industry. They are working in nuclear energy and technology fields and helping to empower the next-generation nuclear workforce around the globe.

Chair: Rosa Lo Frano, University of Pisa
Co-Chair: Puzhen Gao, Harbin Engineering University
Co-Chair: Chikako Iwaki, Toshiba ESS

Speakers:
Puzhen Gao, Harbin Engineering University
Naoko Inoue, JAEA
Larisa Dubská, ČNS – WIN
Yongmei Wang, Nuclear Industry College

Nuclear-Renewable Integrated Systems

Wednesday, August 7, 2024 | 10:30AM–12:00PM

The panel will focus on the integration of nuclear energy with renewable energy. The nuclear energy being a base load will complement intermittent renewable energy in providing demand-based power supply. The systems development activities, configurations, demonstrations, safety, challenges, and opportunities are explored in this panel.

Chair: Shripad Revankar, Purdue University
Co-Chair: Dalin Zhang, Xi'an Jiaotong University

Speakers:
Shripad Revankar, Purdue University
Dalin Zhang, Xi'an Jiaotong University
Aleš Doucek, UJV Řež
Yan Xing, JAEA

Robust Fuel Development

Wednesday, August 7, 2024 | 10:30AM–12:00PM

The development of Robust or Accident Tolerant Fuel (ATF) has become an international area of interest and effort in the last few years. Conceptually, ATF would provide leap-ahead improvement in LWR fuel safety during beyond design basis accidents and commercial benefit to nuclear utilities.

Accelerated by the severe accident at the Fukushima Daiichi nuclear power plant in Japan, a variety of research and commercial analysis of ATF is presently underway globally.

The goal of this effort is insertion of ATF lead test rods and assemblies into a commercial PWR. This panel will present and discuss the state-of-art knowledge of ATF from the point of view of industry, government, nonprofit research agencies, and academic representatives currently leading global ATF development. The significant challenges in development and implementation of ATF, such as large-scale ATF fabrication, acceptance by nuclear utilities, the role of government and inter-government agencies in ATF research oversight, and the engineering and scientific challenges to develop ATF will be presented. The goal of this panel is to communicate the current understanding of the commercial and technical challenges faced in ATF development.

Chair: Guoqiang Wang, PNNL

Co-Chair: Xiaomei Li, China Institute of Atomic Energy
Co-Chair: Fumiaki Inoue, Toshiba ESS

Speakers:

Jorie Walters, Westinghouse
Karl Buchanan, Framatome
Ke Shen, Hunan University
Shinichiro Yamashita, JAEA
Fumiaki Inoue, Toshiba ESS
Jan Klouzal, UJV Rez

Advanced Manufacturing

Wednesday, August 7, 2024 | 1:00PM–2:30PM

Advanced Manufacturing technologies have the capability to significantly improve the cost, schedule, and quality associated with manufacturing nuclear components. This panel will feature presentations from panelists that are leading work around the world to progress the development of Advanced Manufacturing technology.

Chair: Thomas Vogan, Sargent & Lundy
Co-Chair: Dale Matthews, Framatome
Co-Chair: Lu Qi, Nuclear Power Institute of China
Co-Chair: Yasutaka Banno, Mitsubishi Heavy Industries

Speakers:

Karl Buchanan, Framatome
Paul Cheng, FuseRing
Dale Matthews, Framatome
Tianfu Li, China Institute of Atomic Energy
Yasutaka Banno, Mitsubishi Heavy Industries
Josef Strejcius, Research Center Řež
Thomas Garnier, Framatome

Nuclear Energy for Non-Power Generation

Wednesday, August 7, 2024 | 1:00PM - 2:00PM

The panel on Nuclear Energy for Non-Power Generation will focus on a variety of nuclear energy applications, including transport, heating, chemical, and hydrone production, and integrated systems with renewables.

Chair: Frank Michell
Co-Chair: Jian Li, Tsinghua University
Co-Chair: Maury Pressburger, Sargent & Lundy

Speakers:

Gilles Rodriguez
Jan Klouzal, UJV Rez
Rosa Lo Frano, University of Pisa
Hiroyuki Sato, JAEA

Fukushima-Daiichi Panel

Wednesday, August 7, 2024 | 1:00PM–2:30PM

This panel will discuss the current status, lessons learned, and actions of the post–Fukushima Daiichi accident.

Chair: Tadashi Narabayashi, Tokyo Institute of Technology
Co-chair: Yassin Hassan, Texas A&M University
Co-chair: Leon Cizelj, Jozef Stefan Institute

Speakers:

Kenji Takeshita, Tokyo Institute of Technology
Shinya Mizokami, Tokyo Electric Power Company Holdings
Leon Cizelj, Jozef Stefan Institute

Nuclear Applications in Space

Thursday, August 8, 2024 | 1:00PM - 2:30pm

This panel will focus on Nuclear Applications in Space. As known, nuclear-based systems can have less mass than solar cells of equivalent power, allowing more compact spacecraft that are easier to orient and direct in space. In the case of crewed spaceflight, nuclear power concepts that can power both life support and propulsion systems may reduce both cost and flight time.

Chair: Hitesh Bindra, Purdue University

Co-Chair: Zhenchao Liu, Xi'an Jiaotong University

Speakers:

Hitesh Bindra, Purdue University
Dongfeng Chen, China Institute of Atomic Energy
Asif Arastu, Unisont, Inc
Eric Proust, CEA, France

SMRs and Advanced Reactors

Thursday, August 8, 2024 | 1:00PM–2:30PM

This panel will consist of seven global nuclear technology leaders in advanced and small modular reactors. They will present and discuss technology development progress and status on SMR, advanced reactors, High Temperature Gas Cooled (HTGC) Reactor, and other advanced reactor technologies.

Chair: Jovica Riznic, Canadian Nuclear Safety Commission
Co-Chair: Xiang Wang, Harbin Engineering University
Co-Chair: Kazuaki Kito, Hitachi-GE Nuclear Energy

Speakers:

Xiang Wang, Harbin Engineering University
Kazuaki Kito, Hitachi-GE Nuclear Energy
David Harut, Research Center Řež
Igor Pioro, Ontario Tech
Daniel Klein, EPRI

Technical Sessions

Time	Title	Room
8:30AM - 10:00AM	ICONE Opening and Keynote Session	Congress Hall 2, Lower Level
10:00AM - 10:30AM	Refreshment Break	Congress Hall Foyer, Lower Level
10:00AM - 4:00PM	EXPO Open	Congress Hall Foyer, Lower Level
10:30AM - 12:00PM	Plenary Session 1: Current Status of Nuclear Power	Congress Hall 2, Lower Level
12:00PM - 1:00PM	Ticketed Lunch	Atrium Restaurant
1:00PM - 2:30PM	ICONE Technical Session	See App for specific locations
2:30PM - 3:00PM	Refreshment Break & Poster Session	Congress Hall Foyer, Lower Level
3:00PM - 4:30PM	ICONE Technical Session	See App for specific locations
4:45PM - 6:15PM	ICONE Technical Session	See App for specific locations
6:30PM - 8:00PM	ICONE Welcome Reception	Congress Hall Foyer, Lower Level

MONDAY, 8/5/2024

10-01: Advanced Manufacturing 1

8/5/2024 1:00PM–2:30PM - Palmovka 4

Chair: Antony Hurst - Engineering Analysis Services Limited

Co-Chair: Asif Arastu - Unisont Engineering, Inc.

Co-Chair: Miltos Alamaniotis - The University of Texas at San Antonio

Co-Chair: Emre Tatli - Westinghouse

Co-Chair: Yuan Gaihuan - State Nuclear Baoti Zirconium Industry Company

Co-Chair: Yasuhiro Ishijima - Japan Atomic Energy Agency

Co-Chair: Ting Jin - CNPEC

Co-Chair: Shinobu Okido - NA

Co-Chair: Wan Sun - Chognqing University

Co-Chair: Yoshinori Katayama - Toshiba Energy Systems & Solutions Corporation

Co-Chair: Akemi Nishida - Japan Atomic Energy Agency

Co-Chair: Guoqiang Wang - Westinghouse Electric Co.

Evaluation of Material Properties for Additively Manufactured Type 316l Stainless Steel

Technical Presentation Only: ICONE31-132637

Shuhei Matsunaga - Hitachi-GE Nuclear Energy, Ltd.

Fluid-Structure-Soil Interaction Study for Nuclear Facilities With Large Pool Water Considering Nonlinear Structural Behavior

Technical Paper Publication: ICONE31-133230

Yuki Sato - JGC Corporation

Dan M. Ghiocel - Ghiocel Predictive Technologies, Inc.

Shunji Kataoka - JGC Corporation

Yasutomi Morimoto - JGC Corporation

Using Radius of Gyration in Order to Determine Surrogate Mechanical Properties of a Porous Structure

Technical Paper Publication: ICONE31-133321

Oksana Shiman - CNL

Michel Gaudet - CNL

Enhancing Image Quality in Limited-Angle CT Reconstruction for Reactor Pressure Pipelines Detection

Technical Paper Publication: ICONE31-133650

Jintao Fu - Tsinghua University

Jiahao Chang - Tsinghua University

Yuewen Sun - Tsinghua University

Tianchen Zeng - Tsinghua University

Peng Tang - Tsinghua University

Shuo Xu - Tsinghua University

Peng Cong - Tsinghua University

A Novel Optical Chamber Design and Shielding Optimization for Application in Liquid Scintillation Counting

Technical Paper Publication: ICONE31-134157

Husheng Wang - Wuhan Second Ship Design and Research Institute

Liangzhou Zuo - Wuhan Second Ship Design and Research Institute

Yangyang Yan - Wuhan Second Ship Design and Research Institute

Hao Jiang - Wuhan Second Ship Design and Research Institute

Jie Wang - Wuhan Second Ship Design and Research Institute

Introduction of the Design and Validation Program for Lower Reactor Internal Structures of Advanced Light Water Reactor Srz-1200

Technical Presentation Only: ICONE31-134938

Masayoshi Mori - Mitsubishi Heavy Industry

Shinjiro Inomata - Mitsubishi Heavy Industry

Makoto Nakajima - Mitsubishi Heavy Industry

Kazuhiro Yoshida - Mitsubishi Heavy Industry

15-01

8/5/2024 1:00PM–2:30PM - Karlin 2

Chair: Shripad Revankar - Purdue University

Co-Chair: Kin Wing Wong - KTH Royal Institute of Technology

Co-Chair: Yutong Chen - Xi'an Jiaotong University

Analyzing Flow Rate Impact on Chf Front Behavior During Boiling Crisis in Downward Flow Boiling

Technical Paper Publication: ICONE31-124786

Shixian Wang - The University of Tokyo

Kai Wang - Sun Yat-sen University

Shuichiro Miwa - The University of Tokyo

Koji Okamoto - The University of Tokyo

Enabling Passive Scalar Wall Modelling in Large Eddy Simulation for Turbulent Flows at High Schmidt or Prandtl Numbers

Technical Paper Publication: ICONE31-130423

Kin Wing Wong - KTH Royal Institute of Technology

Ignas Mickus - KTH Royal Institute of Technology

Dmitry Grishchenko - KTH Royal Institute of Technology

Pavel Kudinov - KTH Royal Institute of Technology

Criticality and Burnup Analysis of Accident-Tolerant Fuels in High-Temperature Test Reactor

Technical Paper Publication: ICONE31-130621

Yan-Xin Chen - Institute of Nuclear Engineering and Science, National Tsing Hua University

Shin-Rong Wu - Institute of Nuclear Engineering and Science, National Tsing Hua University

Der-Sheng Chao - Nuclear Science and Technology Development Center (NSTDC) , National Tsing Hua University

Jhao-Yang Hong - Engineering and System Science, National Tsing Hua University

Jenq-Horng Liang - Institute of Nuclear Engineering and Science, National Tsing Hua University

Design, Development and Testing of Large Diameter High Temperature Alkaline Metal Heat Pipe

Technical Paper Publication: ICONE31-134437

Jiarui Zhang - Xi'an Jiaotong University

Chenglong Wang - Xi'an Jiaotong University

Zhixing Tian - Xi'an Jiaotong University

Kailun Guo - Xi'an Jiaotong 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

Numerical Investigation of Postuated Steam Generator Tube Rupture Accident in a Lead-Cooled Fast Reactor

Technical Paper Publication: ICONE31-134478

Yutong Chen - Xi'an Jiaotong University

Dalin Zhang - Xi'an Jiaotong University

Zhenyu Feng - Xi'an Jiaotong University

Yue Lin - Xi'an Jiaotong University

Wenxi Tian - Xi'an Jiaotong University

Suizheng Qiu - Xi'an Jiaotong University

Guanghui Su - Xi'an Jiaotong University

Preliminary Study on Laser Inertial Confinement Fusion Reactor Energy Transfer

Technical Paper Publication: ICONE31-134501

Xinze Li - Xi`an Jiaotong University

Ronghua Chen - Xi`an Jiaotong University

Bingqian Zhang - Xi`an Jiaotong University

Kui Zhang - Xi`an Jiaotong 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

06-01 Nuclear Codes, Standards, Licensing, & Regulatory Issues Session 1

8/5/2024 1:00PM–2:30PM - Liben 3

Chair: Thomas Vogan - Sargent & Lundy

Co-Chair: Dale Matthews - Framatome

Effect of Pressure Acting on the Flaw Surface on Plastic Collapse Strength of Pipes With the Circumferential Surface Flaw

Technical Paper Publication: ICONE31-126112

Hideo Machida - Tepco Systems Corporation

Model Evaluation and Parallelization of Subchannel Analysis Code for Full-Core Pin-by-Pin Analysis

Technical Paper Publication: ICONE31-133784

Zhonghao Yu - Shanghai Jiao Tong University

Jinbiao Xiong - Shanghai Jiao Tong University

Research on Quality Assurance Requirements for Manufacturing Special Non Safety Items in High Temperature Gas Cooled Reactors

Technical Presentation Only: ICONE31-133177

Yanping Zhou - Tsinghua University

Progress on the Development of Dayu3d Code for Htr Thermal-Hydraulic Design and System Analysis

Technical Paper Publication: ICONE31-134375

Haojie Zhang - Tsinghua University

Ding She - Tsinghua University

Lei Shi - Tsinghua University

Discussion on Radiation Protection for PWR Second-Loop Steam Supply Outside for Industrial Application

Technical Paper Publication: ICONE31-134481

Zhuang Yaping - Shandong Nuclear Power Company

Fang Yuan - Nuclear and Radiation Safety Center

Fang Wu - Shandong Nuclear Power Company

Zhengqiang Miao - Shandong Nuclear Power Company

07-22: Thermal-Hydraulics Research and Applications - III

8/5/2024 1:00PM–2:30PM - Palmovka 1

Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Minyun Liu - Nuclear Power Institute of China

Co-Chair: Alessandro De Angelis - University of Pisa

Transition Mechanism of Supercritical Carbon Dioxide Between Gas-Like and Liquid-Like States

Technical Paper Publication: ICONE31-135342

Minyun Liu - Nuclear Power Institute of China

Yansong Han - Tsinghua University

Yanping Huang - Nuclear Power Institute of China

Dynamic Modeling for Compact Recuperator in Helium Gas Turbine Direct-Cycle System

Technical Paper Publication: ICONE31-135619

Xuyao Geng - Institute of Nuclear and New Energy Technology

Jie Wang - Institute of Nuclear and New Energy Technology

Modelling Melting of Concrete and Its Mixing With Corium During Molten Corium-Concrete Interaction Phenomena Using Openfoam

Technical Paper Publication: ICONE31-136086

Ilyas Khurshid - Khalifa University

Yacine Addad - Khalifa University

Imran Afgan - Khalifa University

Development of a Qualified Plant Nodalization for Steady State and Transient Analysis of Table Top Facility

Technical Paper Publication: ICONE31-136859

Davide Rozzia - SCK-CEN

Loukas Dikonimos Makris - POLIMI

Jan Cools - SCK-CEN

Tom Van Loy - SCK-CEN

Tim Verpoorten - SCK-CEN

Katrien Van Tichelen - SCK-CEN

A Single Channel Thermal-Hydraulic Calculation Module for PWR Pin-by-Pin Wise Coupled Calculation System

Technical Paper Publication: ICONE31-124037

Zhigang Li - Nuclear Power Institute of China

Juejie Pan - Nuclear Power Institute of China

Bangyang Xia - Science and Technology on Reactor System Design Technology Laboratory

Wei Lu - Nuclear Power Institute of China

Wenbo Zhao - Nuclear Power Institute of China

Shenglong Qiang - Nuclear Power Institute of China

09-01: Waste treatment and decontamination

8/5/2024 1:00PM–2:30PM - Palmovka 3

Chair: Anthony Hechanova - Abu Dhabi Polytechnic

Co-Chair: Andrea Chierici - University of Pisa

Design and Research of Radioactive Waste Gas Treatment System for Medical Isotope Test Reactor

Technical Paper Publication: ICONE31-130479

Zhang Yongkang - Nuclear Power Institute of China

Zhang Jinsong - Nuclear Power Institute of China

Yang Huiqing - Nuclear Power Institute of China

Chen Li - Nuclear Power Institute of China

Chen Yunming - Nuclear Power Institute of China

Capability for Volume Reduction of Concrete Contaminated by Radioactive Carbon Dioxide Using Rubbing

Technical Paper Publication: ICONE31-131634

Norikazu Kinoshita - Shimizu Corporation

Hitoshi Nakashima - Shimizu Corporation

Akira Saito - Shimizu Corporation

Mamoru Hanzawa - Shimizu Corporation

Yuki Sasaki - Shimizu Corporation

Kazuyuki Torii - Shimizu Corporation

Optimization Design and Application Analysis of Glass Solidification Product Container Under High Level Liquid Waste Separation Strategy

Technical Paper Publication: ICONE31-135884

Ma Duo - CNNC Long'an Co., Ltd.

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

Wang Jing-Yang - Harbin Engineering University

Optimizing the Scale of Off-Site Emergency Decontamination Infrastructure for Nuclear Power Plants: A Case Study of Daya Bay Nuclear Power Station

Technical Paper Publication: ICONE31-135411

Hongxing Lu - Shenzhen Urban Public Safety and Technology Institute

Jinxing Hu - Chinese Academy of Sciences

Quanyi Lin - Shenzhen Technology Institute of Urban Public Safety

Faming Han - Nuclear and Radiation Safety Management Office of Shenzhen Ecological Environment Bureau

Hudie Huang - Lanzhou University

Development and Optimization Criteria of Cementitious Mortars Used for the Immobilization of ILW Radioactive Waste

Technical Paper Publication: ICONE31-136066

Francesco Rizzo - Sapienza University of Rome

Domenico Rosa - Sapienza University of Rome

Teresa Mangialardi - Sapienza University of Rome

Luca Di Palma - Sapienza University of Rome

Fabio Giannetti - Sapienza University of Rome

09-04: Radiation shielding

8/5/2024 1:00PM–2:30PM - Liben 1

Chair: Anthony Hechanova - Abu Dhabi Polytechnic

Co-Chair: Sohaib Syed - Canadian Nuclear Laboratories

Development of an Integrated Point Kernel Shielding Calculation Code for Fast Three-Dimensional Radiation Field Characterization

Technical Paper Publication: ICONE31-132332

Junyi Chen - Tsinghua University

Ruihan Li - Tsinghua University

Jingang Liang - Tsinghua University

Radiation Shielding Study of PEEK-W and PEEK-B4C Composites

Technical Paper Publication: ICONE31-132433

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

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

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

Layers of Protection When Adapting Advance Technologies to Enable Remote Handling of Radioactive Materials

Technical Paper Publication: ICONE31-133409

Sohaib Syed - Canadian Nuclear Laboratories

Advancement in Shielding Materials: GEANT4 Simulation of Gamma Radiation With Polystyrene-Bismuth Oxide

Technical Paper Publication: ICONE31-133740

Bashir Garba Aminu - Harbin Engineering University

Yongkuo Liu - Harbin Engineering University

Hanan Akhdar - Imam Mohammad Ibn Saud Islamic University

Shamsuddeen Lawal - Harbin Engineering University

Radiation Shielding Design for Dalian Advanced Light Source Beam Test Platform

Technical Paper Publication: ICONE31-135316

E. Dejun - Institute of Advanced Science Facilities

Liming Huang - Institute of Advanced Science Facilities

Changqi Liu - Institute of Advanced Science Facilities

Kai Tao - Institute of Advanced Science Facilities

02-01: Nuclear Fuels and Materials - I

8/5/2024 1:00PM–2:30PM - Karlin 1

Chair: Bin Du - Tsinghua University

Co-Chair: Hakan Ozaltun - U.S. Nuclear Regulatory Commission

Co-Chair: Jiaxuan Li - Institute of Nuclear and New Energy Technology

Oxidation Behavior and Tensile Property of Inconel 617 in the Simulation Environment of the Very-High-Temperature Reactor

Technical Paper Publication: ICONE31-130256

Bin Du - Tsinghua University

Zhiyong Liu - Tsinghua University

Huaqiang Yin - Tsinghua University

Penghui Xiao - Tsinghua University

Huang Zhang - Tsinghua University

Xuedong He - Tsinghua University

Tao Ma - Tsinghua University

Densification and Oxidation Behavior of Zirconium Carbide Produced by Spark Plasma Sintering

Technical Paper Publication: ICONE31-132169

Qisen Ren - China Nuclear Power Technology Research Institute

Lixiang Wu - China Nuclear Power Technology Research Institute

Yang Liu - China Nuclear Power Technology Research Institute

Jun Yan - China Nuclear Power Technology Research Institute

Yehong Liao - China Nuclear Power Technology Research Institute

Weiming Guo - Guangdong University of Technology

Weiqiang Liu - Tsinghua University

The Impact of Oxygen Potential on the Chemical Interaction Behavior Between Fuel Pellets and Cladding

Technical Presentation Only: ICONE31-135483

Shuilin Zhang - Sun Yat-sen University

Yingwu Jiang - Sun Yat-sen University

Jiewei Wu - Sun Yat-sen University

Muyi Ni - Sun Yat-sen University

Study on the Effective Diffusion Coefficient of Inert Gases in Porous Graphite Materials
Technical Paper Publication: ICONE31-135581
Rui Nie - Tsinghua University
Yu Wang - Tsinghua University
Ziling Zhou - Tsinghua University
Weihua Zhang - Tsinghua University
Feng Xie - Tsinghua University
Hong Li - Tsinghua University
Liqiang Wei - Tsinghua University
Zhixiang Fan - Xihua University
Jia Fu - Xihua University
Qunchao Fan - Xihua University

Investigation on Oxidation Behaviors of FeCrAl Alloy Cladding Under the Simulated Loca Conditions
Technical Paper Publication: ICONE31-135966
Kang Chen - Chongqing University
Zhengang Duan - Chongqing University
Qinglong Wen - Chongqing University
Ruiqian Zhang - Nuclear Power Institute of China

Adsorption and Diffusion of Silver on SiC(111) and ZrC(111) Surfaces: A First Principles Study
Technical Paper Publication: ICONE31-137055
Jiaxuan Li - Tsinghua University
Hongwei Zhu - Tsinghua University
Taowei Wang - Tsinghua University
Zelin Gao - Tsinghua University
Xiaotong Chen - Tsinghua University
Gang Xu - Tsinghua University
Bing Liu - Tsinghua University
Yaping Tang - Tsinghua University

04-01: SMRs, Advanced Reactors, and Fusion

8/5/2024 1:0 PM–2:30PM - Karlin 3

Chair: Rosa Lo Frano - University of Pisa

Research on Pressure Suppression and Against Hydrogen Risk of the SMR in Floating Nuclear Power Plants
Technical Paper Publication: ICONE31-130396
Jialei Chen - North China Electric Power University
Xuefeng Lyu - North China Electric Power University
Jiayu Zhang - North China Electric Power University
Shengfei Wang - North China Electric Power University
Houjian Zhao - North China Electric Power University
Fang Liu - North China Electric Power University
Yu Yu - North China Electric Power University

Analysis of SMR Reactor Coolant System in Apros
Technical Paper Publication: ICONE31-131299
Ye Zhu - Nuclear Power Institute of China
Wang Xinbo - Nuclear Power Institute of China
Liao Xianwei - Nuclear Power Institute of China
Cai Zhiyun - Nuclear Power Institute of China
Liu Minghao - Nuclear Power Institute of China

Analysis of Communication Requirements for the "Intelligent Operation and Maintenance System" of Mobile Small Reactors
Technical Paper Publication: ICONE31-131270
Fangxiaozhi Yu - China Nuclear Power Engineering Co., Ltd.
Hao Dong - China Nuclear Power Engineering Co., Ltd.

Analysis of Coordinated Development Between SMR and Papermaking Industry in China
Technical Paper Publication: ICONE31-132055
Ping Wang - China Nuclear Power Engineering Co., Ltd.

Research on Automatic Layout Method of Nuclear Power Plant Equipment Based on Genetic Algorithm
Technical Paper Publication: ICONE31-135851
Jincheng Su - China Nuclear Power Engineering Co., Ltd.
Xiaopan Jia - China Nuclear Power Engineering Co., Ltd.
Xiaoshan Zhao - China Nuclear Power Engineering Co., Ltd.
Dong Hao - China Nuclear Power Engineering Co., Ltd.

Status of the Light Water Small Modular Reactors Research at Oregon State University
Technical Paper Publication: ICONE31-135989
Izabela Gutowska - Oregon State University
Trevor Kent Howard - Oregon State University
Qiao Wu - Oregon State University
Brian G. Woods - Oregon State University

08-01: Computational Fluid Dynamics (CFD) and Applications - I

8/5/2024 1:00PM–2:30PM - Palmovka 2

Chair: Yassin Hassan - Texas A&M
Co-Chair: Elia Merzari - Pennsylvania State University
Co-Chair: Guoqiang Wang - Westinghouse Electric Co.
Co-Chair: Xiaobo Zeng - Harbin Engineering University
Co-Chair: Ma Yue - Tsinghua University

Assessment of CFD Methods in Simulating Flowfield in a Vane-Type Separator
Technical Paper Publication: ICONE31-132562
Xiaobo Zeng - Harbin Engineering University
Yifan Xu - Harbin Engineering University
Guangming Fan - Harbin Engineering University
Changqi Yan - Harbin Engineering University

Numerical Simulation of Helium-Xenon Gas Recuperator With Different PCHE Channel Configurations
Technical Paper Publication: ICONE31-133282
Dong Li - Shanghai University of Electric Power
Linfeng Xie - Shanghai University of Electric Power
Cheng Peng - Shanghai University of Electric Power
Ziyue Zhang - Shanghai University of Electric Power

Numerical Investigation on PBM Kernel Functions for the Internal Flow Field of a Steam Separator
Technical Paper Publication: ICONE31-133295
Ma Yue - Tsinghua University
Liu Qianfeng - Tsinghua University
Zhang Huang - Tsinghua University
Luo Lantao - Tsinghua University

Numerical Study on the Vortex Movement in the Bubble Separator for Molten Salt Reactor
Technical Paper Publication: ICONE31-133597
Jiaming Li - Harbin Engineering University
Guangming Fan - Harbin Engineering University
Junyi Zhu - Xi'an Jiaotong University
Xiaobo Zeng - Harbin Engineering University
Shuai Hao - Harbin Engineering University

Simulation of Aerosol Transport Under Spray Control Measures for Floating Reactor Accidents
Technical Paper Publication: ICONE31-134353
Zhe Liu - China Institute for Radiation Protection
Ning Wang - China Institute for Radiation Protection
Yapeng Yang - China Institute for Radiation Protection

Numerical Simulation Study of Flow and Heat Transfer Characteristics of Asymmetric Microchannel Intermediate Heat Exchanger
Technical Paper Publication: ICONE31-136188
Junhao Chu - Luoyang Ship Material Research Institute
Zhe Xu - Luoyang Ship Material Research Institute
Yanxin Zhao - Luoyang Ship Material Research Institute
Xiding Wang - Luoyang Ship Material Research Institute
Wei Wang - Luoyang Ship Material Research Institute
Xinhe Liu - Luoyang Ship Material Research Institute
Dong Zeng - Luoyang Ship Material Research Institute
Wen Fu - Luoyang Ship Material Research Institute
Peiyue Li - Luoyang Ship Material Research Institute

05-01: Probabalistic Safety and Risk Assessment

8/5/2024 1:00PM–2:30PM - Karlin 4

Chair: Fredrick McCrory - Sandia National Laboratories
Co-Chair: Alessandro Petruzzi - Nuclear and Industrial Engineering
Co-Chair: Dmitry Grishchenko - KTH Royal Institute of Technology
Co-Chair: Scott Sanborn - Sandia National Laboratories
Co-Chair: Takeshi Yamada - Hitachi-GE Nuclear Energy, Ltd.
Co-Chair: Tomohiko Ikegawa - Hitachi
Co-Chair: Hideki Horie - Toshiba Corp.
Co-Chair: Patrick Frias - U.S. Department of Energy
Co-Chair: Hongxing Yu - Nuclear Power Institute of China
Co-Chair: Si-chao Tan - Harbin Engineering University
Co-Chair: Ronghua Chen - Xi'An Jiao Tong University
Co-Chair: Songtao Ji -
Co-Chair: Brian Fant - Bechtel

Comparison of Different Methods to Parameterize Errors in Inverse Modeling of Atmospheric Emissions
Technical Paper Publication: ICONE31-134601
Xinwen Dong - Tsinghua University
Yuhan Xu - Tsinghua University
Shuhan Zhuang - Tsinghua University
Hao Hu - Tsinghua University
Sheng Fang - Tsinghua University

Analysis of Common Cause Events in Multiple Reactor Site Initiation Events
Technical Paper Publication: ICONE31-134811
Wanxin Feng - North China Electric Power University
Zecong Li - North China Electric Power University
Yu Yu - North China Electric Power University
Fenglei Niu - North China Electric Power University

The Influence of Seasonal Variation on AP1000 Reliability Under Loop Accident
Technical Paper Publication: ICONE31-135100
Guanyu Liu - North China Electric Power University
Mingzhu Zhang - North China Electric Power University
Bingbing Wang - North China Electric Power University
Yu Yu - North China Electric Power University
Niu Fenglei - North China Electric Power University

Comparative Study of Cluster Analysis Methods in Dynamic Safety Analysis of Nuclear Power Plants
Technical Paper Publication: ICONE31-135943
Mohamedelmogtabh Omer Elfadni Suliman - Harbin Engineering University
He Wang - Harbin Engineering University
Binfu Xiong - Harbin Engineering University

Research on Dynamic Event Tree Analysis Method Considering Spar-H
Technical Paper Publication: ICONE31-136092
Nianchun Qu - Harbin Engineering University
He Wang - Harbin Engineering University

01-01: Nuclear Plant Operation, Modification, Life Extension, Maintenance and Life Cycle - I

8/5/2024 1:00PM–2:30PM - Florenc 2

Chair: Guoqiang Wang - Westinghouse Electric Co.
Co-Chair: Eduard Diaz - Technische Universität Dresden
Co-Chair: Ze Xi - Tsinghua University
Co-Chair: Koji Yamada - Chubu Electric Power Co., Inc.

Radiation Field and Dose Assessment of Pressure Vessel Opening Operation for HPR1000
Technical Paper Publication: ICONE31-130579
Ya Xu - China Nuclear Power Engineering Co., Ltd.
Yingnan Tian - China Nuclear Power Engineering Co., Ltd.
Yedi Chang - China Nuclear Power Engineering Co., Ltd.
Jingyi Shen - China Nuclear Power Engineering Co., Ltd.
Aijun Mi - China Nuclear Power Engineering Co., Ltd.
Yawei Mao - China Nuclear Power Engineering Co., Ltd.
Xiaoxia Wang - China Nuclear Power Engineering Co., Ltd.
Bingheng Wang - China Nuclear Power Engineering Co., Ltd.
Siyang Xie - China Nuclear Power Engineering Co., Ltd.

Impact Assessment of the Integration of a Large-Scale Hydrogen Cogeneration Facility Into a VVER Power Plant

Technical Paper Publication: ICONE31-130640

Eduard Diaz-Pescador - Technische Universität Dresden

Marco Viebach - Technische Universität Dresden

Florian Gamaleja - Technische Universität Dresden

Antonio Hurtado - Technische Universität Dresden

The Status and Trend of In-Situ Gamma-Spectrometry Technology in Measuring Sedimentary Source Terms in Pressurized Water Reactors

Technical Paper Publication: ICONE31-131787

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

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

Xinming Huang - Daya Bay Nuclear Power Operations and Management Co., Ltd.

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

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

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

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

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

Preliminary Study on Endoscopic Ultrasound System for In-Service Inspection of Helical-Tube Once-Through Steam Generator

Technical Paper Publication: ICONE31-131874

Ze Xi - Tsinghua University

Xiangang Wang - Tsinghua University

Xiaowei Luo - Tsinghua University

Junjie Zhou - Tsinghua University

Lei Song - Tsinghua University

Research on Hydrogen Production Technology of China Fast Reactor (CFR1000)

Technical Paper Publication: ICONE31-132454

Zhiwen Dai - Xiapu Nuclear Power Corporation (China National Nuclear Power Corporation

15-02

8/5/2024 3:00PM–4:30PM - Karlin 2

Chair: Shripad Revankar - Purdue University

Co-Chair: Stepan Jedlan - Czech Technical University in Prague

Co-Chair: Haoming Dou - Tsinghua University

Analysis of Different Initial Droplet Parameters on the Motion Behavior of Multi Droplets

Technical Paper Publication: ICONE31-132390

Zhanwei Liu - Tsinghua University

Wen He - Tsinghua University

Yanlin Li - Tsinghua University

Zhiyuan Sun - Tsinghua University

Hanliang Bo - Tsinghua University

Properties of Irradiated Additively Manufactured 316l Steel for In-Core Applications – Mechanical and Microstructural Analyses

Technical Paper Publication: ICONE31-133131

Stepan Jedlan - Czech Technical University in Prague

Martin Sevecek - Czech Technical University in Prague

Josef Hodek - COMTES FHT a.s.

Antonin Prantl - COMTES FHT a.s.

Jaroslav Soltes - Research Center Rez, s.r.o.

Alica Fedorikova - Research Center Rez, s.r.o.

Michael Sovadina - Research Center Rez, s.r.o.

Investigations on the Debris Bed Formation Behavior of the Heated Solid Particles

Technical Paper Publication: ICONE31-133165

Wenbin Zou - Shanghai Jiao Tong University

Zhaoran Liu - School of Mechanical Engineering

Lili Tong - Shanghai Jiao Tong University

Xuewu Cao - Shanghai Jiao Tong University

Control Study for Automatic Startup of a Pressurizer Water Reactor Nuclear Power Plant

Technical Paper Publication: ICONE31-134529

Qi Zhang - Xi'an Jiaotong University

Wenhao Yu - Xi'an Jiaotong University

Longhao Xiao - Xi'an Jiaotong University

Peiwei Sun - Xi'an Jiaotong University
Xinyu Wei - Xi'an Jiaotong University

Development of Two-Dimensional Heat Conduction Model in Subchannel Code Based on Openfoam
Technical Paper Publication: ICONE31-134543
Zhengyang Dong - Xi'an Jiaotong University
Kai Liu - Xi'an Jiaotong University
Mingjun Wang - Xi'an Jiaotong University
Junmei Wu - Xi'an Jiaotong University
Wenxi Tian - Xi'an Jiaotong University
Suizheng Qiu - Xi'an Jiaotong University
Guanghui Su - Xi'an Jiaotong University

Development of DLOFC Accidents Calculation Function of Dayu Based on Global Direct Solution Algorithm of Flow Field
Technical Paper Publication: ICONE31-134550
Haoming Dou - Tsinghua University
Minggang Lang - Tsinghua University
Ding She - Tsinghua University
Han Zhang - Tsinghua University

10-02 Advanced Manufacturing 2

8/5/2024 3:00PM–4:30PM - Palmovka 4

Chair: Asif Arastu - Unisont Engineering, Inc.
Co-Chair: Emre Tatli - Westinghouse

Research and Application of Projection-Based Augmented Reality (AR) System in Fusion Tokamak Assembly
Technical Paper Publication: ICONE31-132063
Cuicai Dong - China Nuclear Power Engineering Co., Ltd.
Hanjie Xu - China Nuclear Power Engineering Co., Ltd.
Wei Han - China Nuclear Power Engineering Co., Ltd.

Study on Application of the Single-Curvature Polyhedron Hydro-Bulging Technology in Metallic Reactor Containment
Technical Paper Publication: ICONE31-134806
Jianling Dong - Tsinghua University
Xingcheng Huang - Jiangnan Shipyard (Group) Co., Ltd.
Ke Chen - Tsinghua University
Bohao Ning - Tsinghua University

Study on Influence of Braking Circuit and Stator-Rotor Structure on the Damping Characteristics of Permanent Magnet Motor
Technical Paper Publication: ICONE31-135443
Zhiyuan Ren - Tsinghua University
Hongyu Wu - Tsinghua University
He Yan - Tsinghua University
Tianjin Li - Tsinghua University
Xingzhong Diao - Tsinghua University

Calculation of Noble Gas Ion Mobility Based on SRK Gas Equation of State Under High-Pressure Conditions
Technical Paper Publication: ICONE31-135689
Jiahao Chang - Tsinghua University
Jintao Fu - Tsinghua University
Peng Tang - Tsinghua University
Haoyu Liu - Tsinghua University
Zhentao Wang - Tsinghua University
Zhifang Wu - Tsinghua University

Effect of Thermal Cycling on Microstructure and Mechanical Properties of T22/800H DMWs
Technical Paper Publication: ICONE31-135730
Wenwei Luo - Tsinghua University
Mengjia Hu - Tsinghua University
Xiaowei Luo - Tsinghua University
Li Shi - Tsinghua University
Xinxin Wu - Tsinghua University

06-02 Nuclear Codes, Standards, Licensing, & Regulatory Issues Session 2

8/5/2024 3:00PM–4:30PM - Liben 3

Chair: Thomas Vogan - Sargent & Lundy

Co-Chair: Dale Matthews - Framatome

Analysis of the Acceleration Effect of Anderson's Fixed-Point Acceleration Method in Core Neutronics Calculations

Technical Paper Publication: ICONE31-134930

Ping An - Nuclear Power Institute of China

Wei Lu - Nuclear Power Institute of China

Rui Liu - Nankai University

Zhigang Li - Nuclear Power Institute of China

Qifen Tang - Nuclear Power Institute of China

Jie Shen - Nankai University

How Can Governments Help the Private Sector Unlock the Potential of Small Modular Reactors?

Technical Presentation Only: ICONE31-134457

Rohunsingh Sam - University of Leeds

Tristano Sainati - BI Norwegian Business School

Bruce Hanson - University of Leeds

Robert Kay - University of Leeds

Containment Depressurization Rate Requirements for Design Basis Loss-of-Coolant Accidents

Technical Paper Publication: ICONE31-135279

Hua Zheng - NA

Inelastic Analysis and Evaluation Method of High-Temperature Components Based on the Material Data of Incoloy 800H in ASME III-5

Technical Presentation Only: ICONE31-135159

Sixuan He - Tsinghua University

Heng Peng - Tsinghua University

Li Shi - Tsinghua University

Xinxin Wu - Tsinghua University

Research on International Standardization Cooperation and Competition Analysis in Nuclear Field, Taking the United States and France as Examples

Technical Paper Publication: ICONE31-135727

Shangyuan Liu - China Institute of Nuclear Industry Strategy

Wei Wei - China National Nuclear Corporation

Jiang Li - China Institute of Nuclear Industry Strategy

Ruiyuan Deng - China Institute of Nuclear Industry Strategy

07-02: Experiments and Analyses - I

8/5/2024 3:00PM–4:30PM - Palmovka 1

Chair: Luke Placzek - Pacific Northwest National Laboratory

Co-Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Jiahui Zhang - Harbin Engineering University

Experimental Investigation of the Effect of PCS on Hydrogen Stratification Behaviour in Large Enclosed Spaces

Technical Paper Publication: ICONE31-130962

Jiahui Zhang - Harbin Engineering University

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

Hu Yangxing - Harbin Engineering University

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

Hua Yongzhen - China Nuclear Power Engineering Co., Ltd.

Sun Zhongning - Harbin Engineering University

Zhang Nan - Harbin Engineering University

Pre-Test Analysis of a PLOFA Scenario for the Circe-Thetis Facility by Means of Coupled STH/CFD Calculations

Technical Paper Publication: ICONE31-133058

Pietro Stefanini - University of Pisa

Andrea Pucciarelli - University of Pisa

Nicola Forgione - University of Pisa

Ivan Di Piazza – ENEA

Design and Experimental Verification of Passive Residual Heat Removal System for an Alkali-Metal Heat Pipe Cooled Reactor

Technical Paper Publication: ICONE31-133590

Hexin Wu - Xi'an Jiaotong University

Junli Gou - Xi'an Jiaotong University

Ruifeng Wang - Xi'an Jiaotong University

Leqi Yuan - Xi'an Jiaotong University

Jianqiang Shan - Xi'an Jiaotong University

Experimental Study of the Effect of Inclination Angle on the Heat Transfer Characteristics of Steam Condensation in the Vertical Tube

Technical Paper Publication: ICONE31-133818

Jiabao Liu - Harbin Engineering University

Xiaxin Cao - Harbin Engineering University

Peixun Yang - Harbin Engineering University

Thermal Hydraulics Simulation of a Typical Pressurized Water Reactor Coolant System Using CFD Method

Technical Paper Publication: ICONE31-132452

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

Run Lin - China Nuclear Power Design Co., Ltd.

Design and Performance Verification of Passive Core Cooling System Strainer in Nuclear Power Plants

Technical Paper Publication: ICONE31-134892

Ruolin Huang - China Nuclear Power Engineering Co., Ltd.

09-02: Waste Packages and Monitoring

8/5/2024 3:00PM–4:30PM - Palmovka 3

Chair: Anthony Hechanova - Abu Dhabi Polytechnic

Co-Chair: Rosa Lo Frano - University of Pisa

Dynamic Response Analysis of Nuclear Fuel Transport Package Under Actual Drop Loading

Technical Paper Publication: ICONE31-132843

Yuchen Hao - Shanghai Electro-mechanical Engineering Institute

Bin Xu - Shanghai Electro-mechanical Engineering Institute

Xiaohong Zhang - Shanghai Electro-mechanical Engineering Institute

Wenzhao Sun - Shanghai Electro-mechanical Engineering Institute

Yulin Li - Shanghai Electro-mechanical Engineering Institute

Guang Liu - Shanghai Electro-mechanical Engineering Institute

Yan Ma - Tsinghua University

Yue Li - Tsinghua University

Musen Lin - Tsinghua University

Advanced Waste Monitoring: Field Trials of a Wireless Sensor Network for Radioactive Waste Package Integrity Assessment

Technical Paper Publication: ICONE31-133064

Andrea Chierici - Università di Pisa

Riccardo Ciolini - Università di Pisa

Rosa Lo Frano - Università di Pisa

Francesco D'errico - Università di Pisa

Welding Shut Spent Fuel Container Lid W/a Twist

Technical Presentation Only: ICONE31-135283

Paul Cheng - Fusering Inc.

Corrosion of Steel in Bentonite Immersed in Highly Alkaline Solution

Technical Presentation Only: ICONE31-135912

Ryoei Nakasuga - Tokyo Denki University

Hiroyuki Saito - Tokyo Denki University

Masao Uyama - Tokyo Denki University

Reconstruction of Complex Scene Radiation Fields Based on Image Restoration Equation

Technical Paper Publication: ICONE31-135542

Hao Hu - Tsinghua University

Sheng Fang - Tsinghua University

Xinwen Dong - Tsinghua University

Yuhan Xu - Tsinghua University

Shuhan Zhuang - Tsinghua University

09-05: Radiation Protection and Dose Assessment

8/5/2024 3:00PM–4:30PM - Liben 1

Chair: Anthony Hechanova - Abu Dhabi Polytechnic

Co-Chair: Andrea Chierici - University of Pisa

A Summary of Historical Evolution of Radiation Protection Policy From ICRP

Technical Paper Publication: ICONE31-134891

Yufei Huang - Tsinghua University

Zongyuan Zhang - Tsinghua University

Ling Liu - Tsinghua University

Yu Wang - Tsinghua University

Jingni Guo - Tsinghua University

Liqiang Wei - Tsinghua University

Feng Xie - Tsinghua University

Jiejuan Tong - Tsinghua University

Development of an Extra-Trees-Based Program to Calculate Gamma-Ray Exposure and Energy Absorption Buildup Factors

Technical Paper Publication: ICONE31-133464

Zhitao Chen - Harbin Engineering University

Yongkuo Liu - Harbin Engineering University

Jifeng Hu - Harbin Engineering University

Research on Inverse Reconstruction Method of Radiation Dose Distribution Based on RBF Interpolation

Technical Paper Publication: ICONE31-134809

Jifeng Hu - Harbin Engineering University

Yongkuo Liu - Harbin Engineering University

Zhitao Chen - Harbin Engineering University

Xinrong Qian - Harbin Engineering University

Research and First Application of 4d Radiation Dose Calculation in China

Technical Paper Publication: ICONE31-136133

Zhaoxing Liu - China Institute of Radiation Protection

Ri Zhao - China Institute of Radiation Protection

Runcheng Liang - China Institute of Radiation Protection

Jing Zhang - China Institute of Radiation Protection

Xin Liu - China Institute of Radiation Protection

Liye Liu - China Institute of Radiation Protection

SMR Spent Fuel Safety Assessments Through Development of Integrated Nuclear Fuel and Thermal Analysis Code

Technical Presentation Only: ICONE31-137567

Chansoo Lee - Seoul National University

Youho Lee - Seoul National University

02-02: Nuclear Fuels and Materials – II

8/5/2024 3:00PM–4:30PM - Karlin 1

Chair: Yasuhiro Ishijima - Japan Atomic Energy Agency

Co-Chair: Hakan Ozaltun - U.S. Nuclear Regulatory Commission

Co-Chair: Qifeng Zeng - Shanghai Nuclear Engineering Research & Design Institute

Hydrogen Absorption Behavior of the R–SUS304ULC/Ta/Zr Dissimilar Metal Joint Under NaOH Immersion

Technical Paper Publication: ICONE31-132312

Yasuhiro Ishijima - Japan Atomic Energy Agency

Fumiyoshi Ueno - Japan Atomic Energy Agency

Hitoshi Abe - Japan Atomic Energy Agency

Takahiro Igarashi - Japan Atomic Energy Agency

Influence of Chemical Composition on the Liquid Lead-Bismuth Eutectic Corrosion Resistance of Alumina Forming Austenitic Steel

Technical Presentation Only: ICONE31-134306

Jiajian Shi - Sun Yat-sen University

Fanqiang Meng - Sun Yat-sen University

Crevice Corrosion Behaviors of Austenitic Stainless Steel Exposed to High Temperature Liquid Lead-Bismuth Eutectic

Technical Presentation Only: ICONE31-134560

Yuji Huang - Sun Yat-sen University

Fanqiang Meng - Sun Yat-sen University

Preparation and Corrosion Resistance Mechanism of Sic Composite Coatings on the Surface of Graphite Spheres for VHTR Fuel Element

Technical Paper Publication: ICONE31-134744

Hui Yang - Tsinghua University

Hongsheng Zhao - Tsinghua University

Kaihong Zhang - Tsinghua University
Xing Cheng - Tsinghua University
Ziqiang Li - Tsinghua University
Yue Wang - Tsinghua University
Bing Liu - Tsinghua University

Mechanism of Corrosion Resistance Enhancement of 2.5Al Alumina-Forming Austenitic Steel in Supercritical Carbon Dioxide
Technical Presentation Only: ICONE31-135629
Ming Shu - Tsinghua University
Qin Zhou - Tsinghua University
Yongduo Sun - Nuclear Power Institute of China

Effect of Temperature and Lithium Concentration on the Out of Reactor Corrosion Property of SZA Alloys and Model Study
Technical Paper Publication: ICONE31-135893
Qifeng Zeng - Shanghai Jiao Tong University; Shanghai Nuclear Engineering Research & Design Institute Co., Ltd.
Chen Wang - Shanghai Nuclear Engineering Research & Design Institute Co., Ltd.
Ben Wang - State Nuclear Baoti Zirconium Industry Company
Junqiang Lu - Shanghai Nuclear Engineering Research & Design Institute Co., Ltd.
Cong Li - Shanghai Nuclear Engineering Research & Design Institute Co., Ltd.
Lefu Zhang - Shanghai Jiao Tong University
Shengyi Si - Nuclear Power Operations Research Institute

04-02: SMRs, Advanced Reactors, and Fusion

8/5/2024 3:00PM–4:30PM - Karlin 3

Chair: Rosa Lo Frano - University of Pisa

Development of Low-Pressure Loss Separator for Advanced BWRs
Technical Paper Publication: ICONE31-133805
Antonin Povolny - Hitachi-GE Nuclear Energy
Kenichi Katono - Hitachi-GE Nuclear Energy
Naoyuki Ishida - Hitachi-GE Nuclear Energy
Kiyoshi Fujimoto - Hitachi-GE Nuzlear Energy
Kenichi Yasuda - Hitachi-GE Nuclear Energy
Kazuaki Kito - Hitachi-GE Nuclear Energy

Steam-Water Two-Phase Flow Testing Under Nominal Pressure and Temperature Conditions for Natural Circulation Performance of Chimney in BWRX-300 SMR
Technical Paper Publication: ICONE31-134289
Hajime Furuichi - Hitachi-GE Nuclear Energy, Ltd.
Antonin Povolny - Hitachi-GE Nuclear Energy, Ltd.
Kenichi Katono - Hitachi-GE Nuclear Energy, Ltd.
Kenichi Yasuda - Hitachi-GE Nuclear Energy, Ltd.
Kazuaki Kito - Hitachi-GE Nuclear Energy, Ltd.
Charles Heck - Global Nuclear Fuel – Americas, LLC

Assessment of Emergency Planning Zone for Small Modular Pressurized Water Reactors Based on the Risk-Informed Methodology
Technical Paper Publication: ICONE31-134526
Mengxi Wang - China Nuclear Power Engineering Co., Ltd.
Nan Wu - China Nuclear Power Engineering Co., Ltd.
Qun Cao - China Nuclear Power Engineering Co., Ltd.
Jin Yan - China Nuclear Power Engineering Co., Ltd.
Jiaxuan Gao - China Nuclear Power Engineering Co., Ltd.
Jiemin Zhang - China Nuclear Power Engineering Co., Ltd.
Na Xue - China Nuclear Power Engineering Co., Ltd.

Numeral Research on Thermal-Hydraulic Characteristics of Pebble Bed in WCCB Blanket Under In-Box LOCA
Technical Paper Publication: ICONE31-135512
Hanlin Bai - Harbin Engineering University
Jie Cheng - Harbin Engineering University
Shuaiyu Han - Harbin Engineering University
Di Wu - Harbin Engineering University
Jianjun Wang - Harbin Engineering University

Analytical Study of Matching of Dual Compressor Modules With Turbine for Small Modular Reactors
Technical Paper Publication: ICONE31-133224
Frank Lu - The University of Texas at Arlington
Ananthkumar Jayamani - The University of Texas at Arlington
Daejong Kim - The University of Texas at Arlington
John Bolin - General Atomics
Radu Curiac - General Atomics

Hangbok Choi - General Atomics

Three-Dimensional Temperature Field Monitoring of Heat Pipe Reactor Core

Technical Paper Publication: ICONE31-134519

Shidi Wang - Xi'an Jiaotong University

Youqi Zheng - Xi'an Jiaotong University

Xiayu Wang - Xi'an Jiaotong University

Lunhe Fan - Xi'an Jiaotong University

Bowen Xiao - Xi'an Jiaotong University

01-02: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - II

8/5/2024 3:00PM–4:30PM - Florenc 2

Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Pascal Duranton - Framatome

Co-Chair: Bin Zhang - Sun Yat-sen University

Co-Chair: Hiroki Yada - Japan Atomic Energy Agency

Evaluation of Component Cooling System Based on Optimization Algorithm in HPR1000

Technical Paper Publication: ICONE31-130083

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

Hou Ting - China Nuclear Power Engineering Co., Ltd.

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

Finite Element Simulation of Rupture Pressure of Alloy 690 Tubes With Defects

Technical Paper Publication: ICONE31-134269

Bin Zhang - Sun Yat-sen University

Nai Bin Jiang - Sun Yat-sen University

A Brief Introduction to Several Important Design Optimization of Passive Nuclear Power Plants in China

Technical Paper Publication: ICONE31-134488

Baisong Ma - Shandong Nuclear Power Company Ltd.

Zhengqiang Miao - Shandong Nuclear Power Company Ltd.

Yuanhua Ma - Shandong Nuclear Power Company Ltd.

Investigation About Classification of Stresses Due to Radial Deformation Induced by Design Pressure Applied to the Tubes of Square Pitch Multi-Perforated Portion of Thick

Technical Paper Publication: ICONE31-134544

Pascal Duranton - Framatome

Marie Bernion - Framatome

Aboubakr Amzil - Framatome

Divjot Jolly - Framatome

Abdelhak Benrabia - Framatome

Tony Da Silva - EDF

Stress Intensity Factor Solutions for Circumferential Through-Wall Cracks Applicable to Pool Type Sodium Cooled Fast Reactors

Technical Paper Publication: ICONE31-134552

Hiroki Yada - Japan Atomic Energy Agency

Shigeru Takaya - Japan Atomic Energy Agency

Hideo Machida - Tepco Systems Corporation

Research on Optimization of Simulation Models Based on Operational Data in Nuclear Power Plants

Technical Paper Publication: ICONE31-134822

Dong Shubiao - China Nuclear Power Operation Technology Corporation, Ltd.

Zhang Xiaoyu - China Nuclear Power Operation Technology Corporation, Ltd.

Zhang Qianping - China Nuclear Power Operation Technology Corporation, Ltd.

08-02: Computational Fluid Dynamics (CFD) and Applications - II

8/5/2024 3:00PM–4:30PM - Palmovka 2

Chair: Yassin Hassan - Texas A&M
Co-Chair: Guoqiang Wang - Westinghouse Electric Co.
Co-Chair: Hiroyuki Yoshida - Japan Atomic Energy Agency
Co-Chair: Yu Liu - North China Electric Power University
Co-Chair: Ikhwan Khaleb - University of Michigan

Research on Fluid-Structure Coupling of Spent Fuel Storage and Transport Basket Based on Immersed Boundary Element
Technical Paper Publication: ICONE31-134466
Feifan Zhang - North China Electric Power University
Yu Liu - North China Electric Power University
Daogang Lu - North China Electric Power University
Fei Xie - North China Electric Power University

CFD Analysis of Heat Transfer in Molten Salt Fuel Chambers of the Wielenga Innovation Static Salt Reactor (WISSR)
Technical Paper Publication: ICONE31-134475
Ikhwan Khaleb - University of Michigan
Thomas Wielenga - Wielenga Innovation Foundation
Won Sik Yang - University of Michigan

Numerical Simulation of Subchannel Flow Boiling Using Five-Component Wall Boiling Model and IMUSIG Model
Technical Paper Publication: ICONE31-134545
Hanwen Luo - Shanghai Jiao Tong University
Hongbin Wang - Shanghai Jiao Tong University
Jinbiao Xiong - Shanghai Jiao Tong University

Development of the New Crust Model for Analyzing Vulacano VBs-U3 MCCI Experiment with MPS Method
Technical Paper Publication: ICONE31-134499
Takeshi Yamada - Waseda University
Xin Li - Japan Atomic Energy Agency
Takuya Yamasita – Japan Atomic Energy Agency
Akifumi Yamaji - Waseda University

Evaluation of Coolant Mixing Characteristics in the Lower Plenum of a Scaled PWR With Openfoam
Technical Paper Publication: ICONE31-134558
Lilia Djebara - Harbin Engineering University
Hongyang Wei - Harbin Engineering University
Cheng Yang - Harbin Engineering University
Sichao Tan - Harbin Engineering University
Ruifeng Tian - Harbin Engineering University

05-02: Nuclear Safety and Emergency Preparedness

8/5/2024 3:00PM–4:30PM - Karlin 4

Chair: Fredrick McCrory - Sandia National Laboratories
Co-Chair: Brian Fant - Bechtel
Co-Chair: Alessandro Petruzzi - Nuclear and Industrial Engineering
Co-Chair: Dmitry Grishchenko - KTH Royal Institute of Technology
Co-Chair: Scott Sanborn - Sandia National Laboratories
Co-Chair: Takeshi Yamada - Hitachi-GE Nuclear Energy, Ltd.
Co-Chair: Tomohiko Ikegawa - Hitachi
Co-Chair: Hideki Horie - Toshiba Corp.
Co-Chair: Patrick Frias - U.S. Department of Energy
Co-Chair: Hongxing Yu - Nuclear Power Institute of China
Co-Chair: Si-chao Tan - Harbin Engineering University
Co-Chair: Ronghua Chen - Xi'An Jiao Tong University
Co-Chair: Songtao Ji -

Gas Leakage Test for Radioactive Materials Transport Package With Vibration
Technical Paper Publication: ICONE31-134287
Qian Sun - China Institute for Radiation Protection
Pengyi Wang - China Institute for Radiation Protection
Lei Chen - China Institute for Radiation Protection
Juying Bai - China Institute for Radiation Protection
Limin Jiao - China Institute for Radiation Protection
Zhipeng Wang - China Institute for Radiation Protection
Dajie Zhuang - China Institute for Radiation Protection
Hongchao Sun - China Institute for Radiation Protection

Research on the Optimization of Emergency Planning Zone Determination Based on the Weather Stratified Sampling Method

Technical Paper Publication: ICONE31-134371

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.

Research on Decontamination Site Selection and Personnel Allocation Under Off-Site Nuclear Emergency

Technical Presentation Only: ICONE31-134549

Ruan Fang - University of Science and Technology of China

Chen Chunhua - Hefei Institute of Physics Science

Cheng Yuan - University of Science and Technology of China; Anhui Jianzhu University

Sun Yuanyuan - Hefei Institute of Physics Science

Research on Simulation of Emergency Evacuation Outside Nuclear Power Plants Based on Genetic Algorithm and Variable Neighborhood Search Algorithm

Technical Paper Publication: ICONE31-134621

Yan Jin - China Nuclear Power Engineering Co., Ltd.

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

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

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

Liang Long - China Nuclear Power Engineering Co., Ltd.

Na Xue - China Nuclear Power Engineering Co., Ltd.

15-03

8/5/2024 4:45PM–6:15PM - Karlin 2

Chair: Shripad Revankar - Purdue University

Co-Chair: Jasmine Hamelberg - Tokai University

Co-Chair: Noshi Yusuke -

Fundamental Experiment of Gas Entrainment Phenomenon From Free Liquid Surface in a Sodium-Cooled Fast Reactor

Technical Paper Publication: ICONE31-133273

Jasmine Hamelberg - Tokai University

Shunsuke Kobayashi - Tokai University

Kazuki Endo - Tokai University

Jotaro Takeda - Tokai University

Takaaki Sakai - Tokai University

Dynamic Refinement Evaluation and Criteria Optimization for Les Using Flamefoam in Turbulent Hydrogen-Air Deflagration Experiment

Technical Paper Publication: ICONE31-133301

Julius Venckus - Lithuanian Energy Institute

Mantas Povilaitis - Lithuanian Energy Institute

The Robust Development of a Thermal Hydraulic Analysis Method for Condensation Bubbles in Subcooled Flow Boiling Using AI Based Object Detection and Tracking Technique

Technical Paper Publication: ICONE31-133410

Wen Zhou - University of Tokyo

Shuichiro Miwa - University of Tokyo

Koji Okamoto - University of Tokyo

Tomio Okawa - The University of Electro-Communications

Ryoma Tsujimura - The University of Electro-Communications

Thanh-Binh Nguyen - The University of Electro-Communications

Investigation of Compressible Flow in Natural Circulation Loops With a Non-Boussinesq Algorithm

Technical Paper Publication: ICONE31-134557

Jinsong Zhang - Tsinghua University

Yongyong Wu - Tsinghua University

Nan Gui - Tsinghua University

Zhen Zhang - Tsinghua University

Xingtuan Yang - Tsinghua University

Jiyuan Tu - RMIT University

Shengyao Jiang - Tsinghua University

Study on Thermal Conductivity Model for Porous PWR Crud Depositions

Technical Paper Publication: ICONE31-134562

Yan Liu - Shanghai Jiao Tong University

Xiaojing Liu - Shanghai Jiao Tong University

Hui He - Shanghai Jiao Tong University

Tengfei Zhang - Shanghai Jiao Tong University

Xiang Chai - Shanghai Jiao Tong University

An Effect of Damage Rate on Mechanical Property Change and Microstructural Evolution in Proton-Irradiated Fe-Cu Alloys

Technical Paper Publication: ICONE31-134568

Yusuke Noshi - University of Fukui

Ken-Ichi Fukumoto - University of Fukui

Ryoya Ishigami - The Wakasa Wan Energy Research Center

Kinji Uda - The Wakasa Wan Energy Research Center

06-03 Nuclear Codes, Standards, Licensing, & Regulatory Issues Session 3

8/5/2024 4:45PM–6:15PM - Liben 3

Chair: Thomas Vogan - Sargent & Lundy

Co-Chair: Dale Matthews - Framatome

Study on Nureg-2215 Regulatory Condition for Reflooding of the Previously Dried High Burnup Fuel Is Not Allowable During Dry Storage

Technical Paper Publication: ICONE31-135819

Ting-Yi Liao - National Tsing Hua University

Yi-Fan Tseng - National Tsing Hua University

Kuan-Che Lan - National Tsing Hua University

Wan-June Chiu - National Atomic Research Institute

Hsiao-Ming Tung - National Atomic Research Institute

Vigorously Develop Nuclear Power to Meet the Challenge of the Rapid Growth of Electricity Consumption and Carbon Emission in the Information Industry

Technical Paper Publication: ICONE31-136091

Yingnan Li - SPIC Nuclear Energy Co., Ltd.

Fang Wu - SPIC Nuclear Energy Co., Ltd.

Te Tang - Shanghai Nuclear Engineering Research & Design Institute Co. Ltd.

Weili Liu - SPIC Nuclear Energy Co., Ltd.

Effect of Work Environment and Performance Changes by Regulation of Nuclear Power Plant in Korea: A Survey

Technical Presentation Only: ICONE31-136158

Haehyun Lee - Korea Institute of Nuclear Safety

Young-A Suh - Korea Institute of Nuclear Safety

Sujin Jung - Korea Institute of Nuclear Safety

Comparison of K-Solutions of Rectangular Flaw With Semi-Elliptical Flaw for PWSCC Crack Growth Analysis

Technical Paper Publication: ICONE31-136517

Kiminobu Hojo - Mitsubishi Heavy Industries Ltd.

David Rudland - U.S. Nuclear Regulatory Commission

10-03: Advanced Manufacturing 3

8/5/2024 4:45PM–6:15PM - Palmovka 4

Chair: Asif Arastu - Unisont Engineering, Inc.

Co-Chair: Akemi Nishida - Japan Atomic Energy Agency

Co-Chair: Antony Hurst - Engineering Analysis Services Limited

Sigma Embrittlement Evaluation Test for Dissimilar Welding Between F6NM and FXM-19

Technical Paper Publication: ICONE31-135920

Ryoji Osafune - IHI Corporation

Yoshihiro Tanabe - IHI Corporation

Daisuke Yagi - IHI Corporation

Daisuke Koike - IHI Corporation

Investigating the Effect of Supports on Reinforced Concrete Slab Subjected to Oblique Missile Impact

Technical Paper Publication: ICONE31-135948

Zuoyi Kang - Japan Atomic Energy Agency

Yukihiko Okuda - Japan Atomic Energy Agency

Akemi Nishida - Japan Atomic Energy Agency

Haruji Tsubota - Japan Atomic Energy Agency

Masaharu Itoh - Japan Atomic Energy Agency

Yinsheng Li - Japan Atomic Energy Agency

Manufacturing Challenges for Hot Isostatic Pressing of Large-Scale Vessels
Technical Paper Publication: ICONE31-136240
John Sulley - Rolls-Royce
David Stewart - Rolls-Royce

Joining Fuel Rod to End Cap W/No Flaw Repeatable
Technical Presentation Only: ICONE31-135340
Paul Cheng - Fusering Inc.

07-03: Experiments and Analyses - II

8/5/2024 4:45PM–6:15PM - Palmovka 1

Chair: Luke Placzek - Pacific Northwest National Laboratory
Co-Chair: Guoqiang Wang - Westinghouse Electric Co.
Co-Chair: Ruohao Wang - Harbin Engineering University

Experimental Study on Two-Phase Flow Instability in Parallel Helically Coiled Tubes Under Rolling Motion
Technical Paper Publication: ICONE31-134836
Ruohao Wang - Harbin Engineering University
Chao Qi - Shanghai Spaceflight Precision Machinery Institute
Jiaxing Ren - Harbin Engineering University
Shouxu Qiao - Harbin Engineering University
Sichao Tan - Harbin Engineering University
Ruifeng Tian - Harbin Engineering University

Experimental Study on the Sealing Performance of Core Barrel Flange for Swimming Pool-Type Low-Temperature Heating Reactor
Technical Paper Publication: ICONE31-134990
Song Yu - China Institute of Atomic Energy
Weiming Zhai - China Institute of Atomic Energy
Daoxi Cheng - China Institute of Atomic Energy
Ping Zhou - China Institute of Atomic Energy
Xiaoyao Ma - China Institute of Atomic Energy
Ruizhi Li - China Institute of Atomic Energy
Mingdi Xing - China Institute of Atomic Energy
Weilong Gao - China Institute of Atomic Energy

Experimental Study on the Vibration Characteristics of Two-Phase Flow Post Dryout in Helical Coiled Tube
Technical Paper Publication: ICONE31-135067
Ningyuan Wang - Chongqing University
Deqi Chen - Chong Qing University
Zhenzhong Li - Chongqing University
Hanzhou Liu - Chongqing university
Shanshan Bu - Chongqing university

Experiment and Analysis of Small Break Loss of Coolant Accident in New Pressurized Water Reactor
Technical Paper Publication: ICONE31-135074
Changjiang Yang - China Nuclear Power Engineering Co., Ltd.
Si Ni - China Nuclear Power Engineering Co., Ltd.
Jingxiang Zhan - China Nuclear Power Engineering Co., Ltd.
Yiwa Geng - China Nuclear Power Engineering Co., Ltd.
Guangfei Wang - China Nuclear Power Engineering Co., Ltd.
Yuxiang Wu - China Nuclear Power Engineering Co., Ltd.
Di Yao - China Nuclear Power Engineering Co., Ltd.

Experimental Study on Natural Settling Characteristics of Aerosols in Containment
Technical Paper Publication: ICONE31-135097
Tao Li - Harbin Engineering University
Haifeng Gu - Harbin Engineering University
Hui Wang - China Nuclear Power Engineering Co., Ltd.

09-03: Decommissioning

8/5/2024 4:45PM–6:15PM - Palmovka 3

Chair: Anthony Hechanova - Abu Dhabi Polytechnic
Co-Chair: Daisuke Kawasaki - University of Fukui

Proposal for Organizing and Understanding Decommissioning Information Using Task Ontology
Technical Paper Publication: ICONE31-135835
Yasuyoshi Taruta - Fukui University
Yukihiro Iguchi - Fukui University
Daisuke Kawasaki - Fukui university
Satoshi Yanagihara - Fukui University
Koichi Tomoda - Japan Atomic Energy Agency

General Outline of the Decommissioning of the Prototype Fast Breeder Reactor Monju
Technical Paper Publication: ICONE31-135887
Hideharu Kobayashi - Japan Atomic Energy Agency
Keiji Naruse - Japan Atomic Energy Agency
Kazuhito Hirako - Japan Atomic Energy Agency
Hiromasa Sawazaki - Japan Atomic Energy Agency
Takehiro Goto - Japan Atomic Energy Agency
Ikuhito Obata - Japan Atomic Energy Agency
Kazuaki Matsui - Japan Atomic Energy Agency

A Study on Analysis of Actual Date in "Fugen" Decommissioning
Technical Paper Publication: ICONE31-135953
Yuya Kouda - Fugen Decommissioning Engineering Center
Yasuyuki Nakamura - Fugen Decommissioning Engineering Center
Yukihiro Iguchi - University of Fukui
Satoshi Yanagihara - University of Fukui

Application of Plasma Arc Cutting Technology in Reactor Decommissioning and Disassembly
Technical Paper Publication: ICONE31-135612
Naizhe Zhang - Tsinghua University
Weishuai Wang - Tsinghua University
Zhen Gao - China National Nuclear Industry Corporation
Hai Liu - China National Nuclear Industry Corporation
Xuegang Liu - Tsinghua University

Radiation Safety of the Personnel During Decommissioning of Maišiagala RWSF in Lithuania
Technical Presentation Only: ICONE31-134264
Ernestas Narkūnas - Lithuanian Energy Institute
Povilas Poškas - Lithuanian Energy Institute
Audrius šlmonis - Lithuanian Energy Institute
Artūras šMaižys - Lithuanian Energy Institute

09-06: Waste Management and Environmental Studies

8/5/2024 4:45PM–6:15PM - Liben 1

Chair: Anthony Hechanova - Abu Dhabi Polytechnic
Co-Chair: Andrea Chierici - University of Pisa

A Policy Driven Vegetative Foodchain Model: Soil-Plant Transfer in Chinese Organic Soil
Technical Paper Publication: ICONE31-132442
Priscilla Obeng Oforiwaa - Tsinghua University
Xiaole Zhang - Tsinghua University
Guofeng Su - Tsinghua University

Investigation of the C-14 Source Term in Repositories and Its Migration Behavior in Buffer Materials
Technical Paper Publication: ICONE31-134283
Zhengzhe Qu - Tsinghua University
Jingni Guo - Tsinghua University
Qi Zhang - Beijing Research Institute of Uranium Geology
Yu Wang - Tsinghua University
Mengjie Wu - Tsinghua University
Feng Xie - Tsinghua University
Liqiang Wei - Tsinghua University
Jianzhu Cao - Tsinghua University

A Novel Framework for Spatiotemporally Decoupled Source Reconstruction of Radionuclides Released Into the Atmosphere
Technical Paper Publication: ICONE31-135471
Yuhan Xu - Tsinghua University
Xinwen Dong - Tsinghua University
Shuhan Zhuang - Tsinghua University
Hao Hu - Tsinghua University
Sheng Fang - Tsinghua University

Digital Twin and Surrogate Model for Long-Term Geochemical Processes in Nuclear Waste Management
Technical Paper Publication: ICONE31-135796
Guang Hu - Paul Scherrer Institute
George-Dan Miron - Paul Scherrer Institute
Wilfried Pfingsten - Paul Scherrer Institute
Rainer Dähn - Paul Scherrer Institute

A Preliminary Study on the Transport of Critical Radionuclide Polonium in the Marine Environment After Source Term Release

Technical Paper Publication: ICONE31-134279

Junyang Zeng - Sun Yat-sen University

Yuqing Wang - Sun Yat-sen University

Minghao Zhang - Sun Yat-sen University

Muyi Ni - Sun Yat-sen University

02-03: Nuclear Fuels and Materials - III

8/5/2024

4:45PM–6:15PM - Karlin 1

Chair: Hakan Ozaltun - U.S. Nuclear Regulatory Commission

Co-Chair: Weijian Zhang - Tsinghua University

Co-Chair: Yuhao Liu - Tsinghua University

Isotopic Measurement of HTR-10 Irradiated Fuels Based on Anti-Compton Gamma Spectroscopy

Technical Paper Publication: ICONE31-132758

Weijian Zhang - Tsinghua University

Haiyan Xiao - Tsinghua University

Jingang Liang - Tsinghua University

Ruihan Li - Tsinghua University

Liguo Zhang - Tsinghua University

Low-Cycle Fatigue Behavior of 13cr-Ods Heat Pipes at High Temperatures

Technical Presentation Only: ICONE31-133403

Yuntao Zhong - Nuclear Power Institute of China

Huansheng Lai - Sun Yat-sen University

Ruiqian Zhang - Nuclear Power Institute of China

Yong Chen - Nuclear Power Institute of China

Effect of Heat Treatment on Microstructure Characteristics of Hot-Worked Zr-2.5Nb Alloy Tubes

Technical Paper Publication: ICONE31-134410

Jianming Yin - State Nuclear Baoti Zirconium Industry Company

Bo Gao - State nuclear Baoti Zirconium Industry Company

Baifeng Luan - Chongqing University

Yan Zhang - Chongqing University

Research on Uranium-Hydrogen-Zirconium Micro-Reactor Core Design

Technical Paper Publication: ICONE31-134554

Shixin Lin - Xi'an Jiaotong University

Youqi Zheng - Xi'an Jiaotong University

A Nonlocal Meso-Scale Damage Model for Nuclear Graphite

Technical Paper Publication: ICONE31-134775

Yan Ma - Tsinghua University

Yue Qian - Tsinghua University

Yuchen Hao - Shanghai Electro-mechanical Engineering Institute

Musen Lin - Tsinghua University

Yue Li - Tsinghua University

Jinhua Wang - Tsinghua University

Haitao Wang - Tsinghua University

Study on the Influence of Internal Heat Source Characteristics and Distribution on Effective Thermal Conductivity of Cylindrical Particle Dispersed Fuel

Technical Paper Publication: ICONE31-136000

Yuhao Liu - Tsinghua University

Jun Sun - Tsinghua University

04-03: SMRs, Advanced Reactors and Fusion

8/5/2024 4:45PM–6:15PM - Karlin 3

Chair: Rosa Lo Frano - University of Pisa

Design and Analysis of a Nuclear Hydrogen Production System by Methanol Reforming Using LWR (Light Water Reactor)
Technical Paper Publication: ICONE31-123745
Ruiyang Liu - Tsinghua University
Zhiyi Peng - North China Electric Power University
Huaqiang Yin - Tsinghua University
Huang Zhang - Tsinghua University

Study on Parameters Design Methodology for Rolling Test of Control Rod Hydraulic Drive System
Technical Paper Publication: ICONE31-130895
Yanlin Li - Tsinghua University
Benke Qin - Tsinghua University
Hanliang Bo - Tsinghua University

Multiple Knowledge Exploration Functions for Advanced Reactor Design and Safety in Knowledge Management System Implemented in the Arkadia
Technical Paper Publication: ICONE31-131784
Akiyuki Seki - Japan Atomic Energy Agency
Yuki Kondo - Japan Atomic Energy Agency
Ryuta Hashidate - Japan Atomic Energy Agency
Masanori Yoshikawa - Japan Atomic Energy Agency
Kenji Yokoyama - Japan Atomic Energy Agency
Shigeru Takaya - Japan Atomic Energy Agency
Yasuhiro Enuma - Japan Atomic Energy Agency
Taira Hazama - Japan Atomic Energy Agency
Takashi Wakai - Japan Atomic Energy Agency
Tai Asayama - Japan Atomic Energy Agency

Core Design and Neutronic Analysis of the European Sodium Fast Reactor With Metallic Fuel
Technical Paper Publication: ICONE31-133069
Antonio Jiménez-Carrascosa - Paul Scherrer Institute
Konstantin Mikityuk - Paul Scherrer Institute
Nicolas Stauff - Argonne National Laboratory
Aydin Karahan - Argonne National Laboratory
Emil Fridman - Helmholtz-Zentrum Dresden-Rossendorf
Alexander Ponomarev - Helmholtz-Zentrum Dresden-Rossendorf

Modeling of Carbon-Free Ammonia Plants Powered by Small Modular Reactors
Technical Presentation Only: ICONE31-147514
Hailei Wang - Utah State University

Long-Term Corrosion Behavior of Type 316 Stainless Steel Under NaCl-MgCl2 Eutectic Salt in Molten Salt Thermal Convection Loop (MSTCL)
Technical Presentation Only: ICONE31-147502
Hyunjin Boo - Soonchunhyang University
Su Hyun Lee - Soonchunhyang University
Byung Gi Park - Soonchunhyang University

08-03: Computational Fluid Dynamics (CFD) and Applications - III

8/5/2024 4:45PM–6:15PM - Palmovka 2

Chair: Yassin Hassan - Texas A&M
Co-Chair: Guoqiang Wang - Westinghouse Electric Co.
Co-Chair: Jian Wu -
Co-Chair: Menghang Gong - Tsinghua University
Co-Chair: Yizhi Tian - Harbin Engineering University

Scaled Experiment on Flow Characteristics of a Single Area of Spent Fuel Dry-Storage System of HTR-PM1000
Technical Paper Publication: ICONE31-134632
Jinhua Wang - Tsinghua University
Mengyao Wang - Tsinghua University
Menghang Gong - Tsinghua University
Yue Li - Tsinghua University
Bin Wu - Tsinghua University
Wei Zhang - Tsinghua University
Lihua Gao - Tsinghua University
Tao Ma - Tsinghua University
Haitao Wang - Tsinghua University
Bing Liu - Tsinghua University

CFD Analysis of a Four-Loop Pressurized Water Reactor With Multiple Operating Conditions

Technical Paper Publication: ICONE31-134682

Yizhi Tian - Harbin Engineering University

Guangliang Chen - Haibin Engineering University

Ruojun Xue - Harbin Engineering University

Yuchen Sun - Harbin Engineering University

Jinchao Li - Harbin Engineering University

Rui Li - Harbin Engineering University

Numerical Simulation Study on Cladding Blister of Parallel Fuel Plates Under Subcooled Boiling

Technical Paper Publication: ICONE31-134729

Kexin Liu - Harbin Engineering University

Jianjun Xu - Nuclear Power Institute of China

Ming Ding - Harbin Engineering University

Xiaxin Cao - Harbin Engineering University

Numerical Analysis of Flow Field and Phase Distribution Characteristics of Subcooled Boiling Flow in the PSBT 5×5 Fuel Bundle Channel

Technical Paper Publication: ICONE31-134856

Hengji Liao - Harbin Engineering University

Xiao Yan - Harbin Engineering University

Haifeng Gu - Harbin Engineering University

Shengjie Qin - Nuclear Power Institute of China

Research on Natural Frequency Characteristics of Spiral Tube Bundles

Technical Paper Publication: ICONE31-134953

Xiaoxi Li - Harbin Engineering University

Jiming Wen - Harbin Engineering University

Puzhen Gao - Harbin Engineering University

Yibo Yin - Harbin Engineering University

05-03: Digitalization and Fault Detection

8/5/2024 4:45PM–6:15PM - Karlin 4

Chair: Fredrick McCrory - Sandia National Laboratories

Co-Chair: Brian Fant - Bechtel

Co-Chair: Alessandro Petruzzi - Nuclear and Industrial Engineering

Co-Chair: Dmitry Grishchenko - KTH Royal Institute of Technology

Co-Chair: Scott Sanborn - Sandia National Laboratories

Co-Chair: Takeshi Yamada - Hitachi-GE Nuclear Energy, Ltd.

Co-Chair: Tomohiko Ikegawa - Hitachi

Co-Chair: Hideki Horie - Toshiba Corp.

Co-Chair: Patrick Frias - U.S. Department of Energy

Co-Chair: Hongxing Yu - Nuclear Power Institute of China

Co-Chair: Si-chao Tan - Harbin Engineering University

Co-Chair: Ronghua Chen - Xi'An Jiao Tong University

Co-Chair: Songtao Ji -

Convolutional Prototype Learning-Based Open Set Recognition Fault Diagnosis Method for Nuclear Power Plant Faults

Technical Paper Publication: ICONE31-132186

Jiangkuan Li - Harbin Engineering University

Meng Lin - Shanghai Jiao Tong University

Bo Wang - Harbin Engineering University

Ruifeng Tian - Harbin Engineering University

Sichao Tan - Harbin Engineering University

Fault Detection and Location Method for Nuclear Power Plant Main Systems Based on Low-Dimensional Manifolds

Technical Paper Publication: ICONE31-134341

Xin Ai - Harbin Engineering University

Yong-Kuo Liu - Harbin Engineering University

Long-Fei Shan - Harbin Engineering University

Jia-Rong Gao - Harbin Engineering University

Few-Shot Learning for Abnormal Event Detection in Nuclear Power Plants

Technical Paper Publication: ICONE31-134965

Tianhao Zhang - Tsinghua University

Chao Guo - Tsinghua University

Qianqian Jia - Tsinghua University

Xiaojin Huang - Tsinghua University

Research on Accident Diagnosis Method in Nuclear Power Plants Based on Generative Adversarial Networks and Underlying Deep Learning Networks

Technical Paper Publication: ICONE31-134996

Ben Qi - Tsinghua University

Yu Wang - Tsinghua University

Xingyu Xiao - Tsinghua University

Jingang Liang - Tsinghua University

Automatic Reading Recognition Method for Nuclear Power Digital Detection Instruments Based on Computer Vision and Deep Learning

Technical Paper Publication: ICONE31-135091

Jiarong Gao - Harbin Engineering University

Yongkuo Liu - Harbin Engineering University

Xin Ai - Harbin Engineering University

Longfei Shan - Harbin Engineering University

01-03: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - III

8/5/2024 4:45PM–6:15PM - Florenc 2

Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Ji Tao Li - Tsinghua University

Co-Chair: Zhijian Wang - China Nuclear Power Engineering Co., Ltd.

Co-Chair: Ryo Morita - Central Research Institute of Electric Power Industry

The Research on Design Selection and Application of Cable in Nuclear Plant

Technical Paper Publication: ICONE31-133255

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

Study on the Locations of On-Line Monitoring of Sedimentary Source Terms in the Primary Loop of a Pressurized Water Reactor

Technical Paper Publication: ICONE31-133448

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

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

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

Xinming Huang - Daya Bay Nuclear Power Operations and Management Co., Ltd.

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

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

DHP: Cloud-Edge Collaborative Internet Framework for Nuclear Power Industry

Technical Paper Publication: ICONE31-134444

Min Min Cheng - China Nuclear Power Operation Technology Corporation, Ltd.

Xianying Liu - 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.

Machine Learning Approach to Analyzing Data in Japanese BWR Chemistry Database

Technical Paper Publication: ICONE31-134463

Gaku Yamazaki - Central Research Institute of Elecrtic Power Industry

Research on Adaptive Updating Method of Nuclear Power Plant Transient Models Based on Concept Drift

Technical Paper Publication: ICONE31-134670

Jitao Li - Tsinghua University

Zijian Wu - Tsinghua University

Xiaojin Huang - Tsinghua University

TUESDAY, 8/6/2024

Time	Title	Room
8:30AM - 10:00AM	Plenary Session 2 : The Future of Nuclear Power	Congress Hall Foyer, Lower Level
10:00AM - 4:00PM	EXPO Open	Congress Hall Foyer, Lower Level
10:00AM - 10:30AM	Refreshment Break	Congress Hall Foyer, Lower Level
10:30AM - 11:45AM	Plenary Session 3: Small Modular Reactor -Global Perspective	Congress Hall 2, Lower Level
12:00PM - 1:00PM	Ticketed Lunch	Atrium Restaurant
1:00PM - 2:30PM	ICONE Technical Session	TS: 11-01 Severe Accident
2:30PM - 3:00PM	Refreshment Break	Congress Hall Foyer, Lower Level
3:00PM - 4:30PM	Panel Sessions	See App for specific locations
5:00PM - 6:30PM	ICONE Technical Session	See App for specific locations
7:00PM - 9:30PM	ICONE Banquet **Ticket Required	Congress Hall 2, Lower Level

14-01: Nuclear Education and Public Acceptance

8/6/2024 1:00PM–2:30PM - Liben 3

Chair: Leon Cizejl - Jozef Stefan Institute
Co-Chair: Kan Wang - Tsinghua University

Study on Development Pathways of Nuclear Energy for Energy System in China Using Message Model
Technical Paper Publication: ICONE31-131292
Luhan Mei - Tsinghua University
Xiaotong Chen - Tsinghua University
Huang Zhang - Tsinghua University

Researchers Understanding of the Possible Contribution of International Atomic Energy's to the Launch of a National Nuclear Power Programme
Technical Paper Publication: ICONE31-135926
Ayodeji Ala - Southwest University of Science and Technology
Ala Oluwafolakemi - Harbin Engineering University

Comprehensive Approach to Enhance Resilience in Emergency Preparedness of a Nuclear Power Plant
Technical Presentation Only: ICONE31-147520
Han Young Joo - Dankook University
Jeongyeon Lee - Dankook University
Chaehyun Lee - Dankook University
Sang Yun Lee - Dankook University
Joo Hyun Moon - Dankook University

15-04

8/6/2024 1:00PM–2:30PM - Karlin 2

Chair: Shripad Revankar - Purdue University
Co-Chair: Luo YuChen -
Co-Chair: Ayumu Sugiura - Tokyo Denki University

Study on Functional Limitations of Piping in Industrial Facilities
Technical Paper Publication: ICONE31-133764
Ayumu Sugiura - Tokyo Denki University
Kiyotaka Takito - Japan Atomic Energy Agency
Osamu Furuya - Tokyo Denki University
Izumi Nakamura - Tokyo City University
Yukihiko Okuda - Japan Atomic Energy Agency

Multi-Objective Optimization Study of Nozzle Outlet Size Based on Atomization Performance
Technical Paper Publication: ICONE31-133800
Qingshan Chen - 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

Criticality and Burnup Analysis of Nuscale Reactors With Various Burnable Absorber Designs and Fuel Isotopes
Technical Paper Publication: ICONE31-133977
Yu-Chen Luo - National Tsing Hua University
Shin-Rong Wu - National Tsing Hua University
Jhao-Yang Hong - National Tsing Hua University
Der-Sheng Chao - National Tsing Hua University
Jenq-Horng Liang - National Tsing Hua University

Dynamic Modeling and Characteristic Analysis of sCO2 Brayton Cycle System
Technical Paper Publication: ICONE31-134272
Shichang Yun - Xi'an Jiaotong University
Dalin Zhang - Xi'an Jiaotong University
Xinyu Li - Xi'an Jiaotong University
Xindi Lv - Xi'an Jiaotong University

An Experimental Study on the Scrubbing Characteristics of Graphite Dust Aerosol in HTGRs
Technical Paper Publication: ICONE31-134288
Yating Wang - Tsinghua University
Yiyang Zhang - Tsinghua University
Zhikai You - Tsinghua University
Shumiao Zhao - Tsinghua University
Zhu Fang - Tsinghua University
Libin Sun - Tsinghua University

Time Series Analysis With Combined Learning Approach for Anomaly Detection in Nuclear Power Plants
Technical Paper Publication: ICONE31-134602
Feiyan Dong - The University of Tokyo
Shi Chen - The University of Tokyo
Kazuyuki Demachi - The University of Tokyo
Masanori Yoshikawa - Japan Atomic Energy Agency
Akiyuki Seki - Japan Atomic Energy Agency
Shigeru Takaya - Japan Atomic Energy Agency

15-07

8/6/2024 1:00PM–2:30PM - Palmovka 1

Chair: Shripad Revankar - Purdue University
Co-Chair: Shuvendu Shivam - Indian Institute of Technology, Jammu
Co-Chair: Weixiang Wang - University of Science and Technology of China

Lattice Physics Study of Various Fuel Assembly Design and Optimization Based on Neutronic Analysis for PT-SCWR
Technical Paper Publication: ICONE31-134897
Shuvendu Shivam - Indian Institute of Technology, Jammu
B. Satya Sekhar - Indian Institute of Technology, Jammu
Goutam Dutta - Indian Institute of Technology, Jammu

Study on Influence of Nonlinear Characteristics of Laminated Rubber Bearings on Reactor Buildings Including SMR
Technical Paper Publication: ICONE31-134933
Keito Kitagawa - Tokyo Denki University
Osamu Furuya - Tokyo Denki University
Shigeki Okamura - Japan Atomic Energy Agency

Multi-Scale Coupling Analysis of the Reactivity Insertion Accident in the Typical LFR
Technical Paper Publication: ICONE31-134957
Hanrui Qiu - Xi'an Jiaotong University
Ruibo Zhang – Xi'an Jiaotong University
Jing Zhang - Xi'an Jiaotong University
Mingjun Wang - Xi'an Jiaotong University
Wenxi Tian - Xi'an Jiaotong University
g.h. Su - Xi'an Jiaotong University

Methodology for Acquiring Reliability Data in Novel Nuclear Energy Systems Using a Non-Homogeneous Poisson Process
Technical Paper Publication: ICONE31-134981
Zefeng Li - Tsinghua University
Pu Chen - Tsinghua University
Tao Liu - Tsinghua University

Numerical Investigation of Capillary Wick Structural Effects on the Heat Transfer Performance of Heat Pipe Cooled Nuclear Reactor

Technical Paper Publication: ICONE31-135009

Fu Youyuan - Southeast University

Da Chen - Southeast University

Wenbin Liu - Southeast University

Shang Mao - Southeast University

Chunhui Xue - Southeast University

Tao Zhou - Southeast University

Development of a High-Temperature Heat Pipe Simulation Code Using Conjugate Heat-Mass Transfer and High-Speed Compressible Algorithm

Technical Paper Publication: ICONE31-135068

Weixiang Wang - University of Science and Technology of China

Kefan Zhang - University of Science and Technology of China

Sifan Dong - University of Science and Technology of China

Rui Pan - University of Science and Technology of China

Hongli Chen - University of Science and Technology of China

15-10

8/6/2024 1:00PM–2:30PM - Palmovka 2

Chair: Shripad Revankar - Purdue University

Co-Chair: Andrius Ambrutis - Lithuanian Energy Institute

Co-Chair: Chengzuo Ji - Tokyo Institute of Technology

A Numerical Study of Film Cooling and Particle Depositions in Turbine Blade of a High-Temperature Gas-Cooled Reactor

Technical Paper Publication: ICONE31-135428

Xiaozhong Wang - Tsinghua University

Qi Sun - InstituTsinghua University

Ping Ye - Tsinghua University

Wenkui Ma - Tsinghua University

Xiaoyong Yang - Tsinghua University

Wei Peng - Tsinghua University

Study on Bubble Migration Characteristics in a Lead-Cooled Fast Reactor After Steam Generator Tube Rupture Accident

Technical Paper Publication: ICONE31-135457

Zhenyu Feng - Xi'an Jiaotong University

Dalin Zhang - Xi'an Jiaotong University

Haoyu Jiao - Xi'an Jiaotong University

Yutong Chen - Xi'an Jiaotong University

Yue Lin - Xi'an Jiaotong University

Wenxi Tian - Xi'an Jiaotong University

Suizheng Qiu - Xi'an Jiaotong University

Guanghui Su - Xi'an Jiaotong University

Remote Measurement by Robot Arm Equipped With PAUVP and Libs

Technical Paper Publication: ICONE31-135489

Chengzuo Ji - Tokyo Institute of Technology

Yuan Chen - Tokyo Institute of Technology

Christian Brice - Tokyo Institute of Technology

Hiroshige Kikura - Tokyo Institute of Technology

Hideharu Takahashi - Tokyo Institute of Technology

Gen Endo - Tokyo Institute of Technology

Development and Validation of a Two-Phase Flow Solver With Drift-Flux Model Based on Openfoam

Technical Paper Publication: ICONE31-135549

Wenqiang Wu – Xi'an Jiaotong University

Dalin Zhang - Xi'an Jiaotong University

Tao Huang - Nuclear Power Institute of China

Lei Zhou - Xi'an Jiaotong University

Peng Du - Nuclear Power Institute of China

Wenxi Tian - Xi'an Jiaotong University

Suizheng Qiu – Xi'an Jiaotong University

Guanghui Su - Xi'an Jiaotong University

Enhancing Hydrogen Laminar Burning Velocity Estimation With Artificial Neural Networks and Simulated Data

Technical Paper Publication: ICONE31-135582

Andrius Ambrutis - Lithuanian Energy Institute

Mantas Povilaitis - Lithuanian Energy Institute

Designing a Knowledge-Centric Plant Information Model by Integrating Tacit Knowledge
Technical Paper Publication: ICONE31-135585
Pascal Mosler - Technical University of Darmstadt
Uwe Rüppel - Technical University of Darmstadt

15-13

8/6/2024 1:00PM–2:30PM - Palmovka 3

Chair: Shripad Revankar - Purdue University
Co-Chair: John Acierno - Pennsylvania State University
Co-Chair: Pilhyeon Ju - Seoul National University

Les of Twin High-Re Rectangular Jets for Benchmarking Model Order Reduction Methods
Technical Paper Publication: ICONE31-136284
John Acierno - Pennsylvania State University
Elia Merzari - Pennsylvania State University
Victor Petrov - University of Michigan
Annalisa Manera - University of Michigan

Scaling of Horizontal Steam Generator Based on Three-Dimensional Thermal-Hydraulic Simulations
Technical Paper Publication: ICONE31-136502
Milos Lazarevic - University of Belgrade
Vladimir Stevanovic - University of Belgrade
Milan Petrovic - University of Belgrade
Sanja Milivojevic - University of Belgrade
Milica Ilic - University of Belgrade

Seasonal-Weekly Energy Mix Simulation Model for Carbon Neutrality Incorporating Nuclear and Renewable Energy
Technical Presentation Only: ICONE31-135808
Pilhyeon Ju - Seoul National University
Sungyeol Choi - Seoul National University
Jongho Lee - Seoul National University

Preliminary Study on the Integration of Organic Rankine Cycle With the Low-Temperature Heating Reactor
Technical Presentation Only: ICONE31-139314
De-En Song - Tsinghua University
Wenwen Zhang - Tsinghua University
Wentao Hao - Tsinghua University
Weihua Li - Tsinghua University
Wei Peng - Tsinghua University

The Effect of Liquid and Wall Properties Toward the Increase of Wetting Velocity in the Case of Using Multiple Plates in the Top-Reflood Vertical Surfaces
Technical Presentation Only: ICONE31-139623
Akbari - The University of Electro-communications
Hiroyuki Umebayashi - The University of Electro-communications
Tomio Okawa - The University of Electro-communications

A Text Intelligence-Based Approach for Automatic Generation of Fault Trees in Nuclear Power Plants
Technical Presentation Only: ICONE31-146582
Xingyu Xiao - Tsinghua University
Songlin Liu - Peking University
Zhiyong Zuo - Univeristy of Science and Technology Beijing
Peng Chen - University of Chinese Academy of Sciences
Ben Qi - Tsinghua University
Jingang Liang - Tsinghua University
Jiejuan Tong - Tsinghua University

09-07: Radiation and Physical Transport Studies

8/6/2024 1:00PM–2:30PM - Liben 1

Chair: Anthony Hechanova - Abu Dhabi Polytechnic
Co-Chair: Shuijun He - Institute of NBC Defence

Experimental Investigation on the Gasification Kinetics of Irradiated A3-3 Matrix Graphite
Technical Paper Publication: ICONE31-133398
Weishuai Wang - Tsinghua University
Naizhe Zhang - Tsinghua University
Xuegang Liu - Tsinghua University
Feng Xie - Tsinghua University

Molecular Simulation of I2-H2O Diffusion in Different Pore Structures of Activated Carbon Fiber
Technical Paper Publication: ICONE31-135557
Xin Li - China Institute for Radiation Protection
Jingguo Liu - China Institute for Radiation Protection
Yingzhong Shuang - China Institute for Radiation Protection
Zhixin Liu - China Institute for Radiation Protection
Jian Li - China Institute for Radiation Protection
- China Institute for Radiation Protection
Yongguo Li - China Institute for Radiation Protection
Liye Liu - China Institute for Radiation Protection

Study on the Weights of Influencing Factors of Background Count Rate of Gross Alpha and Gross Beta Measured by Liquid Scintillation Counter
Technical Paper Publication: ICONE31-135811
Shuijun He - Institude of NBC defence
Lijuan Tang - Institute of NBC defence
Manchun Liang - Tsinghua University
Ke Li - Tsinghua University
Jihong Wang - Institute of NBC defence
Xiaochuang Du - Tsinghua University

Research on Pulse Discrimination for Alpha and Beta Measurement Based on Auto-Encoder
Technical Paper Publication: ICONE31-135873
Shuijun He - Institude of NBC Defence
Lijuan Tang - Institute of NBC Defence
Manchun Liang - Tsinghua University
Ke Li - Tsinghua University
Jihong Wang - Institute of NBC Defence
Xiaochuang Du - Tsinghua University

Study on Sodium Extraction and Transport at Monju
Technical Paper Publication: ICONE31-135877
Yuta Isobe - Japan Atomic Energy Agency
Takanori Tanigaki - Japan Atomic Energy Agency
Kohei Tone - Japan Atomic Energy Agency
Yuya Joboji - Japan Atomic Energy Agency
Kazuaki Matsui - Japan Atomic Energy Agency
Ikuhito Obata - Japan Atomic Energy Agency

02-04: Nuclear Fuels and Materials - IV

8/6/2024 1:00PM–2:30PM - Palmovka 4

Chair: Hakan Ozaltun - U.S. Nuclear Regulatory Commission
Co-Chair: Yue Wang - Tsinghua University
Co-Chair: Sarah Weick - Karlsruhe Institute of Technology

Internal Nitridation of Ni-Based Superalloy In617 During Aging at 950°C
Technical Paper Publication: ICONE31-131779
Yue Wang - Tsinghua University
Hongsheng Zhao - Tsinghua University
Haitao Wang - Tsinghua University
Li Shi - Tsinghua University
Kejian Li - Tsinghua University

Overview of Tritium-Resistant Performance of Heat Transfer Tube Materials in Reactors
Technical Paper Publication: ICONE31-133813
Mengjie Wu - Tsinghua University
Ziling Zhou - Tsinghua University
Yu Wang - Tsinghua University
Zhengzhe Qu - Tsinghua University
Jing Chen - Chinergy Co., Ltd.
Feng Xie - Tsinghua University
Jianzhu Cao - Tsinghua University
Jiejuan Tong - Tsinghua University

Preliminary Investigation on Superficial Defects of Zirconium Alloys With Advanced Machine Vision Technology
Technical Paper Publication: ICONE31-134576
Xiaoliang Yang - Nuclear Power Institute of China
Jiandong Luo - Nuclear Power Institute of China
Haoliang Jiang - Nuclear Power Institute of China
Xuequan Wang - Nuclear Power Institute of China
Shuanglu Yu - Nuclear Power Institute of China
Dan Li - Nuclear Power Institute of China

Effects of Magnetic Ordering on the Ground-State Energy of Plutonium Dioxide: A Study Using Adiabatic Connection Fluctuation-Dissipation Theory

Technical Paper Publication: ICONE31-134660

Hiroki Nakamura - Japan Atomic Energy Agency

Masahiko Machida - Japan Atomic Energy Agency

Reconstruction of 3D Nuclear Graphite Based on Generative Adversarial Neural Networks With Gradient Penalty

Technical Paper Publication: ICONE31-134733

Lei Peng - Tsinghua University

Zhiyong Liu - Tsinghua University

Pengyu Wang - University of Posts and Telecommunications

Hao Liu - Guangdong University of Technology

Huang Zhang - Tsinghua University

Huaqiang Yin - Tsinghua University

Xuedong He - Tsinghua University

Tao Ma - Tsinghua University

The Spizwurz Project – Experimental and Modeling Approaches of Hydrogen in Cladding Tubes Under Dry Storage Conditions

Technical Paper Publication: ICONE31-136905

Michel Herm - Karlsruher Institut für Technologie

Mirco Grosse - Karlsruher Institut für Technologie

Sarah Weick - Karlsruher Institut für Technologie

Robert Kilger – GRS gGmbH

Conrado Rössger - Karlsruher Institut für Technologie

Martin Steinbrueck - Karlsruher Institut für Technologie

Juri Stuckert - Karlsruher Institut für Technologie

11-01 Severe Accident Mitigation Strategies

8/6/2024 1:00PM–2:30PM - Florenc 2

Chair: Luteng Zhang - Chongqing University

Co-Chair: Ivo Kljenak - Jozef Stefan Institute

Co-Chair: Guoqiang Wang - Westinghouse Electric Co.

The Study on Risk Assessment Method of Severe Accident Management Strategies in Nuclear Power Plants

Technical Paper Publication: ICONE31-127856

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

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

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

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

Yang Liu - Xi'an Jiaotong University

Jiarui Zhang - Xi'an Jiaotong University

Yapei Zhang - Xi'an Jiaotong University

Current Challenges in Nuclear Accident Emergency Evacuation for Densely Populated Areas

Technical Paper Publication: ICONE31-134734

Hongchun Ding - Shenzhen Research Institute of China University of Mining and Technology

Guohua Wu - Shenzhen Technology University

Kang Liu - Shenzhen Institutes of Advanced Technology, China Academy of Science

Wei Wang - City University of Hong Kong

Assessment of Multi-Unit Emergency Response Capability of Nuclear Power Plants

Technical Paper Publication: ICONE31-135370

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

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

Na Xue - China Nuclear Power Engineering Co., Ltd.

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

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

Research on Depressurization Strategy of AP1000 Automatic Depressurization System Under DVI Pipeline Break Accident

Technical Paper Publication: ICONE31-135532

Dufeng Lv - Harbin Engineering University

Zhengrun Shang - Harbin Engineering University

Zhaoming Meng - Harbin Engineering University

Zhongning Sun - Harbin Engineering University

Depressurization Behavior and Strategy of Automatic Depressurization System for AP1000

Technical Paper Publication: ICONE31-135645

Zhengrun Shang - Harbin Engineering University

Dufeng Lv - Harbin Engineering University

Zhaoming Meng - Harbin Engineering University
Zhongning Sun - Harbin Engineering University

Research on Diffusion and Mitigation of Severe Accident Source Terms in Floating Nuclear Power Plant
Technical Paper Publication: ICONE31-139205
Tao Xu - Nuclear Power Institute of China
Junlong Wang - Nuclear Power Institute of China
Bin Zhang - Xi'an Jiaotong University
Jishen Li - Nuclear Power Institute of China
Jiajia Liu - Nuclear Power Institute of China
Mingming Xia - Nuclear Power Institute of China
Haifu Ma - Nuclear Power Institute of China
Yirui Wu - Nuclear Power Institute of China

03-01: Control and Monitoring Systems

8/6/2024 1:00PM–2:30PM - Karlin 1

Chair: Brian Fant - Bechtel

Dynamic Matrix Control for Cold Helium Temperature and Main Steam Temperature of Multi-Modular High Temperature Gas-Cooled Reactor Plant
Technical Paper Publication: ICONE31-130137
Wu Zhendong - Tsinghua University
Dong Zhe - Tsinghua University

Research on the Radiation Monitoring Methods in the Reactor Coolant Pressure Boundary Leakage of Nuclear Power Plant
Technical Paper Publication: ICONE31-130567
Zhenlei Yang - Nuclear Power Institute of China
Chengmin Liu - Nuclear Power Institute of China
Tianzhi Jiang - Nuclear Power Institute of China
Jin Li - Nuclear Power Institute of China
Xianglin Zhuo - Nuclear Power Institute of China
Hongliang Zhu - Nuclear Power Institute of China
Liang He - Nuclear Power Institute of China
Zhengxi He - Nuclear Power Institute of China
Jinqiu Peng - Nuclear Power Institute of China

A Method Using Strong Tracking Filter for Compensating the Response Delay of Self-Powered Neutron Detectors
Technical Paper Publication: ICONE31-130885
Shiyu Liu - Xian Jiaotong University
Qingmin Zhang - Xian Jiaotong University
Jinliang Liu - Northwest Institute of Nuclear Technology
Yaodong Sang - Xi'an Jiaotong University
Zhuang Shao - Xi'an Jiaotong University
Kangfu Zhu - Xi'an Jiaotong University

A Study on the Burnup Effect of Silver Self-Powered Neutron Detector
Technical Paper Publication: ICONE31-134377
Yaodong Sang - Xi'an Jiaotong University
Bangjie Deng - Xian Jiaotong University
Shiyu Liu - Xian Jiaotong University
Qingmin Zhang - Xian Jiaotong University

Operation and Control Characteristics of Large Parallel Pipeline Fluid System Simulation Study
Technical Paper Publication: ICONE31-134879
Niu Yuchen - Harbin Engineering University
Minjun Peng - Harbin Engineering University
Bowen Zhang - Harbin Engineering University
Zhe Yuan - Harbin Engineering University

12-01 Risk Assessments and Management - Session 1

8/6/2024 1:00PM–2:30PM - Karlin 3

Chair: Arun Veeramany - Pacific Northwest National Laboratory

Co-Chair: Hidemasa Yamano - Japan Atomic Energy Agency

Co-Chair: Mahesh Pandey - University of Waterloo

Co-Chair: Anton Prins - Risk Management and Consultancy

Co-Chair: Arnold Yuan - Ryerson University

Co-Chair: Ivan Vrbanic - APoSS d.o.o.

Co-Chair: Jaroslav Holy - UJV Řež, a.s.

Co-Chair: Yoshihisa Nishi - Central Research Institute of Electric Power Industry

Co-Chair: Zhegang Ma - Idaho National Laboratory

Co-Chair: Wei Deng - China Nuclear Power Engineering Co., Ltd.

Co-Chair: Thomas Vogan - Sargent & Lundy

Co-Chair: Tao Yu -

Co-Chair: He Wang - Harbin Engineering University

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

Uncertainty Analysis of Geometric Parameters for Fuel Assembly Based on Sub-Channel Model

Technical Paper Publication: ICONE31-131992

Deyan Kong - Harbin Engineering University

Zhibo Gao - Harbin Engineering University

Di Wu - Harbin Engineering University

Jie Cheng - Harbin Engineering University

Jianjun Wang - Harbin Engineering University

A Study of Safety Importance Screening Criteria in the NPP Risk-Informed Safety Classification Process

Technical Paper Publication: ICONE31-132467

Jinghua Zhou - China Nuclear Power Engineering Co., Ltd.

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

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

Yiwen Guo - China Nuclear Power Engineering Co., Ltd.

Comparative Study of Deep Learning Models for Accident Classification in NPP: Emphasizing Transparency and Performance

Technical Paper Publication: ICONE31-133604

Merouane Najar - Harbin Engineering University

He Wang - Harbin Engineering University

Estimation of Unavailability Parameter for Mitigation System Performance Index for the Japanese Nuclear Power Plants

Technical Presentation Only: ICONE31-131637

Yoneda Kimitoshi - Central Research Institute of Electric Power Industry

Yasuhiro Iwaya - Central Research Institute of Electric Power Industry

Tomoaki Yoshida - Central Research Institute of Electric Power Industry

A Text Intelligence-Based Approach for Automatic Generation of Fault Trees in Nuclear Power Plants

Technical Paper Publication: ICONE31-134226

Xingyu Xiao - Tsinghua University

Songlin Liu - Peking University

Zhiyong Zuo - University of Science and Technology Beijing

Peng Chen - Chinese Academy of Sciences

Ben Qi -Tsinghua University

Jingang Liang - Tsinghua University

Jiejuan Tong - Tsinghua University,

The Development of the Fire PRA Model for Shimane Unit 2 Nuclear Power Plant

Technical Paper Publication: ICONE31-134339

Kotaro Yoshizaki - Hitachi-GE Nuclear Energy, Ltd.

Bumpei Fujioka - Hitachi-GE Nuclear Energy, Ltd.

Daichi Shiota - Hitachi-GE Nuclear Energy, Ltd.

Takahiro Usui - The Chugoku Electric Power Company

Hitoshi Nojima - The Chugoku Electric Power Company

Kenichi Kanda - The Chugoku Electric Power Company

Kazunobu Noriyasu - The Chugoku Electric Power Company

13-01: Computer Code V&V - I

8/6/2024 1:00PM–2:30PM - Karlin 4

Chair: Guoqiang Wang - Westinghouse Electric Co.
Co-Chair: Yassin Hassan - Texas A&M
Co-Chair: Samah Albdour - Khalifa University
Co-Chair: Han Yin - Shanghai Jiao Tong University

Research and Preliminary Verification of the Resonance Self-Shielding Calculation Method for the High-Fidelity Neutronics Code VITAS
Technical Paper Publication: ICONE31-133419
Han Yin - Shanghai Jiao Tong University
Tengfei Zhang - Shanghai Jiao Tong University
Xiaojing Liu - Shanghai Jiao Tong University

Verification of Method of Characteristics With General Quadrant Meshing Technique for Complex Geometry
Technical Paper Publication: ICONE31-134175
Jian Guo - Chinese Academy of Sciences
Guifeng Zhu - Chinese Academy of Sciences
Rui Yan - Chinese Academy of Sciences
Yang Zou - Chinese Academy of Sciences

Modeling Co-Current and Counter-Current Flow: A Performance Evaluation of the Trace Condensation Model With Non-Condensable and Light Gases
Technical Paper Publication: ICONE31-134262
Samah A. Albdour - Khalifa University
Yacine Addad - Khalifa university
Imran Afgan - Khalifa University

Validation and Verification of ASYST Code for Predicting Condensation Phenomena in Nuclear Reactor Safety Systems
Technical Paper Publication: ICONE31-134294
Satya Prakash Saraswat - Khalifa University
Mubashir Hassan - Khalifa University
Sameer Mohammad Osman - Khalifa University
Chris Allison - Innovative Systems Software
Yacine Addad - Khalifa University

Tube Plugging Induced Temperature Non-Uniformity in Once Through Steam Generator
Technical Paper Publication: ICONE31-134783
Yunhao Luo - Insititude of Nuclear and New Energy Technology
Xiaoyang Xie - Institute of Nuclear and New Energy Technology
Xiaowei Li - Institute of Nuclear and New Energy Technology
Xinxin Wu - Institute of Nuclear and New Energy Technology

15-05

8/6/2024 5:00PM–6:30PM - Karlin 2

Chair: Shripad Revankar - Purdue University
Co-Chair: Wen Junlong - Kyushu University
Co-Chair: He Shang - Harbin Engineering University

Study on Heat Transfer Behavior of a Rectangular Particle Bed With Volumetric Heating
Technical Paper Publication: ICONE31-134313
Wen Junlang - Kyushu University
Kamada Yuto - Kyushu University
Yokoyama Kosei - Kyushu University
Matsumoto Tatsuya - Kyushu University
Liu Wei - Kyushu University
Morita Koji - Kyushu University
Imaizumi Yuya - Japan Atomic Energy Agency
Tagami Hirotaka - Japan Atomic Energy Agency
Matsuba Kenichi - Japan Atomic Energy Agency
Kamiyama Kenji - Japan Atomic Energy Agency

The Effect of Liquid and Wall Properties Toward the Increase of Wetting Velocity in the Case of Using Multiple Plates in the Top-Reflood Vertical Surfaces
Technical Paper Publication: ICONE31-134362
Akbari - The University of Electro-communications
Hiroyuki Umebayashi - The University of Electro-communications
Tomio Okawa - The University of Electro-communications

Liquid Lead-Bismuth Oxygen Sensors Performance Study
Technical Paper Publication: ICONE31-134381
Hui Li - North China Electric Power University
Weihao Wu - North China Electric Power University
Yuqi Zhu - North China Electric Power University
Huiping Zhu - North China Electric Power University
Fenglei Niu - North China Electric Power University

Investigation on Isotopic Depletion Validation and Uncertainty Analysis With Kalman Filtering
Technical Paper Publication: ICONE31-134428
Jianshu Qiao - Southeast University
Dongli Huang - Southeast University

Study on the Calculation of Interphase Drag Force Based on Liquid Metal-Gas Two-Phase Flow
Technical Paper Publication: ICONE31-134630
Hong Zhang - Chongqing University
Yangyong Ou - China Nuclear Power Technology Research Institute Co., Ltd.
Di Wang - China Nuclear Power Technology Research Institute Co., Ltd.
Longxiang Zhu - Chognqing University
Lingfeng Wan - Chognqing University
Wan Sun - Chognqing University
Liangming Pan - Chognqing University

Development of a Nonintrusive Reduced Order Model for Parametric Study in the Reactor Pressure Vessel Lower Plenum
Technical Paper Publication: ICONE31-134678
He Shang - Harbin Engineering University
Minjun Peng - Harbin Engineering University
Genglei Xia - Harbin Engineering
Shiqi Zhang - Harbin Engineering University
Shijie Zhu - Harbin Engineering University

15-08
8/6/2024 5:00PM–6:30PM - Palmovka 1

Chair: Shripad Revankar - Purdue University
Co-Chair: Asma Alzarooni - Khalifa University of Science and Technology
Co-Chair: Yihua Xu - University of Tokyo

Performance Analysis for Enhanced Cr-Coated Fuel Cladding System in APR-1400 Reactor
Technical Paper Publication: ICONE31-135127
Asma Alzarooni - Khalifa University of Science and Technology
Mohammad Alrwashdeh - Khalifa University of Science and Technology
Saeed A. Alameri - Khalifa University of Science and Technology

Numerical Prediction of Flow and Heat Transfer in Supercritical Fluids
Technical Paper Publication: ICONE31-135186
Abdullah Alasif - King Fahd University of Petroleum & Minerals
Andrea Pucciarelli - Università di Pisa
Osman Siddiqui - King Fahd University of Petroleum & Minerals
Afaque Shams - King Fahd University of Petroleum & Minerals

Joint Simulation of Pressurizer and Chemical and Volume Control System of PWR Based on Modelica
Technical Paper Publication: ICONE31-135196
Zhibo Gao - Harbin Engineering University
Xuefeng Xia - Harbin Engineering University
Ziao Xiang - Harbin Engineering University
Jie Cheng - Harbin Engineering University
Jianjun Wang - Harbin Engineering University
Di Wu - Harbin Engineering University

An Improved Multiphase Lattice Boltzmann Method Scheme for Large Density Ratio Simulation in Heat Pipe
Technical Paper Publication: ICONE31-135207
Lie Quan - Tsinghua University
Yugao Ma - Nuclear Power Institute of China
Xiao Liu - Tsinghua University

Shanfang Huang - Tsinghua University
Kan Wang - Tsinghua University

Study on Radial Thermal-Hydraulic Characteristics of Once-Through Steam Generator of Sodium-Cooled Fast Reactor
Technical Paper Publication: ICONE31-135219
Yapeng Liu - Xi'an Jiaotong University
Bo Wang - Xi'an Jiaotong University
Dalin Zhang - Xi'an Jiaotong University
Zhenyu Feng - Xi'an Jiaotong University
Xinyu Li - Xi'an Jiaotong University
Wenxi Tian - Xi'an Jiaotong University
Suizheng Qiu - Xi'an Jiaotong University
Guanghui Su - Xi'an Jiaotong University

Experimental Study on Metal Jet Spreading on Substrate With Roughness
Technical Paper Publication: ICONE31-135231
Yihua Xu - University of Tokyo
Ryo Yokoyama - University of Tokyo
Shunichi Suzuki - University of Tokyo

15-11
8/6/2024 5:00PM–6:30PM - Palmovka 2

Chair: Shripad Revankar - Purdue University
Co-Chair: Salvatore Angelo Cancemi - University of Pisa
Co-Chair: Aramaki Takuto - Tokyo Denki University

Study of Jet Characteristics and Structural Fatigue in the Upper Chamber of a Lead-Bismuth Eutectic Cooled Reactor Based on Fluid-Structure Coupling Methods
Technical Paper Publication: ICONE31-135637
Ji Zhang - 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

Coarse Mesh Generation for CMFD Acceleration in Sarax-Lavender Code
Technical Paper Publication: ICONE31-135744
Haoxiang Xu - Xi'an Jiaotong University
Youqi Zheng - Xi'an Jiaotong University
Bowen Xiao - Xi'an Jiaotong University
Hongchun Wu - Xi'an Jiaotong University

Characteristic Time Analysis for the Main Dynamic Behaviors of Radioactive Aerosols in Severe Nuclear Accidents
Technical Paper Publication: ICONE31-135753
Jinghong Wang - Tsinghua University
Wei Peng - Tsinghua University
Suyuan Yu - Tsinghua University

Enhancing Nuclear Safety Assessment Through Ai-Driven Surrogate Models for Severe Accident Simulations
Technical Paper Publication: ICONE31-135798
Salvatore Angelo Cancemi - University of Pisa
Michela Angelucci - University of Pisa
Rosa Lo Frano - University of Pisa
Sandro Paci - University of Pisa

Heat Transfer to Supercritical Water Flowing Upward in Short Vertical Flow Geometries
Technical Paper Publication: ICONE31-135875
Mehmet Kavalci - Ontario Tech University
Mark Wspanialy - Ontario Tech University
Laura Heyns - Ontario Tech University
Marcus Cornelius - Ontario Tech University
Igor Pioro - Ontario Tech University

Study on Stabilization Technology of Base Isolation Layer Using Air Floating Technology by Shaking Table Test
Technical Paper Publication: ICONE31-136046
Aramaki Takuto - Tokyo Denki University
Osamu Furuya - Tokyo Denki University
Yoshiro Hiyama - Sansei Airdanshin Systems Inc.
Koji Yamazaki - Sansei Airdanshin Systems Inc.

07-04: Experiments and Analyses - III

8/6/2024 5:00PM–6:30PM - Liben 3

Chair: Luke Placzek - Pacific Northwest National Laboratory

Co-Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Fabian Fabian - Karlsruhe Institute of Technology

Experimental Investigation of Heat Transfer to Supercritical Pressure R134a in Artificially Roughened Tubes

Technical Paper Publication: ICONE31-135141

Fabian Wiltschko - Karlsruhe Institute of Technology

Monika Sipova - Centrum Výzkumu Řež

Jan Vit - Centrum Výzkumu Řež

Xu Cheng - Karlsruhe Institute of Technology

Simulation and Analysis for Hualong Reactor Advanced Integrated Test Facility Based on Relap5

Technical Paper Publication: ICONE31-135143

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

Jingxiang Zhan - China Nuclear Power Engineering Co., Ltd.

Yuntao Zheng - China Nuclear Power Engineering Co., Ltd.

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

Shuliang Huang - China Nuclear Power Engineering Co., Ltd.

Si Ni - China Nuclear Power Engineering Co., Ltd.

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

Inverse Uncertainty Quantification for Subchannel Code With PSBT Experimental Benchmark

Technical Paper Publication: ICONE31-135192

Hanyu Luo - Shanghai Jiao Tong University

Xiaojing Liu - Shanghai Jiao Tong University

Experimental Study on Startup and Heat Transfer Performance of High Temperature Sodium Heat Pipe

Technical Paper Publication: ICONE31-135210

Shunli Jiang - Nuclear Power Institute of China; Tsinghua University

Huihui Zhou - Nuclear Power Institute of China

Youjia Zhang - Nuclear Power Institute of China

Dewen Yuan - Nuclear Power Institute of China

Shanfang Huang - Tsinghua University

Prediction of Critical Heat Flux of Wire-Wrapped Rod Bundle Based on Artificial Neural Network

Technical Paper Publication: ICONE31-135404

Wei Zhang - Shanghai Jiao Tong University

Yao Xiao - Shanghai Jiao Tong Unversity

Lijun Yu - Shanghai Jiao Tong Unversity

Hanyang Gu - Shanghai Jiao Tong Unversity

Preliminary Assessment of Cathare-Modelica Codes Coupling for Safety Analyses in Nuclear Cogeneration

Technical Paper Publication: ICONE31-136017

Alessandro De Angelis - University of Pisa

Paolo Olita - CEA Cadarache

Walter Ambrosini - University of Pisa

07-06: Experiments and Analyses - V

8/6/2024 5:00PM–6:30PM - Palmovka 3

Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Yoshihiro Ishikawa - Rasa Industries, Ltd.

Co-Chair: Minghui Duan - China Institute of Atomic Energy

A Benchmark Test of CHF Test Facility in Ciae to Columbia University HTRF

Technical Paper Publication: ICONE31-135859

Minghui Duan - China Institute of Atomic Energy

Yongwang Xu - China Institute of Atomic Energy

Dongxu Zhang - China Institute of Atomic Energy

Minfu Zhao - China Institute of Atomic Energy

Junhan Wei - China Institute of Atomic Energy

Bing Yang - China Institute of Atomic Energy

Qingyuan Li - China Institute of Atomic Energy

Wei Wang - China Institute of Atomic Energy

Sampo-P Test Facility and Numerical Pretest

Technical Paper Publication: ICONE31-135932

Pengya Guo - Tsinghua University

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

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

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

Jie Pei - China Nuclear Power Engineering Co., Ltd.

Yidan Yuan - China Nuclear Power Engineering Co., Ltd.
Jiyang Yu - DepTsinghua University
Weimin Ma - KTH Royal Institute of Technology

Experimental Study of Heat Transfer Characteristics During Reflooding Process Under Partially Exposed Conditions in Narrow Rectangular Channels
Technical Paper Publication: ICONE31-136011
Junchen Wu - Chongqing University
Haidong Liu - Chongqing University of Technology
Deqi Chen - Chongqing University
Qianlong Zuo - Chongqing University
Hanzhou Liu - Chongqing University
Jian Deng - Nuclear Power Institute of China
Dan Wu - Nuclear Power Institute of China
Mingjing Chen - Chongqing University

Experimental Investigation of Fluidelastic Instability in In-Line Tube Arrays
Technical Paper Publication: ICONE31-136028
Yuiqi Wang - Tsinghua University
Xiaoxin Wang - Tsinghua University
Li Shi - Tsinghua University
Xinxin Wu - Tsinghua University

Advanced Radioactive Material Removal System Using Silver Zeolite (9) Performance Evaluation of Silver Zeolite AgX by High Temperature and Atmospheric Pressure Test Equipment
Technical Paper Publication: ICONE31-136295
Yoshihiro Ishikawa - Rasa Industries, Ltd.
Koji Endo - Rasa Industries
Tadashi Narabayashi - Tokyo Tech
Yasuhiro Kawahara - Kimura Chemical Plants
Tomonori Watanabe - Morimura Bros., Inc.

02-05: Fabrication, Fuel Cycle, Shielding, Storage - I

8/6/2024 5:00PM–6:30PM - Palmovka 4

Chair: Hakan Ozaltun - U.S. Nuclear Regulatory Commission
Co-Chair: Jianhui Wu - Chinese Academy of Sciences
Co-Chair: Xuesong Liu - China Nuclear Power Engineering

Influence of Thorium Utilization on the Safety of a Small Modular Molten Salt Reactor
Technical Paper Publication: ICONE31-134819
Jianhui Wu - Chinese Academy of Sciences
Chunyan Zou - Chinese Academy of Sciences
Chenggang Yu - Chinese Academy of Sciences
Hongkai Zhao - Chinese Academy of Sciences
Yong Cui - Chinese Academy of Sciences
Haotian Bao - Chinese Academy of Sciences
Xiangzhou Cai - Chinese Academy of Sciences
Jingen Chen - Chinese Academy of Sciences

Reliability Studies for Additive Manufacturing Parts of Nuclear Fuel
Technical Paper Publication: ICONE31-135681
Guopeng Qin - CNNC Jianzhong Nuclear Fuel Co., Ltd.
Liying Zhang - CNNC Jianzhong Nuclear Fuel Co., Ltd.
Yushan Huang - Guangzhou Shinengine AM Technology Co., Ltd.

Analysis of Shielding Structures of Radioactive Material Transport Package Based on Isotope γ Radiation Properties in Radioactive Materials
Technical Paper Publication: ICONE31-136353
Zhipeng Wang - China Institute for Radiation Protection
Changwu Wang - China Institute for Radiation Protection
Qian Sun - China Institute for Radiation Protection
Yuhang Zhang - China Institute for Radiation Protection

A Kind of Shielding Design and Verification Test of Radioactive Source Transport Container
Technical Paper Publication: ICONE31-136170
Lei Chen - China Institute for Radiation Protection
Zhipeng Wang - China Institute for Radiation Protection
Liming Jiao - China Institute for Radiation Protection

Dajie Zhuang - China Institute for Radiation Protection
Qian Sun - China Institute for Radiation Protection
Changwu Wang - China Institute for Radiation Protection

Analysis on Permeation Leakage Through Rubber Sealing Ring for Radioactive Material Transport Packages
Technical Paper Publication: ICONE31-136263
Pengyi Wang - China Institute for Radiation Protection
Dajie Zhuang - China Institute for Radiation Protection
Hongchao Sun - China Institute for Radiation Protection
Lei Chen - China Institute for Radiation Protection

Methodologies for Fission Product Inventory of Reactor Core Based on Transport-Burnup Program
Technical Paper Publication: ICONE31-136168
Xuesong Liu - China Nuclear Power Engineering Co., Ltd.
Bingheng Wang - China Nuclear Power Engineering Co., Ltd.
Aijun Mi - China Nuclear Power Engineering Co., Ltd.

11-02 Severe accident mitigation phenomena

8/6/2024 5:00PM–6:30PM - Florenc 2

Chair: Luteng Zhang - Chongqing University
Co-Chair: Ivo Kljenak - Jozef Stefan Institute
Co-Chair: Guoqiang Wang - Westinghouse Electric Co.

Numerical Simulation of Single/two-Phase Flow in a Stratified Porous Bed
Technical Paper Publication: ICONE31-135388
Aimad Bouloudenine - Xian Jiaotong University
Liangxing Li - Xi'an Jiaotong University
Zutao Xiang - Xi'an Jiaotong University
Shang Shi - Xi'an Jiaotong University
Muhammad Abu Bakar - Xi'an Jiaotong University

Study on the Remelting Process of the Debris Bed in the Lower Head of Reactor Pressure Vessel Based on Lattice Boltzmann Method
Technical Paper Publication: ICONE31-136038
Shang Shi - Xi'an Jiaotong University
Liangxing Li - Xi'an Jiaotong University
Weimin Ma - Royal Institute of Technology
Xiao Zeng - China Nuclear Power Engineering Co., Ltd.
Yidan Yuan - China Nuclear Power Engineering Co., Ltd.
Zhenxin Lei - Xi'an Jiaotong University
Zutao Xiang - Xi'an Jiaotong University
Xiangyang Xu - Xi'an Jiaotong University

Uncertainty and Sensitivity Analysis of PHEBUS FPT-1 Experiment Based on Severe Accident Analysis Code ISAA
Technical Paper Publication: ICONE31-136230
Hao Yang - Xi'an Jiaotong University
Bin Zhang - Xi'an Jiaotong University
Jishen Li - Xi'an Jiaotong University
Pengcheng Gao - Xi'an Jiaotong University
Zhiran Zhang - Xi'an Jiaotong University
Fan Miao - School of Nuclear Science and Technology

Experimental Study of Rectangular Channel Heat Transfer With Buoyancy-Aided Flow Under Asymmetrically Heating
Technical Paper Publication: ICONE31-134969
Yongan Ji - Harbin Engineering University
Zehua Guo - Harbin Engineering University
Ming Ding - Harbin Engineering University
Zhongning Sun - Harbin Engineering University

Experimental Study on the Influence of Spray Characteristics and Temperature Control on the Removal Efficiency of Iodine Aerosols
Technical Paper Publication: ICONE31-135227
Jiaxuan Tang - Chongqing University
Yang Yang - Chongqing University
Luteng Zhang - Chongqing University
Jialong Li - Chongqing University
Liangming Pan - Chongqing University
Zhuo Liu - China Nuclear Power Engineering Co., Ltd.
Li Gao - China Nuclear Power Engineering Co., Ltd.
Yidan Yuan - China Nuclear Power Engineering Co., Ltd.

Numerical Study on the Operational Behavior of Catalytic Components With Spherical Packed Bed Structures
Technical Paper Publication: ICONE31-134633
Tianming Man - Harbin Engineering University
Zehua Guo - Harbin Engineering University

Ming Ding - Harbin Engineering University

Wenkai Liang - Tsinghua University

03-02: Human Factors and Digitization

8/6/2024 5:00PM–6:30PM - Karlin 1

Chair: Brian Fant - Bechtel

Research on Human Reliability Analysis in Digital Master Control Room of Nuclear Power Plant

Technical Paper Publication: ICONE31-134638

Shuting Wang - Nuclear Power Operations Research Institute

Ling Zhao - Nuclear Power Operations Research Institute

Dalin Liu - Nuclear Power Operations Research Institute

Zhen Yan - Nuclear Power Operations Research Institute

Overview of the Application of Thermal Management in Industry and the Application Prospect in the DCS of the NPP

Technical Paper Publication: ICONE31-134820

Youyou Xu - Nuclear Power Institute of China

Jian Deng - Nuclear Power Institute of China

Zhifang Qiu - Nuclear Power Institute of China

Dahuan Zhu - Nuclear Power Institute of China

Dongwei Wang - Nuclear Power Institute of China

Wenbin Han - Nuclear Power Institute of China

Influence of Nuclear Power Plant Interface Complexity on Operator Cognitive Behavior: A Modeling Study

Technical Paper Publication: ICONE31-134997

Pu Chen - Tsinghua University

Jiejuan Tong - Tsinghua University

Visual Analysis of the Research Status, Hotspots, and Trends of International Nuclear Industry Internet Platforms

Technical Paper Publication: ICONE31-135876

Liu Xianying - China Nuclear Power Operation Technology Corporation, Ltd.

Yinggang Jing - China Nuclear Power Operation Technology Corporation,Ltd.

Minmin Cheng - China Nuclear Power Operation Technology Corporation, Ltd.

Huajian Fang - China Nuclear Power Operation Technology Corporation, Ltd.

Preliminary Research on Human Error Analysis and Accident Risk Assessment of Operators With Dynamic Human-Machine Interaction Simulation of Advanced Control Room in Nuclear Power Plants

Technical Paper Publication: ICONE31-136549

Ting Wen - Shenzhen University

Anqi Xu - Shenzhen,China

Ming Yang - Shenzhen University

Xiaomeng Dong - Shenzhen University

Linfeng Li - Shenzhen University

Huiting Wang - Shenzhen University

Leiyue Yang - Shenzhen University

12-02 Risk Assessments and Management - Session 2

8/6/2024 5:00 PM to 6:30 PM - Karlin 3

Chair: Arun Veeramany - Pacific Northwest National Laboratory

Co-Chair: Hidemasa Yamano - Japan Atomic Energy Agency

Co-Chair: Mahesh Pandey - University of Waterloo

Co-Chair: Anton Prins - Risk Management and Consultancy

Co-Chair: Arnold Yuan - Ryerson University

Co-Chair: Ivan Vrbanic - APoSS d.o.o.

Co-Chair: Jaroslav Holy - UJV Řež, a.s.

Co-Chair: Yoshihisa Nishi - Central Research Institute of Electric Power Industry

Co-Chair: Zhegang Ma - Idaho National Laboratory

Co-Chair: Wei Deng - China Nuclear Power Engineering Co., Ltd.

Co-Chair: Thomas Vogan - Sargent & Lundy

Co-Chair: Tao Yu -

Co-Chair: He Wang - Harbin Engineering University

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

Enhancement of Shimane Unit 2 Internal Event At-Power PRA for Reflecting New Findings Including Current Plant States

Technical Paper Publication: ICONE31-134400

Takahiro Usui - The Chugoku Electric Power Co., Inc.

Hiroki Nakamura - The Chugoku Electric Power Co., Inc.

Kenichi Ihara - The Chugoku Electric Power Co., Inc.

Yuki Hirai - The Chugoku Electric Power Co., Inc.

Hitoshi Nojima - The Chugoku Electric Power Co.,Inc.

Satoshi Yoneda - The Chugoku Electric Power Co., Inc.

Kenichi Kanda - The Chugoku Electric Power Co., Inc.

Kazunobu Noriyasu - The Chugoku Electric Power Co., Inc.

Daichi Shiota - Hitachi-GE Nuclear Energy, Ltd.

Naoki Hirokawa - Hitachi-GE Nuclear Energy, Ltd.

Development of the Ambient Dose Rate Evaluation Methodology Based on Plant Conditions for Rapid Consequence Assessment

Technical Presentation Only: ICONE31-133049

Kodai Wadayama - Nuclear Regulation Authority

Retsu Kojo - Nuclear Regulation Authority

Typical Fault Diagnosis Model of Nuclear Power Plant Combined With Knowledge Driven and Data Driven

Technical Paper Publication: ICONE31-134815

Xin Wang - Harbin Engineering University

Minjun Peng - Harbin Engineering University

Hang Wang - Harbin Engineering University

Zikang Li - Harbin Engineering University

Impact of Synoptic Weather Patterns Along the Pacific Coastline of Japan on Tornado Wind Hazard Curves

Technical Paper Publication: ICONE31-135030

Kota Fujiwara - Central Research Institute of Electric Power Industry

Daisuke Nohara - Central Research Institute of Electric Power Industry

Yuzuru Eguchi - Central Research Institute of Electric Power Industry

Yasuo Hattori - Central Research Institute of Electric Power Industry

Hiromaru Hirakuchi - Central Research Institute of Electric Power Industry

Effect of Hydrogen Plant Structure on Hydrogen Risk

Technical Paper Publication: ICONE31-135092

Shucheng Zhang - North China Electric Power University

Xuefeng Lyu - North China Electric Power University

Lin Wang - North China Electric Power University

Xichen Li - Shengneng Energy (Zhejiang) Co., Ltd.

Yu Yu - North China Electric Power University

Houjian Zhao - North China Electric Power University

Shengfei Wang - North China Electric Power University

Zhangpeng Guo - North China Electric Power University

Analysis of Mobile Equipment Configuration for Severe Accidents in Nuclear Power Plants Based on Multi-Unit PSA

Technical Paper Publication: ICONE31-134510

Dalin Liu - Nuclear Power Operations Research Institute

Jiangguo Wang - Nuclear Power Operations Research Institute

Zhen Yan - Nuclear Power Operations Research Institute

Shuting Wang - Nuclear Power Operations Research Institute

Ling Zhao - Nuclear Power Operations Research Institute

13-02: Computer Code V&V - II

8/6/2024 5:00PM–6:30PM - Karlin 4

Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Kotaro Nakada - Toshiba Energy Systems & Solutions Corporation

Co-Chair: Lixin Du - Shanghai Jiao Tong University

Co-Chair: Zixuan Wang - Tsinghua University

Verification and Analysis of Thermal-Hydraulics System Program for a Power Plant Model

Technical Paper Publication: ICONE31-134794

Lixin Du - Shanghai Jiao Tong University

Peng Zhou - Shanghai Jiao Tong University

Hao Zhang - Shanghai Jiao Tong University

Yanhua Yang - Shanghai Jiao Tong University

Comparative Analysis of Loss of Coolant Accidents for Gen-III PWRs Based on Acme and Atlas Facilities

Technical Paper Publication: ICONE31-134823

Yuhang Huang - Huazhong University of Science and Technology

Xueyan Zhang - Huazhong University of Science and Technology

Jun Yang - Huazhong University of Science and Technology

Accelerating Nuclear Monte Carlo Simulations With Accuracy Improvement by Using Gaming-Based Deep Learning Super Sampling

Technical Paper Publication: ICONE31-134868

Haoxuan Guo - Xi'an Jiaotong University

Wei Li - Xi'an Jiaotong University

Yaodong Sang - Xi'an Jiaotong University

Haizheng Chen - Xi'an Jiaotong University

Qingmin Zhang - Xi'an Jiaotong University

Code-to-Code Verification of Thermal Hydraulic Subchannel Code Linden

Technical Paper Publication: ICONE31-135128

Zixuan Wang - Tsinghua University

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

Yan Wang - Tsinghua University

Multi-Physics Coupling Simulation of a Small Floating Lead-Cooled Fast Reactor Based on OpenMC and Gen-Foam

Technical Paper Publication: ICONE31-135154

Haochen Huang - North China Electric Power University

Fei Xie - North China Electric Power University

Yu Liu - North China Electric Power University

Daogang Lu - North China Electric Power University

Tripoli-4® Monte Carlo Code Verification and Validation Using T4G Display Tool

Technical Paper Publication: ICONE31-135213

Yi-Kang Lee - CEA

François-Xavier Hugot - CEA

WEDNESDAY, 8/7/2024

Time	Title	Room
8:30AM - 10:00AM	ICONE Technical Session	See App for specific locations
10:00AM - 7:00PM	EXPO Open	Congress Hall Foyer, Lower Level
10:00AM - 10:30AM	Refreshment Break	Congress Hall Foyer, Lower Level
10:30AM - 12:00PM	Panel Sessions	See App for specific locations
12:00PM - 1:00PM	Ticketed Lunch	Atrium Restaurant
1:00PM - 2:30PM	Panel Sessions	See App for specific locations
2:30PM - 3:00PM	Refreshment Break	Congress Hall Foyer, Lower Level
3:00PM - 4:30PM	ICONE Technical Session	See App for specific locations
4:45PM - 6:15PM	ICONE Technical Session	See App for specific locations
6:00PM - 7:00PM	Student Awards/Track Chair Reception	TBD

15-06

8/7/2024 8:30AM–10:00AM - Karlin 2

Chair: Shripad Revankar - Purdue University
Co-Chair: Salvatore Cancemi - University of Pisa
Co-Chair: Koji Fujikura - Tohoku University

Neural Network-Driven Methodology for Predictive Health Monitoring and Aging Management in Nuclear Power Plant Operations
Technical Paper Publication: ICONE31-134685
Salvatore Angelo Cancemi - University of Pisa
Michela Angelucci - University of Pisa
Rosa Lo Frano - University of Pisa
Sandro Paci - University of Pisa

Investigation of LSTM and AutoML-Based Models for the Real-Time Diagnosis of PWR LOCA Accident Progression
Technical Paper Publication: ICONE31-134780
Johndel Obra - The University of Tokyo
Shuichiro Miwa - The University of Tokyo
Koji Okamoto - The University of Tokyo

Transport Characteristics of Two-Phase Flow in Rod Bundle Channels With a Spacer Grid
Technical Paper Publication: ICONE31-134834
Jiaxing Ren - Harbin Engineering University
Ruohao Wang - Harbin Engineering University
Fangdong Wang - Harbin Engineering University
Shouxu Qiao - Harbin Engineering University
Sichao Tan - Harbin Engineering University
Ruifeng Tian - Harbin Engineering University
Puzhen Gao - Harbin Engineering University

Reliability Quantification of Passive Containment Cooling System Through Response Surface Methodology
Technical Paper Publication: ICONE31-134863
Chen Shikang - Xi'an Jiaotong University
Chen Ronghua - Xi'an Jiaotong University
Qiu Suizheng - Xi'an Jiaotong University

Anomaly Detection of Thermal System Using CAE-DDQN Model
Technical Paper Publication: ICONE31-134870
Tong Li - Harbin Engineering University
Jiahao Cheng - Harbin Engineering University
Bo Wang - Harbin Engineering University
Sichao Tan - Harbin Engineering University
Ruifeng Tian - Harbin Engineering University

Neutronics Design of Molten Salt Reactor for Transmutation of Various Radioactive Nuclides
Technical Paper Publication: ICONE31-134875
Koji Fujikura - Tohoku University
Naoto Aizawa - Tohoku University

15-09

8/7/2024 8:30AM–10:00AM - Palmovka 1

Chair: Shripad Revankar - Purdue University
Co-Chair: Defang Mu - Xi'an Jiaotong University
Co-Chair: Seda Yilmaz Kaygisiz -

Ultrasonic Doppler Velocimetry (UDV) for Cold Shock Transients in a Scaled Liquid Metal Cooled Reactor Plenum
Technical Paper Publication: ICONE31-135269
Broderick Sieh - Purdue University
Hitesh Bindra - Purdue University

Investigating the Motion Characteristics of Complex-Shaped Foreign Objects on the Secondary Side of a Steam Generator Based on CFD-DEM Method
Technical Paper Publication: ICONE31-135345
Defang Mu - Xi'an Jiaotong University
Jie Rong - 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

Research on Multi-Scale Coupling Program Based on Lead Bismuth Fast Reactor
Technical Paper Publication: ICONE31-135354
Yixin Zhang - Xi'an Jiaotong University
Chenglong Wang - Xi'an Jiaotong University
Jiaxin Zhang - Xi'an Jiaotong University
Wenxi Tian - Xi'an Jiaotong University
S.Z. Qiu - Xi'an Jiaotong University
G.H. Su - Xi'an Jiaotong University

Control Scheme of Cogeneration Nuclear Power Plant Based on the "Turbine Follows Heating" Operation Mode
Technical Paper Publication: ICONE31-135376
Ru Zhang - Xi'an Jiaotong University
Nan Zhang - China Nuclear Power Engineering Co., Ltd.
Mengxiao Yan - Xi'an Jiaotong University
Peiwei Sun - Xi'an Jiaotong University
Xinyu Wei - Xi'an Jiaotong University

Investigating the Impact of Various Molten Salt Combinations on Reactor Criticality and Thermal Neutron Flux Distribution in SD-TMSR
Technical Paper Publication: ICONE31-135393
Seda Yilmaz - Purdue University
Shripad Revankar - Purdue University
Yunlin Xu - Purdue University

Numerical Analysis of Three-Dimensional Flow Field Impact of Sodium Fast Reactor in Core Disruptive Accident
Technical Paper Publication: ICONE31-135397
Jian Zhao - Xi'an Jiaotong University
Jing Zhang - Xi'an Jiaotong Univesity
Yingwei Wu - Xi'an Jiaotong University
Guanghui Su - Xi'an Jiaotong University
Wenxi Tian - Xi'an Jiaotong University
Suizheng Qiu - Xi'an Jiaotong University

15-12

8/7/2024 8:30AM–10:00AM - Palmovka 2

Chair: Shripad Revankar - Purdue University
Co-Chair: Ondřej Lachout - Czech Technical University in Prague
Co-Chair: Noura Elsalamouny - Lithuanian Energy Institute

Analysis of Operational Characteristics of a Small Modular Reactor With Accident Tolerant Fuel
Technical Paper Publication: ICONE31-136104
Ondřej Lachout - Czech Technical University in Prague
Pavel Suk - Czech Technical University in Prague

Experimental Study of Bubble Migration Characteristics in MCCI Melt Pool
Technical Paper Publication: ICONE31-136126
Guorui Yang - Xi'an Jiaotong University
Jing Zhang - Xi'an Jiaotong University
Yingwei Wu - Xi'an Jiaotong University
Yanan He - Xi'an Jiaotong University
Suizheng Qiu - Xi'an Jiaotong University

Guanghui Sui - Xi'an Jiaotong University
Wenxi Tian - Xi'an Jiaotong University

Perform High Temperature and Pressure CHF Experiment Bench Under Six Degrees of Freedom Motion Condition
Technical Paper Publication: ICONE31-136135
Binzhuo Xia - Xi'an Jiaotong University
Fanting Xia - Xi'an Jiaotong University
Yiming Yang - Xi'an Jiaotong University
Kui Zhang - Xi'an Jiaotong University
Ronghua Chen - Xi'an Jiaotong University
Wenxi Tian - Xi'an Jiaotong University
Suizheng Qiu - Xi'an Jiaotong University

Influence of Multi-Hole Sparger Geometry on the Chugging Regime
Technical Paper Publication: ICONE31-136169
Luca Berti - University of Pisa
Rosa Lo Frano - University of Pisa
Francesco D'Errico - University of Pisa
Donato Aquaro - University of Pisa

Effect of Neutron Leakage on Equilibrium U-Pu and Th-U Cycle for 16 Selected Reactors
Technical Paper Publication: ICONE31-136237
Josef Sabol - Paul Scherrer Institute / Czech Technical University in Prague
Jiří Křepel - Paul Scherrer Institute

Modeling of Quench-06 and Quench-20 Experiments Using Severe Accident Code RELAP/SCDAPSIM
Technical Paper Publication: ICONE31-136274
Noura Elsalamouny - Lithuanian Energy Institute
Tadas Kaliatka - Lithuanian Energy Institute
Algirdas Kaliatka - Lithuanian Energy Institute

07-05: Experiments and Analyses - IV

8/7/2024 8:30AM–10:00AM - Liben 3

Chair: Guoqiang Wang - Westinghouse Electric Co.
Co-Chair: Yasuhiro Kawahara - Kimura Chemical Plants Co., Ltd.
Co-Chair: Ayodeji Ala - Southwest University of Science and Technology
Co-Chair: Tomio Okawa - The University of Electro-Communication

Experimental Study on Emergency Discharge Characteristics of Medical Isotope Test Reactor
Technical Paper Publication: ICONE31-135452
Hang Liu - Nuclear Power Institute of China
Liangming Pan - Chongqing University
Yulong Zhang - Nuclear Power Institute of China
Shiwen Liu - Nuclear Power Institute of China
Jianyong Lai - Nuclear Power Institute of China
Qing Li - Nuclear Power Institute of China

Advanced Radioactive Material Removal System Using Silver Zeolite (8) Development of High Temperature/ Normal Pressure Test Equipment
Technical Paper Publication: ICONE31-135455
Yasuhiro Kawahara - Kimura Chemical Plants Co., Ltd.
Tadashi Narabayashi - Tokyo Institute of Technology
Koji Endo - Rasa Industries, Ltd.
Yoshihiro Ishikawa - Rasa Industries, Ltd.
Sanshiro Kobayashi - Morimura Bros, Inc.

Experimental Study on Characteristics of Entrained Droplets and Liquid Film at Swirler Outlet in Swirl-Vane Separator
Technical Paper Publication: ICONE31-135520
Ruiq Kang - Shanghai Jiao Tong University
Zhenqin Xiong - Shanghai Jiao Tong University

Experimental Investigation of Early Response of Hot Water Rapid Blowdown in Separated Pipeline

Technical Paper Publication: ICONE31-135529

Xiaoqiang He - Harbin Engineering University

Puzhen Gao - Harbin Engineering University

Ze Zhang - Harbin Engineering University

Jianjun Wang - Harbin Engineering University

Experimental Study of the Effect of Pulsatile Flow on Corner Vortices at the Sudden Contraction Before the Inlet of Two Parallel Narrow Rectangular Channels

Technical Paper Publication: ICONE31-135587

Ayodeji Ala - Southwest University of Science and Technology

Bin Ye - Southwest University of Science and Technology

07-07: Experiments and Analyses - VI

8/7/2024 8:30AM–10:00AM - Palmovka 3

Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Christopher Balbier - Pennsylvania State University

Co-Chair: Shigeo Hosokawa - Kansai University

Co-Chair: Hiroaki Nakanishi - Mitsubishi Heavy Industries, Ltd.

Experimental Study on Bubble Rising Behavior in Low-Temperature Molten LBE With Ultrasonic Doppler Velocimetry

Technical Paper Publication: ICONE31-136650

Hui Cheng - Harbin Engineering University

Jiayuan Li - Harbin Engineering University

Minyang Gui - Harbin Engineering University

Songbai Cheng - Harbin Engineering University

Zhaolong Li - Sun Yat-sen University

Experimental Investigation on Void Fraction Measurement in High-Temperature and High-Pressure Gas-Liquid Two-Phase Flow

Technical Presentation Only: ICONE31-134244

Yoshiteru Komuro - Mitsubishi Heavy Industries, Ltd.

Hiroaki Nakanishi - Mitsubishi Heavy Industries, Ltd.

Seiho Utsumi - Mitsubishi Heavy Industries, Ltd.

Yoshiyuki Kondo - Mitsubishi Heavy Industries, Ltd.

Takashi Ueno - Mitsubishi Heavy Industries, Ltd.

Experimental Study on the Operational Stability of Passive Residual Heat Removal System

Technical Presentation Only: ICONE31-135743

Quanbin Zhao - Xi'an Jiaotong University

Huchen Han - Xi'an Jiaotong University

Flow Characteristics of Turbulent Bubbly Flow in 2×2 Rod Bundle

Technical Presentation Only: ICONE31-136714

Shigeo Hosokawa - Kansai University

Akio Tomiyama - Kobe University

Experimental Study on the Liquid Film Behaviors of Annular Flow in the Rectangular Channel

Technical Presentation Only: ICONE31-138262

Quan-Yao Ren - Nuclear Power Institute of China

Zengping Pu - Nuclear Power Institute of China

Qingche He - Chongqing University

Hui He - Shanghai Jiaotong University

Haidong Liu - Chongqing University of Technology

Zhong Xiao - Nuclear Power Institute of China

Liang-Ming Pan - Chongqing University

High Temperature Gas Velocity Profile Measurement Using Fiber Optic Hot Wire Velocimetry

Technical Paper Publication: ICONE31-136503

Christopher Balbier - Pennsylvania State University

Scout Bucks - Pennsylvania State University

Matthew Leoschke - Pennsylvania State University

Federico Scurti - Pennsylvania State University

Saya Lee - Pennsylvania State University

02-06: Fabrication, Fuel Cycle, Shielding, Storage - II

8/7/2024 8:30AM–10:00AM - Palmovka 4

Chair: Hakan Ozaltun - U.S. Nuclear Regulatory Commission

Co-Chair: Yuezhou Wei - University of South China

Co-Chair: Xuesong Yan - Chinese Academy of Sciences

An Advanced Aqueous Reprocessing System for MOX-Fuel Based on Anion Exchange and Electrolytic Reduction

Technical Presentation Only: ICONE31-135590

Yuezhou Wei - University of South China

Shunyan Ning - University of South China

Xiaobiao Yin - University of South China

Study on Long-Life Minor Actinide Temporary Storage Scheme Based on High-Level Liquid Waste Partitioning Strategy

Technical Paper Publication: ICONE31-135666

Meng Wei - CNNC Long'an Co. Ltd.

Xiantao Meng - CNNC Long'an Co. Ltd.

Characteristics of Irradiation Production of Radioisotope in an Ultra-High Flux Research Reactor

Technical Paper Publication: ICONE31-135558

Jian Li - Tsinghua University

Wei Xu - North China Electric Power University

Jing Zhao - Tsinghua University

Zhihong Liu - Tsinghua University

Ding She - Tsinghua University

Heng Xie - Tsinghua University

Lei Shi - Tsinghua University

Comparison of EQL0D V2 and V4 Procedures by Means of Equilibrium U-Pu and Th-U Cycles in 16 Selected Reactors

Technical Paper Publication: ICONE31-136218

Jiří Křepel - Paul Scherrer Institute

Francis Borys - Paul Scherrer Institute

Josef Sabol - Paul Scherrer Institute / Czech Technical University in Prague

Evžen Losa - Czech Technical University in Prague

Effect of Fission Products on Equilibrium U-Pu and Th-U Cycle for 16 Selected Reactors

Technical Paper Publication: ICONE31-136232

Josef Sabol - Paul Scherrer Institute / Czech Technical University in Prague

Francis Borys - Paul Scherrer Institute

Jiří Křepel - Paul Scherrer Institute

Simulation Calculation of the Utilization Rate of Uranium Resources on the ADANES Fuel Cycle

Technical Paper Publication: ICONE31-130623

Xuesong Yan - Chinese Academy of Sciences

Yucui Gao - Chinese Academy of Sciences

Yaling Zhang - Chinese Academy of Sciences

Lei Yang - Chinese Academy of Sciences

03-03: Reliability and Safety Systems

8/7/2024 8:30AM–10:00AM - Karlin 1

Chair: Brian Fant - Bechtel

United States Nuclear Regulatory Commission Modernization Efforts to Enable the Safe Use of Digital Instrumentation and Controls in Nuclear Power Plant Safety Systems

Technical Paper Publication: ICONE31-135026

Samir Darbali - U.S. Nuclear Regulatory Commission

Dinesh Taneja - U.S. Nuclear Regulatory Commission

Erick Martinez Rodriguez - U.S. Nuclear Regulatory Commission

Gilberto Blas Rodriguez - U.S. Nuclear Regulatory Commission

Research on Operating Reliability of Multi-Modular HTR Nuclear Power Plant Based on Equipment State

Technical Paper Publication: ICONE31-135387

Chao Guo - Tsinghua University

Jianghai Li - Tsinghua University

Qianqian Jia - Tsinghua University

Ronghong Qu - Tsinghua University

Xiaojin Huang - Tsinghua University

Optimal Sensor Placement in Nuclear Power Steam Water System Based on Signed Directed Graph

Technical Paper Publication: ICONE31-135960

Tianyang Xing - Southeast University

Chunyang Zeng - Southeast University

Bin Han - Southeast University

Mudi Jiang - Southeast University

Yunze He - Southeast University

Shenghui Liu - Southeast University

Junling Huang - Southeast University

Xialiang Zhu - Southeast University

Suppression of Harmonic Vibration in AMB System Using Nonlinear Adaptive Resonant Controllers

Technical Paper Publication: ICONE31-135983

Xiaoyu Bian - Tsinghua University

Zhengang Shi - Tsinghua University

Ni Mo - Tsinghua University

Zhe Sun - Tsinghua University

Response Analysis and Load Optimization of HTR-PM Rotor System

Technical Presentation Only: ICONE31-135993

Tang Xiaoxuan - Tsinghua University

Zhao Lei - Tsinghua University

12-03 Risk Assessments and Management - Session 3

8/7/2024 8:30AM–10:00AM - Karlin 3

Chair: Arun Veeramany - Pacific Northwest National Laboratory

Co-Chair: Hidemasa Yamano - Japan Atomic Energy Agency

Co-Chair: Mahesh Pandey - University of Waterloo

Co-Chair: Anton Prins - Risk Management and Consultancy

Co-Chair: Arnold Yuan - Ryerson University

Co-Chair: Ivan Vrbanic - APoSS d.o.o.

Co-Chair: Jaroslav Holy - UJV Řež, a.s.

Co-Chair: Yoshihisa Nishi - Central Research Institute of Electric Power Industry

Co-Chair: Zhegang Ma - Idaho National Laboratory

Co-Chair: Wei Deng - China Nuclear Power Engineering Co., Ltd.

Co-Chair: Thomas Vogan - Sargent & Lundy

Co-Chair: Tao Yu -

Co-Chair: He Wang - Harbin Engineering University

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

Typical Sequence Analysis of SLOCA Accidents in a Third Generation Nuclear Power Plant Based on RISMC Method

Technical Paper Publication: ICONE31-135096

Churan Feng - China Nuclear Power Engineering Co., Ltd.

Jingxiang Zhan - China Nuclear Power Engineering Co. ,Ltd.

Lin Yan - China Nuclear Power Engineering Co., Ltd.

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

Jinghua Zhou - China Nuclear Power Engineering Co., Ltd.

Research and Application of Parameter Verification Technology for Health Monitoring of NPP I&C Board Based on Field Fault Analysis

Technical Paper Publication: ICONE31-135305

Xiaopeng Zhao - China Techenergy Co., Ltd.

Guilian Shi - China Techenergy Co., Ltd.

Hongwei Pei - China Techenergy Co., Ltd.

Fangjie Wu - China Techenergy Co., Ltd.

Yongbin Sun - China Techenergy Co., Ltd.

Human Reliability Analysis for a Passive NPP and Application in Plant Operating Procedure Optimization

Technical Paper Publication: ICONE31-135379

Yongping Qiu - Shanghai Nuclear Engineering Research & Design Institute Co., Ltd.

Xiao Tan - Shanghai Nuclear Engineering Research & Design Institute Co., Ltd.

Study on Realistic Evaluation of Source Term in Level 2 PRA

Technical Presentation Only: ICONE31-135815

Yoshihisa Nishi - Central Research Institute of Electric Power Industry

Masaaki Satake - Central Research Institute of Electric Power Industry

Koichi Nakamura - Central Research Institute of Electric Power Industry

Satoshi Nishimura - Central Research Institute of Electric Power Industry

Quantifying Software Safety in Nuclear Power Plants: A Framework for Requirements Phase Assessment

Technical Paper Publication: ICONE31-135382

Boyuan Li - Tsinghua University

Duo Li - Tsinghua University

Jianghai Li - Tsinghua University

Chao Guo - Tsinghua University

Huasheng Xiong - Tsinghua University

Shuqiao Zhou - Tsinghua University

Xiaojin Huang - Tsinghua University

The Mission Time Analysis in Level 2 Probabilistic Safety Assessment of the Third-Generation Nuclear Power Plant

Technical Paper Publication: ICONE31-135680

Shujie Guo - China Nuclear Power Engineering Co., Ltd.

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

Yubao Zhong - Xi'an Jiaotong University

13-03: Computer Code V&V - III

8/7/2024 8:30AM–10:00AM - Karlin 4

Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Masaaki Tanaka - Japan Atomic Energy Agency

Co-Chair: Alessandro Bellomo - University of Pisa

Co-Chair: Timothy Valentine - Oak Ridge National Laboratory

Verification of the RMC-SaraGR Nuclear Design Code System Based on the HTTR Benchmark

Technical Paper Publication: ICONE31-135368

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

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

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

OECD-NEA Expert Group on Reactor Systems Multi-Physics

Technical Paper Publication: ICONE31-136161

Timothy Valentine - Oak Ridge National Laboratory

Evgeny Ivanov - Institute for Radiological Protection and Nuclear Safety

Kostadin Ivanov - North Carolina State University

Alessandro Petruzzi - Nuclear and Industrial Engineering S.R.L.

Maria Avramova - North Carolina State University

Mathieu Hursin - Ecole Polytechnic Federal de Lausanne

Oliver Buss - Nuclear Energy Agency

Simmer-III Code Simulation of High-Pressure Water-Lead Interaction in Westinghouse's Lewin Test Facility

Technical Paper Publication: ICONE31-136222

Alessandro Bellomo - University of Pisa

Mattia Massone - Agenzia Nazionale per le Nuove Tecnologie, L'Energia e lo Sviluppo Economico Sostenibile (ENEA)

Simone Gianfelici - Agenzia Nazionale per le Nuove Tecnologie, L'Energia e lo Sviluppo Economico Sostenibile (ENEA)

Fabio Martini - Westinghouse Electric Company UK Limited

Sung Jin Lee - Fauske and Associates

Mariano Tarantino - Agenzia Nazionale per le Nuove Tecnologie, L'Energia e lo Sviluppo Economico Sostenibile (ENEA)

Francesco Galleni - University of Pisa

Andrea Pucciarelli - University of Pisa

Alessio Pesetti - University of Pisa

Pure Lead Thermodynamic Properties in Simmer-Iii Code: A Comparative Review and New Evaluation Proposal

Technical Paper Publication: ICONE31-136243

Alessandro Bellomo - University of Pisa

Mattia Massone - Agenzia Nazionale per le Nuove Tecnologie, L'Energia e lo Sviluppo Economico Sostenibile (ENEA)

Simone Gianfelici - Agenzia Nazionale per le Nuove Tecnologie, L'Energia e lo Sviluppo Economico Sostenibile (ENEA)

Koji Morita - Kyushu University

Mariano Tarantino - Agenzia Nazionale per le Nuove Tecnologie, L'Energia e lo Sviluppo Economico Sostenibile (ENEA)

Alessio Pesetti - University of Pisa

Vittorio Cossu - University of Pisa

Andrei Rineiski - Karlsruhe Institute of Technology

Development and Verification of a Few-Group Parameters Calculation Code TMSR-Link for Molten Salt Reactor
Technical Paper Publication: ICONE31-136987
Kailong Wang - Chinese Academy of Sciences
Yong Cui - Chinese Academy of Sciences
Chunyan Zou - Chinese Academy of Sciences
Jingen Chen - Chinese Academy of Sciences
Xiangzhou Cai - Chinese Academy of Sciences

Development of a Spatial Dynamics Model Based on Semi-Analytic Nodal Method
Technical Paper Publication: ICONE31-137006
Yong Cui - Chinese Academy of Sciences
Jingen Chen - Chinese Academy of Sciences
Jianhui Wu - Chinese Academy of Sciences
Wei Guo - Chinese Academy of Sciences
Xiangzhou Cai - Chinese Academy of Sciences

07-12: SMR and Advanced Reactors - I

8/7/2024 3:00PM–4:30PM - Palmovka 1

Chair: Guoqiang Wang - Westinghouse Electric Co.
Co-Chair: Wang Zhenlan - Xi'an Jiaotong University
Co-Chair: Wang Dexin - Tsinghua University

Transient Analysis of the Loss of Heat Sink Accident in a New Type of Megawatt Heat Pipe Reactor
Technical Paper Publication: ICONE31-131056
Wang Zhenlan - Xi'an Jiaotong University
Gou Junli - Xi'an Jiaotong University
Yuan Leqi - Xi'an Jiaotong University
Shan Jianqiang - Xi'an Jiaotong University

Study on Friction and Wear Performance of Flow-Blocking Packing for High-Temperature Gas-Cooled Reactor
Technical Paper Publication: ICONE31-132043
Dexin Wang - Tsinghua University
Qi Min - Tsinghua University
Yuanyuan Ma - Tsinghua University
Li Shi - Tsinghua University
Xiaowei Li - Tsinghua University
Zhengming Zhang - Tsinghua University
Libin Sun - Tsinghua University

Optimal Design of Supercritical CO2 Power Cycle for High Temperature Gas-Cooled Reactor
Technical Paper Publication: ICONE31-133714
Yujia Zhou - Xi'an Thermal Power Research Institute Co., Ltd.
Yifan Zhang - Xi'an Thermal Power Research Institute Co., Ltd.
Hongzhi Li - Xi'an Thermal Power Research Institute Co., Ltd.
Mingyu Yao - Xi'an Thermal Power Research Institute Co., Ltd.

Temperature Flied Rapid Estimation of Space Nuclear Thermionic Reactor Based on Reduced-Order Model
Technical Paper Publication: ICONE31-134267
Shuo Liu - Xi'an Jiaotong University
Chenglong Wang - Xi'an Jiaotong University
Suizheng Qiu - Xi'an Jiaotong University
Wenxi Tian - Xi'an Jiaotong University
Guanghui Su - Xi'an Jiaotong University

Study on Reactor Cavity Cooling System of HTR-PM in DLOFC Accident With TIN-RCCS Code and Spectra Code
Technical Paper Publication: ICONE31-134275
Xinsheng Xu - Tsinghua University
Yiyang Ye - CAEP Software Center for High Performance Numerical Simulation
Yanhua Zheng - Tsinghua University
M. Stempniewicz Marek - Nuclear Research & Consultancy Group

Effect of Geometric Parameters on Cooling Performance of the Concrete Shielding for Swimming Pool-Type Low-Temperature Heating Reactor
Technical Paper Publication: ICONE31-134626
Guangming Fan - Harbin Engineering University
Shuai Hao - Harbin Engineering University
Zongkun Li - Harbin Engineering University
Jiaming Li - Harbin Engineering University
Shicong Guan - Harbin Engineering University

07-14: Single and Multi-Phase Flow - I

8/7/2024 3:00PM–4:30PM - Palmovka 3

Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Haidong Liu - Chongqing University of Technology

Co-Chair: Shota Ueda - Central Research Institute of Electric Power Industry

Two-Phase Flow Distribution in 5x5 Rod Bundle During Boil-Off Process

Technical Paper Publication: ICONE31-124804

Shota Ueda - Central Research Institute of Electric Power Industry

Takahiro Arai - Central Research Institute of Electric Power Industry

Atsushi Ui - Central Research Institute of Electric Power Industry

Masahiro Furuya - Central Research Institute of Electric Power Industry

Riichiro Okawa - Central Research Institute of Electric Power Industry

Kenetsu Shirakawa - Central Research Institute of Electric Power Industry

Tadakatsu Yodo - Mitsubishi Heavy Industries, Ltd.

Two Phase Flow Interface Dynamic Behavior During CHF Transient

Technical Paper Publication: ICONE31-131755

Haidong Liu - Chongqing University of Technology

Qiao Zeng - Chongqing University of Technology

Deqi Chen - Chongqing University

A Mass Flow Rate Control System in the Novel Superheated Steam Supply System of NHR200-II

Technical Paper Publication: ICONE31-131786

Zongyang Li - Tsinghua University

Wentao Hao - Tsinghua University

Wenwen Zhang - Tsinghua University

Weihua Li - Tsinghua University

Xingtuan Yang - Tsinghua University

Flow Regime Visualization of Wet Steam Flow in a Horizontal Circular Pipes Having Different Diameter

Technical Paper Publication: ICONE31-132427

Yuta Uchiyama - Central Research Institute of Electric Power Industry

Ryo Morita - Central Research Institute of Electric Power Industry

Time-Domain Nonlinear Investigation of Two-Phase Flow Instability in HTGR OTSG Using Simulink

Technical Paper Publication: ICONE31-132493

Yang Su - Tsinghua University

Xiaowei Li - Tsinghua University

Xinxin Wu - Tsinghua University

Study on Fluid-Elastic Instability of Tube Bundles in Cross Flow Based on Spatiotemporal Coherence

Technical Paper Publication: ICONE31-134205

Yuxuan Cheng - Chongqing University

Shanshan Bu - Chongqing University

Guo Kai - Yanshan University

Deqi Chen - Chongqing University

07-15: Single and Multi-Phase Flow - II

8/7/2024 3:00PM–4:30PM - Palmovka 4

Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Tan Bing - Harbin Engineering University

Co-Chair: Scott Franz - Framatome Inc.

Bubble Features on SiC Surfaces in Flow Boiling

Technical Paper Publication: ICONE31-134786

Tan Bing - Harbin Engineering University

Haoliang Ren - Harbin Engineering University

Rulei Sun - Harbin Engineering University

Songbai Cheng - Harbin Engineering University

Research on the Natural Circulation Ability of Lead-Bismuth-Steam-Water Direct Contact Multiphase Flow
Technical Paper Publication: ICONE31-134853
Xiaoyao Ma - China institute of Atomic Energy
Daoxi Cheng - China Institute of Atomic Energy
Weiming Zhai - China Institute of Atomic Energy
Song Yu - China Institute of Atomic Energy
Mingdi Xing - China Institute of Atomic Energy
Ruizhi Li - China Institute of Atomic Energy
Ping Zhou - China Institute of Atomic Energy
Weilong Gao - China Institute of Atomic Energy

Investigation of Reverse Flow in the Passive Residual Heat Removal System of NHR-200II
Technical Paper Publication: ICONE31-135702
Yiwa Geng - China Nuclear Power Engineering Co., Ltd.
Ziyi Li - Shandong Institute of Advanced Technology
Xiongbin Liu - Tsinghua University
Shuliang Huang - China Nuclear Power Engineering Co., Ltd.
Haiqi Qin - of Tsinghua University

Flow Dynamics in a Fuel Bundle With a Particle Bed
Technical Paper Publication: ICONE31-136239
Scott Franz - Framatome Inc.
Gordon Wissinger - Framatome Inc.

X-Ray Imaging of Two Phase Natural Circulation With Seawater
Technical Presentation Only: ICONE31-135710
Broderick Sieh - Purdue University
Hitesh Bindra - Purdue University

Flow Boiling CHF Enhancement Using Honeycomb Porous Structure With Two-Layer Structure
Technical Presentation Only: ICONE31-136501
Shoji Mori - Kyushu University

02-07: Methods Development, Computational Approaches - I

8/7/2024 3:00PM–4:30PM - Karlin 1

Chair: Hakan Ozaltun - U.S. Nuclear Regulatory Commission
Co-Chair: Xiang Wang - Harbin Engineering University
Co-Chair: Yuancheng Zhou - Xi'an JiaoTong University

Fast Solution of Schroedinger Equation Based on Complex One-Dimensional Potential Wells
Technical Paper Publication: ICONE31-137072
Zihao Liu - Harbin Engineering University
Xiang Wang - Harbin Engineering University

A Preconditioning Method Based on Strongly Implicit Procedure for the Multi- Diagonal Equation
Technical Paper Publication: ICONE31-133656
Bo Tan - Tsinghua University
Haojie Zhang - Tsinghua University
Yutong Wen - Tsinghua University
Ding She - Tsinghua University

Multi-Mesh Approach for Geometry-Independent Neutronic/Thermal-Hydraulics Coupling Analyses Using RMC and Ansys Fluent
Technical Paper Publication: ICONE31-133607
Xingyu Zhao - Tsinghua University
Guodong Liu - Tsinghua University
Shanfang Huang - Tsinghua University
Qiaoyan Chen - China Nuclear Power Engineering Co., Ltd.
Hao Luo - Tsinghua University
Ying He - Tsinghua University
Junren Hou - Tsinghua University
Kan Wang - Tsinghua University

Kriging Surrogate Modelling of Multiplication Factor With Random Effect
Technical Paper Publication: ICONE31-136647
Yizhen Wang - Harbin Engineering University
Chen Hao - Harbin Engineering University

High-Order Harmonics Calculation for the Power Reconstruction of 3D Pin-Scale Whole-Core
Technical Paper Publication: ICONE31-136320
Zhinan Xie - Harbin Engineering University
Chen Hao - Harbin Engineering University
Wen Yin - Harbin Engineering University

Bamboo-Frame: An Automatic Modeling Tool for the Two-Step Reactor Core Physics Analysis
Technical Paper Publication: ICONE31-135358
Yuancheng Zhou - Xi'an: JiaoTong University
Yunzhao Li - Xi'an JiaoTong University
Yisong Li - Xi'an JiaoTong University
Yilin Liang - Xi'an JiaoTong University
Hengrui Zhang - Xi'an JiaoTong University
Shilong Zhou - Xi'an JiaoTong University
Weiguo Wang - Xi'an JiaoTong University
Yuxiang Ou - Xi'an JiaoTong University

03-04: Advanced Control Strategies

8/7/2024 3:00PM–4:30PM - Karlin 3

Chair: Brian Fant - Bechtel

A Fuzzy Control Method for Adjusting the Peak Value of Power Axial Distribution Based on Distributed Parameter Model
Technical Paper Publication: ICONE31-135044
Airan Dang - Harbin Engineering University
Bowen Tu - Harbin Engineering University
Xiuchun Luan - Harbin Engineering University

Control Rod Cooperative Control Strategy Based on Multipoint Reactor Model
Technical Paper Publication: ICONE31-135073
Bowen Tu - Harbin Engineering University
Airan Dang - Harbin Engineering University
Xiuchun Luan - Harbin Engineering University

Pid Parameter Tuning Method for Steam Generator Level Control System Optimization Data Based on Ant Colony Optimization Algorithm
Technical Paper Publication: ICONE31-136009
Yulong Wang - Xi'an Jiaotong University
Xinyu Wei - Xi'an Jiaotong University
Peiwei Sun - Xi'an Jiaotong University

A Coordinated Control Strategy for NHR200-II Under Load Rejection Condition
Technical Paper Publication: ICONE31-136013
Canxing Huang - Tsinghua University
Huasheng Xiong - Tsinghua University
Zhe Dong - Tsinghua University
Boyuan Li - Tsinghua University
Shuqiao Zhou - Tsinghua University

Simulation Study of Turbine Trips Without Scram for CPR1000 Nuclear Power Plant Employing MSHIM Control
Technical Paper Publication: ICONE31-134523
Shifa Wu - Xi'an Jiaotong University
Yunzhi Chai - Xi'an Jiaotong University
Jiashuang Wan - Xi'an Jiaotong University

04-04: SMRs, Advanced Reactors, and Fusion

8/7/2024 3:00PM–4:30PM - Florenc 2

Chair: Rosa Lo Frano - University of Pisa

Exergy Analysis of a Small Modular Reactor Nuclear Power Plant Under Constant and Pure Sliding Pressure Operation
Technical Paper Publication: ICONE31-130713
Xin Wang - Tsinghua University
Gang Zhao - Tsinghua University
Xinhe Qu - Tsinghua University
Xiaoyong Yang - Tsinghua University
Jie Wang - Tsinghua University

The Prospects of Small Modular Reactor Development and Application in China Based on the User Requirements

Technical Paper Publication: ICONE31-132001

Sheng Zhu - Nuclear Power Operation Research Institute, Ltd.

Zhen Yan - Nuclear Power Operation Research Institute, Ltd.

Time Series Modeling and Stochastic Techno-Economic Analysis of Advanced Nuclear Energy Systems Under Growing Penetration of Renewables

Technical Presentation Only: ICONE31-147500

Hailei Wang - Utah State University

Application of Global Importance Measures in Risk-Informed Safety Margin Characterization (RISMC) for Dynamic Safety Analysis

Technical Paper Publication: ICONE31-136084

Liye Ma - Harbin Engineering University

He Wang - Harbin Engineering University

Longcong Wang - Harbin Engineering University

Multiphysics Coupling Analysis of an FCM-Fueled Gas-Cooled Microreactor

Technical Paper Publication: ICONE31-124442

Jipu Hu - Shanghai Jiaotong University

Yuyang Shen - Shanghai Jiao Tong University

Ruixiang Wang - Shanghai Jiao Tong University

Kuaiyuan Feng - Shanghai Jiao Tong University

Lei Lou - Nuclear Power Institute of China

Hui Guo - Shanghai Jiao Tong University

Dynamic Modeling and Characteristic Analysis of Microreactor Coupled With Closed Helium Brayton Cycle

Technical Paper Publication: ICONE31-133388

Xuyao Geng - Institute of Nuclear and New Energy Technology

Jie Wang - Institute of Nuclear and New Energy Technology

04-10: SMRs, Advanced Reactors and Fusion

8/7/2024 3:00PM–4:30PM - Karlin 4

Chair: Rosa Lo Frano - University of Pisa

Development of a Liquid Metal Subchannel Code Used in Ocean Conditions and Study the Heat Transfer Characteristics in Rod Bundle of Reactor Core

Technical Paper Publication: ICONE31-135935

Yuanyuan Yin - Southeast University

Bin Han - Southeast University

Xiaoliang Zhu - Southeast University

Siwei Qi - Southeast University

Shenghui Liu - Southeast University

Tianyang Xing - Southeast University

Bao-Wen 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

Dynamic Simulation of a Small Modular Sodium-Cooled Fast Reactor Coupled With Molten Salt Energy Storage System

Technical Paper Publication: ICONE31-136749

Jinrong Jin - Xi'an Jiaotong University

Jiashuang Wan - Xi'an Jiaotong University

Shifa Wu - Xi'an Jiaotong University

Areai Nuerlan - China Institute of Atomic Energy

The Experimental Research of Integrative SMR Using TEG for Power Generation

Technical Paper Publication: ICONE31-133679

Suhao Wang - Nuclear Power Institute of China

Yong Li - Nuclear Power Institute of China

Hui Xiao - Nuclear Power Institute of China

Liang Guo - Nuclear Power Institute of China

Ying Li - Nuclear Power Institute of China

Ruifan Lou - Nuclear Power Institute of China

Hairong Tang - Nuclear Power Institute of China

Practice and Validation of Harmonic Method for HTR-PM Power Distribution Monitoring

Technical Paper Publication: ICONE31-133881

Jinpeng Li - Tsinghua University

Jiong Guo - Tsinghua University

Fu Li - Tsinghua University

Chunlin Wei - Tsinghua University

AHPR1000: Simplified, Intelligent and Environmental-Friendly Advanced Nuclear Power Plant

Technical Paper Publication: ICONE31-135079

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

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

Di Yao - China Nuclear Power Engineering Co., Ltd.

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

Simin Xu - China Nuclear Power Engineering Co., Ltd.

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

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

Design and Analysis of a Soluble Boron Free Small Modular Pressurized Water Reactor Core by Using NECP-Bamboo

Technical Paper Publication: ICONE31-135088

Songzhe Wang - Xi'an Jiaotong University

Yunzhao Li - Xi'an Jiaotong University

Yisong Li - Xi'an Jiaotong University

Kang Li - Xi'an Jiaotong University

05-06: Optimization and Modeling Methods

8/7/2024 3:00PM–4:30PM - Liben 3

Chair: Fredrick McCrory - Sandia National Laboratories

Co-Chair: Brian Fant - Bechtel

Co-Chair: Alessandro Petruzzi - Nuclear and Industrial Engineering

Co-Chair: Dmitry Grishchenko - KTH Royal Institute of Technology

Co-Chair: Scott Sanborn - Sandia National Laboratories

Co-Chair: Takeshi Yamada - Hitachi-Ge Nuclear Energy, Ltd.

Co-Chair: Tomohiko Ikegawa - Hitachi

Co-Chair: Hideki Horie - Toshiba Corp.

Co-Chair: Patrick Frias - U.S. Department of Energy

Co-Chair: Hongxing Yu - Nuclear Power Institute of China

Co-Chair: Si-chao Tan - Harbin Engineering University

Co-Chair: Ronghua Chen - Xi'An Jiao Tong University

Co-Chair: Songtao Ji -

An Iterational Physical Decoupling Method for Assessing the Safety of Deformed Fuel Channels

Technical Paper Publication: ICONE31-130816

Junzheng Zheng - Tsinghua University

Musen Lin - Tsinghua University

Xingtuan Yang - Tsinghua University

Dingqu Wang - Tsinghua University

Songyang Li - Tsinghua University

Wentao Hao - Tsinghua University

Wei Xiong - Tsinghua University

Yueyuan Jiang - Tsinghua University

A Heuristic Algorithm for the Vulnerability Analysis of Physical Protection System

Technical Paper Publication: ICONE31-132046

Zixuan Wang - The Fourth Research and Design Engineering Corporation of CNNC

Liang Ma - The Fourth Research and Design Engineering Corporation of CNNC

Chenliang Yuan - The Fourth Research and Design Engineering Corporation of CNNC

Xiaocong Zhang - The Fourth Research and Design Engineering Corporation of CNNC

Meixuan Wang - The Fourth Research and Design Engineering Corporation of CNNC

Vulnerability Analysis of Physical Protection System for Nuclear Facilities

Technical Paper Publication: ICONE31-132049

Guohai Zhao - State Nuclear Security Technology Center

Zixuan Wang - The Fourth Research and Design Engineering Corporation of CNNC

Liang Ma - The Fourth Research and Design Engineering Corporation of CNNC

Chenliang Yuan - The Fourth Research and Design Engineering Corporation of CNNC

Xiaocong Zhang - The Fourth Research and Design Engineering Corporation of CNNC

Ziyi Li - The Fourth Research and Design Engineering Corporation of CNNC

Research on Optimization Method of Personnel Evacuation Path Based on Evacuation Time and Radiation Risk

Technical Paper Publication: ICONE31-134745

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

Jin Yan - China Nuclear Power Engineering Co., Ltd.

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

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

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

Na Xue - China Nuclear Power Engineering Co., Ltd.

Research on Monte Carlo-Neutron Section Cross Method Coupling Calculation Method of Neutron Radiation Field

Technical Paper Publication: ICONE31-135218

Qi Zhang - Harbin Engineering University

Heli Gong - Harbin Engineering University

Liye Liu - China Institute for Radiation Protection

Yushou Song - Harbin Engineering University

Qinjian Cao - China Institute for Radiation Protection

Jinlong Yong - Harbin Engineering University

Jiawen Hu - Harbin Engineering University

Density Functional Calculation of Adsorption of Po-Containing Gas on Ag Surface

Technical Presentation Only: ICONE31-136167

Man Jiang - Huazhong University of Science and Technology

Hui Du - Huazhong University of Science and Technology

Ao Gan - Huazhong University of Science and Technology

Muyi Ni - Sun Yat-sen University

Jiewei Wu - Sun Yat-sen University

01-04: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - IV

8/7/2024 3:00PM–4:30PM - Karlin 2

Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Pascal Duranton - Framatome

Co-Chair: Haofang Chong - Harbin Engineering University

Co-Chair: Jie Liu - Technische Universität München

Design and Calculation of Nuclear Heating System Utilizing a Molten Salt Heat Storage Circuit for Waste Heat Absorption and Peak Regulation

Technical Paper Publication: ICONE31-134681

Haofang Chong - Harbin Engineering University

Ruojun Xue - Harbin Engineering University

Sen Wang - Harbin Engineering University

Yaowu Cao - Harbin Engineering University

Furu Jing - Harbin Engineering University

Analysis of Water Hammer in the Reactor Coolant System Based on Wave Tracking Method

Technical Paper Publication: ICONE31-134766

Qianping Zhang - China Nuclear Power Operation Technology Corporation

Shubiao Dong - China Nuclear Power Operation Technology Corporation

Xiaoyu Zhang - China Nuclear Power Operation Technology Corporation

Research on Automatic Cable Layout Method for Nuclear Power Plant Based on A* Algorithm

Technical Paper Publication: ICONE31-134799

Hailong Du - Harbin Engineering University

Jie Cheng - Harbin Engineering University

Jianjun Wang - Harbin Engineering University

Puzhen Gao - Harbin Engineering University

Xuchen Deng - China Nuclear Power Engineering Co., Ltd.

Kai Tang - China Nuclear Power Engineering Co., Ltd.

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

Jincheng Su - China Nuclear Power Engineering Co., Ltd.

Research on Sealing Performance and Electrical Performance of Low Voltage Electrical Penetrations Assembly in Containment After Severe Accidents

Technical Paper Publication: ICONE31-134800

Yanlu Wang - Harbin Engineering University

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

Xiaxin Cao - Harbin Engineering University

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

Attention Mechanisms Based Advancing Interpretable Machine Learning Method for Nuclear Power Plant Fault Diagnosis

Technical Paper Publication: ICONE31-134882

Jie Liu - Technical University of Munich

Rafael Macián-Juan - Technical University of Munich

01-10: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - X

8/7/2024 3:00PM–4:30PM - Palmovka 2

Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Pascal Duranton - Framatome

Co-Chair: Busra Buyrukcu - University of Liverpool

Co-Chair: Jiri Cerny - ÚJV Řež, a. s.

Research on Peaking System of Nuclear Power Plant Based on Energy Storage Scheme of Hydrogen Production and Ammonia Synthesis

Technical Paper Publication: ICONE31-136536

Lingyue Shi - Shanghai Nuclear Engineering Research & Design Institute

Cheng Ye - Shanghai Nuclear Engineering Research & Design Institute

Qinglun He - Tsinghua University

Hong Huang - Tsinghua University

The Improvement of the Spent Fuel Rack Design Using Different Neutron Absorber Materials

Technical Paper Publication: ICONE31-137004

Busra Buyrukcu - University of Liverpool

Eray Buyrukcu - Turkish Energy, Nuclear and Mineral Research Agency

Dzianis Litskevich - University of Liverpool

Karl Whittle - University of Liverpool

Investigating Elastic Shakedown Response of Sleeve-Reinforced 90° Back-to-Back Pipe Bends With Local Wall Thinning

Technical Presentation Only: ICONE31-132769

Nak-Kyun Cho - Seoul National University of Science and Technology

Gyeongyul Lee - Seoul National University of Science and Technology

Youngjae Choi - Seoul National University of Science and Technology

Do Kyun Kim - Seoul National University of Science and Technology

Development of the Hitachi Advanced Plant Performance Diagnosis System for Nuclear Power Plant Performance Monitoring: Application to Turbine Building Closed Cooling Water System

Technical Presentation Only: ICONE31-132997

Akinori Tamura - Hitachi Ltd.

Nobuyuki Shinohara - Hitachi-GE Nuclear Energy Ltd.

Norikazu Hamaura - Hitachi-GE Nuclear Energy Ltd.

Seiji Nemoto - Hitachi-GE Nuclear Energy Ltd.

Yuusuke Yamamoto - Chubu Electric Power Co., Inc.

Taketo Endou - Chubu Electric Power Co., Inc.

Ryou Kobayashi - Chubu Electric Power Co., Inc.

Development of the Hitachi Advanced Plant Performance Diagnosis System for Nuclear Power Plant Performance Monitoring: Development Program Overview, Application Examples to Heat Cycle and Turbine Component Cooling Water System

Technical Presentation Only: ICONE31-135591

Nobuyuki Shinohara - Hitachi GE Nuclear Energy, Ltd.

Akinori Tamura - Hitachi Ltd.

Norikazu Hamaura - Hitachi GE Nuclear Energy Ltd.

Seiji Nemoto - Hitachi GE Nuclear Energy Ltd.

Yuki Hidaka - Hitachi GE Nuclear Energy Ltd.

Computational Methodology for Determination of Shoulder to Gauge Ratio by Using Finite Element Method Simulations

Technical Presentation Only: ICONE31-144193

Jiri Cerny - ÚJV Řež, a. s.

Petr Gal - ÚJV Řež, a. s.

07-13: SMR and Advanced Reactors - II

8/7/2024 4:45PM–6:15PM - Palmovka 1

Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Walter Ambrosini - Università di Pisa

Co-Chair: Minyang Gui - Harbin Engineering University

Effect of Corrosion Behavior on the Heat Transfer Performance of Fuel Cladding in Lead-Cooled Fast Reactors

Technical Paper Publication: ICONE31-134758

Wenpei Feng - Chengdu University of Technology

Shangdong Yang - Chengdu University of Technology

Hongxing Yu - Nuclear Power Institute of China

Xingqing Lu - Chengdu University of Technology

Xue Zhang - Nuclear Power Institute of China

Zhixing Gu - Chengdu University of Technology

Customising a System Code for the Analysis of the Thermal-Hydraulic Behaviour of a Supercritical Pressure Light Water Small Modular Reactor

Technical Paper Publication: ICONE31-135160

Omar Chaaraoui - Università di Pisa

Andrea Pucciarelli - Università di Pisa

Walter Ambrosini - Università di Pisa

Ivan Otic - Karlsruhe Institute of Technology

Thomas Schulenberg - Karlsruhe Institute of Technology

Chris Allison - Innovative Systems Software

Zheng Fu - Innovative System Software

Study on the Oxidation/corrosion Behavior of Small Modular Lead-Bismuth-Cooled Fast Reactor Summer

Technical Paper Publication: ICONE31-136020

Junjia Zhang - 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

Thermal-Hydraulics and Neutronics Coupling Calculation and Validation of NECP-Panda: A Computational Code for Pebble-Bed High Temperature Gas-Cooled Reactors

Technical Paper Publication: ICONE31-136096

Dongyu Xu - Xi'an Jiaotong University

Yongping Wang - Xi'an Jiaotong University

Hongchun Wu - Xi'an Jiaotong University

Aolin Zhang - Xi'an Jiaotong University

Yuxuan Wu - Xi'an Jiaotong University

Yong Luo - Huaneng Nuclear Energy Technology Research Institute

Multi-Phase Large Leakage Sodium-Water Reaction Thermal-Hydraulics Analysis in a Sodium-Cooled Fast Reactor

Technical Paper Publication: ICONE31-136210

Xi Bai - Xi'an Jiaotong University

Peiwei Sun - Xi'an Jiaotong University

Xinyu Wei - Xi'an Jiaotong University

Study on Thermal-Hydraulic Characteristics of Horizontal Lead-Based Reactor Assembly Under Complex Motion Condition

Technical Paper Publication: ICONE31-136580

Minyang Gui - Harbin Engineering University

Di Wu - Harbin Engineering University

Hangyuan Zhang - Harbin Engineering University

Senmiao Zhang - Harbin Engineering University

Hui Cheng - Harbin Engineering University

07-16: Heat Transfer - I

8/7/2024 4:45PM–6:15PM - Palmovka 2

Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Jin Der Lee - National Tsing Hua University

Co-Chair: Meiqi Song - Shanghai Jiao Tong University

The Investigation of Heat Transfer Deterioration in Supercritical Water Heating Systems

Technical Paper Publication: ICONE31-127356

Jin-Der Lee - National Tsing Hua University

Yu-Sen Chen - National Tsing Hua University

Shao-Wen Chen - National Tsing Hua University

Analysis of Heat Transfer at Supercritical Conditions With Explainable Machine Learning Model

Technical Paper Publication: ICONE31-130237

Meiqi Song - Shanghai Jiao Tong University

Haozhe Li - Shanghai Jiao Tong University

Xiaojing Liu - Shanghai Jiao Tong University

Research on the Coupled Heat Transfer Characteristics Between Intra- and Inter-Assembly in LFR

Technical Paper Publication: ICONE31-131238

Di Wu - Harbin Engineering University

Minyang Gui - Harbin Engineering University

Jie Cheng - Harbin Engineering University

Jianjun Wang - Harbin Engineering University

Study on the Improvement of Relap5 Post-Critical Boiling Heat Transfer Model for the Submerged Cooling Process of Rectangular Channel

Technical Paper Publication: ICONE31-131657

Lei Zhong - Science and Technology on Reactor System Design Technology

Hongxing Yu - Science and Technology on Reactor System Design Technology Laboratory

Chen Ling - Geely University

Deqi Chen - Chongqing University

Jian Deng - Science and Technology on Reactor System Design Technology Laboratory

Haidong Liu - Chongqing University of Technology

Jun Xu - Science and Technology on Reactor System Design Technology Laboratory

The Variation Law of Aerosol Distribution Coefficient at Different Condensation Rates and Its Impact on Heat Transfer of Tube Bundles

Technical Paper Publication: ICONE31-134530

Xinnuo E - Harbin Engineering University

Haifeng Gu - Harbin Engineering University

Junyan Chen - Harbin Engineering University

Hui Wang - Harbin Engineering University

Yanmin Zhou - Harbin Engineering University

Qingyang Sun - Harbin Engineering University

Jianqun Yu - Harbin Engineering University

Xiao Wang - Harbin Engineering University

Effect of Non-Condensable Gas on Heat Transfer of Direct Contact Condensation

Technical Paper Publication: ICONE31-134787

Shu Li - General Clean Energy Co., Ltd.

Wenxing Huang - Shanghai Jiao Tong University

Dandi Zhang - Shanghai Jiao Tong University

Lili Tong - Shanghai Jiao Tong University

07-17: Heat Transfer - II

8/7/2024 4:45PM–6:15PM - Palmovka 3

Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Zihan Xia - Karlsruhe Institute of Technology

Co-Chair: Walter Ambrosini - Università di Pisa

Investigation on Development of New Mechanistic Model for Post Dryout Heat Transfer

Technical Paper Publication: ICONE31-135118

Zihan Xia - Karlsruhe Institute for Technology

Xu Cheng - Karlsruhe Institute for Technology

Considerations on Current Methodologies for the Assessment of Engineering Correlations for Heat Transfer at Supercritical Pressures

Technical Paper Publication: ICONE31-135167

Sara Kassem - Università di Pisa

Andrea Pucciarelli - Università di Pisa

Walter Ambrosini - Università di Pisa

Study on Laser-Controlled Surface Preparation and Condensation Heat Transfer Characteristics of Copper-Based Micro-Nano Structure Surface

Technical Paper Publication: ICONE31-135222

Zhikai Wang - Tsinghua University

Feng Chen - Tsinghua University

Jing Chen - China Nuclear Energy S&T Limited

Zhiyong Huang - Tsinghua University

He Yan - Tsinghua University

Hanliang Bo - Tsinghua University

Yujie Dong - Tsinghua University

Pool Boiling Heat Transfer Enhancement Using Bi-Conductive Surfaces

Technical Paper Publication: ICONE31-135498

Longchang Tang - Shanghai Jiao Tong University

Xiaojing Liu - Shanghai Jiao Tong University

Wei Xu - Shanghai Jiao Tong University

Luyao Tang - Shanghai Jiao Tong University

Study on Heat Transfer Characteristics of 2×2 Helical Cruciform Fuel Assembly Under Non-Uniform Heat Source

Technical Paper Publication: ICONE31-135530

Menghao Luo - Xi'an Jiaotong University

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

Yanan He - 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

Development of an Onset of Nucleate Boiling Model and a Nucleate Boiling Heat Transfer Model Within the Fouling Layer

Technical Paper Publication: ICONE31-136312

Xiaowen Wang - Shanghai Jiaotong University

Maolong Liu - Fudan University

Tenlong Cong - Shanghai Jiaotong University

Hanyang Gu - Shanghai Jiaotong University

07-18: Accident Analyses

8/7/2024 4:45PM–6:15PM - Palmovka 4

Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Ningxi Jia - China Nuclear Power Engineering Co., Ltd.

Co-Chair: Atsushi Ui - Central Research Institute of Electric Power Industry

Analysis on the Leakage Behavior of Cable Facility Using Gothic and Gothic 3D Models

Technical Paper Publication: ICONE31-130093

Ningxi Jia - China Nuclear Power Engineering Co., Ltd.

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

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

RCCA Ejection Accident Analysis Based on Coupled 3D Neutronics and Thermal-Hydraulics

Technical Paper Publication: ICONE31-134296

Zang Liye - China Nuclear Power Technology Research Institute Co., Ltd.

Accident Progression Analysis of an Offshore Floating Nuclear Power Plant Under Heaving Motion

Technical Paper Publication: ICONE31-134485

Atsushi Ui - Central Research Institute of Electric Power Industry

Yutaka Ikeda - Central Research Institute of Electric Power Industry

Takahiro Arai - Central Research Institute of Electric Power Industry

Application of Sensitivity Analysis Techniques to a Low Dimensional Problem in the Frame of Severe Accidents

Technical Paper Publication: ICONE31-135801

Michela Angelucci - University of Pisa

Sandro Paci - University of Pisa

Salvatore Angelo Cancemi - University of Pisa

Rosa Lo Frano - University of Pisa

Study on Radionuclide Desorption in Matrix Graphite Under Accident Conditions

Technical Paper Publication: ICONE31-135804

Wei Xu - North China Electric Power University

Jian Li - Tsinghua University

Improving the Accuracy of RCCS Simulator Based on Ensemble Kalman Filter Algorithm

Technical Paper Publication: ICONE31-135908

Songsong Liu - Tsinghua University

Han Zhang - Tsinghua University

Yingjie Wu - Tsinghua University

Minggang Lang - Tsinghua University

Yujie Dong - Tsinghua University

Fu Li - Tsinghua University

02-08: Methods Development, Computational Approaches - II

8/7/2024 4:45PM–6:15PM - Karlin 1

Chair: Hakan Ozaltun - U.S. Nuclear Regulatory Commission

Co-Chair: Xiang Wang - Harbin Engineering University

Co-Chair: Zhiyuan Feng - Tsinghua University

Numerical Simulation and Localization Algorithm Study of Two-Energy-Group Neutron Noise Diffusion Problems Induced by Fuel Rod/Assembly Vibration

Technical Paper Publication: ICONE31-135263

Zelin Zhao - Harbin Engineering University

Xiang Wang - Harbin Engineering University

Implementation of Domain Decomposition Parallelism and gCMFD in MOCP: Method of Characteristics for Pebble-Bed Reactor

Technical Paper Publication: ICONE31-134979

Chen Hao - Harbin Engineering University

Yuchen Wen - Harbin Engineering University

Yizhen Wang - Harbin Engineering University

Investigation on Applicability of Dynamic Mode Decomposition in Burnup Analysis

Technical Paper Publication: ICONE31-135535

PengChao Xue - Harbin Engineering University

Qian Zhang - Zhejiang University

Qiang Zhao - Harbin Engineering University

Yunfei Zhang - Chinese Academy of Sciences

Weight Window Generation Based on Pre-Calculated Response Matrix

Technical Paper Publication: ICONE31-134556

Yingzhe Hu - Tsinghua University

Pengfei Shen - Tsinghua University

Shihang Jiang - Tsinghua University

Shanfang Huang - Tsinghua University

Kan Wang - Tsinghua University

Zeguang Li - Tsinghua University

Zhaoyuan Liu - Tsinghua University

Research on Fuel Pebble Modeling Methods Comparison and Eigenvalue Analysis of the Running-in Phase of HTR-PM

Technical Paper Publication: ICONE31-131880

Qianye Yang - Tsinghua University

Nan Gui - Tsinghua University

Jiyuan Tu - Royal Melbourne Institute of Technology University

Shengyao Jiang - Tsinghua University

Research on the ODR-VS Method Applicable to Various Geometric Models

Technical Paper Publication: ICONE31-134943

Zhiyuan Feng - Tsinghua University

Jingang Liang - Tsinghua University

Wenli Guo - Tsinghua University

Kan Wang - Tsinghua University

03-05: Innovations in Nuclear Engineering

8/7/2024 4:45PM–6:15PM - Karlin 3

Chair: Brian Fant - Bechtel

Development and Demonstration Testbed for the Remote Operations and Monitoring of Microreactors

Technical Paper Publication: ICONE31-133205

Joseph Oncken - Idaho National Laboratory

Thomas Ulrich - Idaho National Laboratory

Kaeley Stevens - Idaho National Laboratory

Zachary Sellers - Idaho National Laboratory

Jeren Browning - Idaho National Laboratory

Research on Measurement and Analysis Method of Radiation Test Section Based on Neural Network

Technical Paper Publication: ICONE31-134913

Jinlin Li - Harbin Engineering University

Yunsheng Zhang - Harbin Engineering University

Jie Cheng - Harbin Engineering University

Guangming Fan - Harbin Engineering University

Shuai Jin - Nuclear Power Institute of China; Harbin Engineering University

Modeling and Control Scheme Design of a Multi-Modular High Temperature Gas Cooled Reactor Cogeneration Unit

Technical Paper Publication: ICONE31-135166

Zhonghua Cheng - Tsinghua University

Zhe Dong - Tsinghua University

Analysis and Research on Control Strategies for Supercritical Carbon Dioxide Nuclear Energy Systems

Technical Paper Publication: ICONE31-135711

Xiuting Liu - Sichuan University

Yanping Huang - Nuclear Power Institute of China

Yuan Zhou - Sichuan University

Minyun Liu - Nuclear Power Institute of China

Jun Yang - Nuclear Power Institute of China

Bitan Qin - Nuclear Power Institute of China

Ruilong Liu - Nuclear Power Institute of China

Model Predictive Control for High Temperature Gas-Cooled Reactor in Load Following

Technical Paper Publication: ICONE31-136137

Yunlong Zhu - Tsinghua University

Zhe Dong - Tsinghua University

Xiaojin Huang - Tsinghua University

04-05: SMRs, Advanced Reactors, and Fusion

8/7/2024 4:45PM–6:15PM - Florenc 2

Chair: Rosa Lo Frano - University of Pisa

Research on a Space Reactor Scheme for the Lunar Research Station

Technical Paper Publication: ICONE31-125424

Zhipeng Wang - Chinese Academy of Sciences

Qiang Sheng - Chinese Academy of Sciences

Zijing Liu - Chinese Academy of Sciences

Ke Wang - Chinese Academy of Sciences

Comparison Analysis and Optimization Research of Open and Closed Air Brayton Cycle
Technical Paper Publication: ICONE31-133271
Meihui Song - Xi'an Jiaotong University
Yuyang Leng - Xi'an Jiaotong University
Yiran Qian - Xi'an Jiaotong University
Weixiong Chen - Xi'an Jiaotong University
Yi Yang - China Institute of Atomic Energy
Junjie Yan - Xi'an Jiaotong University

Feasibility Study of Variable Spectrum Molten Salt Reactor by Adjusting Fuel Salt Compositions for the LiF-BeF2-ZrF4-UF4 System
Technical Paper Publication: ICONE31-134672
Naoto Aizawa - Tohoku University
Hiroki Shishido - Tohoku University
Koji Fujikura - Tohoku University

Optimization Design Study of a Radiant Heat Exchanger for a Small-Scale Underwater Nuclear Power Plant's Residual Heat Removal System
Technical Paper Publication: ICONE31-135657
Yinan Guo - Harbin Engineering University
Lei Li - Harbin Engineering University
Yongsheng Wen - Harbin Engineering University

Challenges in the Analysing the Next Water SMR Evolution
Technical Presentation Only: ICONE31-138751
Guido Mazzini - Centrum výzkumu Řež s.r.o.
Jiří Duspiva - Centrum výzkumu Řež s.r.o.
Jan čAda - Centrum výzkumu Řež s.r.o.
Monika ŠÍpová - Centrum výzkumu Řež s.r.o.
Andrej Prošek - Jožef Stefan Institute
Leon Cizelj - Jozef Stefan Institute
Ivan Otić - Karlsruher Institut für Technologie
Alberto Saez Maderuelo - CIEMAT
Juan Carlos De La Rosa Blul - European Commission (JRC-Petten)
Attila Kiss - Budapest University of Technology and Economics
Szabolcs Czifrus - Budapest University of Technology and Economics

Inventory Control Strategy and Dynamic Modelling of a 1mwe Hexe Brayton Cycle Reactor System
Technical Paper Publication: ICONE31-134369
Xinyu Li - Shanghai Jiao Tong University
Chaoran Guan - Shanghai Jiao Tong University
Xiang Chai - Shanghai Jiao Tong University
Xiaojing Liu - Shanghai Jiao Tong University

04-11: SMRs, Advanced Reactors and Fusion

8/7/2024 4:45PM–6:15PM - Karlin 4

Chair: Rosa Lo Frano - University of Pisa

Features of Space Reactor Brayton Cycle Under Power Regulation by Control Drums
Technical Paper Publication: ICONE31-135642
Wenkui Ma - Tsinghua University
Ping Ye - Tsinghua University
Yue Gao - Tsinghua University
Yadong Hao - Tsinghua University
Yi Yao - Tsinghua University
Xiaoyong Yang - Tsinghua University

Impact of Narrow Gaps on Graphite Component Lifespan in Small Modular Molten Salt Reactors
Technical Paper Publication: ICONE31-136988
Qi Wang - Chinese Academy of Sciences
Yu Zhong - Chinese Academy of Sciences
Chenggang Yu - Chinese Academy of Sciences
Wei Guo - Chinese Academy of Sciences
Jingen Chen - Chinese Academy of Sciences
Zhichao Wang - Chinese Academy of Sciences
Qiang Sun - Chinese Academy of Sciences

Conceptual Design and Feasibility Analysis of a Modular Supercritical CO2 Fast Reactor Core
Technical Paper Publication: ICONE31-135206
Guihua Lai - Tsinghua University
Tian Wang - ZTE Corporation
Ding She - Tsinghua University
Hong Wang - Tsinghua University

Concept Study of a Fisson Fragment Propulsion System
Technical Paper Publication: ICONE31-135466
Dacai Zhang - Tsinghua University
Ganglin Yu - Tsinghua University

05-07: System Performance and Safety Enhancements

8/7/2024 4:45PM–6:15PM - Liben 3

Chair: Fredrick McCrory - Sandia National Laboratories
Co-Chair: Brian Fant - Bechtel
Co-Chair: Alessandro Petruzzi - Nuclear and Industrial Engineering
Co-Chair: Dmitry Grishchenko - KTH Royal Institute of Technology
Co-Chair: Scott Sanborn - Sandia National Laboratories
Co-Chair: Takeshi Yamada - Hitachi-Ge Nuclear Energy, Ltd.
Co-Chair: Tomohiko Ikegawa - Hitachi
Co-Chair: Hideki Horie - Toshiba Corp.
Co-Chair: Patrick Frias - U.S. Department of Energy
Co-Chair: Hongxing Yu - Nuclear Power Institute of China
Co-Chair: Si-chao Tan - Harbin Engineering University
Co-Chair: Ronghua Chen - Xi'An Jiao Tong University
Co-Chair: Songtao Ji -

Transient Identification of HRT-PM Based on Graph Neural Networks
Technical Paper Publication: ICONE31-134769
Wenji Zhang - Tsinghua University
Tianhao Zhang - Tsinghua University
Jitao Li - Tsinghua University
Duo Li - Tsinghua University
Chao Guo - Tsinghua University
Xiaojin Huang - Tsinghua University

Design and Evaluation of Mitigation Measures for Tsinghua High Flux Reactor Loss-of-Coolant Accidents
Technical Paper Publication: ICONE31-134999
Zhuang Wang - Tsinghua University
Heng Xie - Tsinghua University
Gan Zhu - Tsinghua University
Szu-En Yeh - Tsinghua University

Experimental Study in Cooling Rate by Containment Spray
Technical Paper Publication: ICONE31-135031
Ning Wang - China Institute for Radiation Protection
Yapeng Yang - China Institute for Radiation Protection
Zhe Liu - China Institute for Radiation Protection

Evaluation and Sensitivity Study of Uniform Kernel Method in Atmospheric 41Ar Dispersion Against the Belgian Field Experiment
Technical Paper Publication: ICONE31-135061
Yeshuai Sun - North China Electric Power University
Yujie Zhang - North China Electric Power University
Zhaoyang Wang - North China Electric Power University
Li Yang - North China Electric Power University
Xinpeng Li - North China Electric Power University
Yixue Chen - North China Electric Power University
Xinwen Dong - Tsinghua University
Sheng Fang - Tsinghua University

Exploration of Ultra-High Performance Concrete (UHPC) Application in Nuclear Power Plant Structures
Technical Paper Publication: ICONE31-135588
Zhang Peiyao - China Nuclear Power Engineering Company Co., Ltd.
Song Mengyan - China Nuclear Power Engineering Company Co., Ltd.
Jiang Di - China Nuclear Power Engineering Company Co., Ltd.
Gao Jingwei - China Nuclear Power Engineering Company Co., Ltd.

Thermal Performance Analysis of Radioactive Material Transport Containers

Technical Paper Publication: ICONE31-136245

Changwu Wang - Chinese Institute for Radiation Protection

Yuhang Zhang - Chinese Institute for Radiation Protection

Yiren Lian - Chinese Institute for Radiation Protection

Lei Chen - Chinese Institute for Radiation Protection

Zhipeng Wang - Chinese Institute for Radiation Protection

Qian Sun - Chinese Institute for Radiation Protection

Dajie Zhuang - Chinese Institute for Radiation Protection

01-05: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - V

8/7/2024 4:45PM–6:15PM - Karlin 2

Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Pascal Duranton - Framatome

Co-Chair: Oleksandr Mazurok - ES Group LLC

Co-Chair: Kazuya Mori - Kumamoto University

Ways to Solve the Safe Operation of VVER-1000 Reactors in Case of Loss of Original Rod Cluster Control Assemblies Supply

Technical Paper Publication: ICONE31-134916

Oleksandr Mazurok - ES Group LLC

Valeriy Zuyok - National Science Centre “Kharkov Institute of Physics and Technology”

Vadym Ivanov - ES Group LLC

Mykhaylo Tretyakov - National Science Center “Kharkov Institute of Physics & Technology”

Key Technologies Research for the Implementation of In-Service Inspection Strategies Optimizing for the Reactor Coolant System of M310 Unit Nuclear Power Plants

Technical Paper Publication: ICONE31-134982

Yunhai Shen - Chengdu Hezong Nuclear Power Engineering Co., Ltd.

Feng Deng - Chengdu Hezong Nuclear Power Engineering Co., Ltd.

Yongqiang Duan - Chengdu Hezong Nuclear Power Engineering Co., Ltd.

Xiaoquan Yu - Chengdu Hezong Nuclear Power Engineering Co., Ltd.

Shuixiang Ye - Chengdu Hezong Nuclear Power Engineering Co., Ltd.

Remote Impact Acoustic Inspection of Structures Using Water Jet Impacts

Technical Paper Publication: ICONE31-135012

Saeko Tokuomi - Kumamoto University

Kazuya Mori - Kumamoto University

Yasutaka Ohshima - Kumamoto University

Research Methods and Protective Measures for Internal Flooding Analysis of Nuclear Islands

Technical Paper Publication: ICONE31-135047

Guang Du - China Nuclear Power Engineering Co., Ltd.

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

Daping Lin - China Nuclear Power Engineering Co., Ltd.

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

Research on the Localization Method of Loose Components in Nuclear Power Plants Based on Hilbert-Huang Signal Processing

Technical Paper Publication: ICONE31-135066

Jiming Jiang - North China Electric Power University

Yu Liu - North China Electric Power University

Daogang Lu - North China Electric Power University

THURSDAY, 8/8/2024

Time	Title	Room
8:30AM - 10:00AM	ICONE Technical Session	See App for specific locations
10:00AM - 10:30AM	Refreshment Break	Congress Hall Foyer, Lower Level
10:30AM - 12:00PM	ICONE Technical Session	See App for specific locations
12:00PM - 1:00PM	Ticketed Lunch	Atrium Restaurant
1:00PM - 2:30PM	Panel Sessions	See App for specific locations
2:30PM - 3:00PM	Refreshment Break	See App for specific locations
3:00PM - 4:30PM	ICONE Technical Session	See App for specific locations
4:45PM - 6:15PM	ICONE Technical Session	See App for specific locations

04-06: SMRs, Advanced Reactors and Fusion

8/8/2024 8:30AM–10:00AM - Florenc 2

Chair: Rosa Lo Frano - University of Pisa

Co-Chair: Prashant Jain -

Co-Chair: Ivan Otic - Karlsruhe Institute of Technology

Co-Chair: Hitesh Bindra - Purdue University

Co-Chair: Jovica Riznic - Canadian Nuclear Safety Commission

Co-Chair: Danrong Song - Nuclear Power Institute of China

Co-Chair: Wei Peng - Tsinghua University

Co-Chair: Dalin Zhang - Xi'an Jiaotong University

Co-Chair: Jinggang Qin -

Co-Chair: Min Xu -

Co-Chair: Glenn Harvel -

Co-Chair: Rei Kimura - Toshiba Energy Systems & Solutions Corporation

Co-Chair: Hiroyuki Sato - Japan Atomic Energy Agency

Co-Chair: Hiroo Kondo -

Co-Chair: Kazuhiro Kamei - Toshiba Energy Systems & Solutions Corporation

Co-Chair: Takashi Hirano - NA

Reactivity Feedback Effects of Fuel and Grid Plate Expansion in Gas-Cooled Reactors

Technical Paper Publication: ICONE31-134125

Yugao Ma - Nuclear Power Institute of China

Suyi Zhang - Chengdu University of Technology

Jian Deng - Nuclear Power Institute of China

Jinyu Wang - Nuclear Power Institute of China

Yue Liu - Chengdu University of Technology

Shuhua Ding - Nuclear Power Institute of China

Muhao Zhang - Chengdu University of Technology

Generative Design of a Gas-Cooled Micro Reactor Based on Multi-Physics Analysis

Technical Paper Publication: ICONE31-135237

Wenbin Han - Tsinghua University

Qi Lu - Nuclear Power Institute of China

Jian Deng - Nuclear Power Institute of China

Shanfang Huang - Tsinghua University

Thermal Analysis and Structural Design of the Main Steam Containment Penetration for Multi-Modular High-Temperature Gas-Cooled Reactor Power Plant

Technical Paper Publication: ICONE31-130135

Chaoyi Zhu - Tsinghua University

Yiyang Zhang - Tsinghua University

Huijie Yan - Tsinghua University

Jiyang Fu - Tsinghua University

Mei Huang - Chinergy Co. Ltd.

JENDL-5 Benchmarking for Advanced Test Reactor for Preparing Burnup Analysis Using Isotopic Data From HTGR Type Fuel Irradiation Tests

Technical Paper Publication: ICONE31-131748

Shoichiro Okita - Japan Atomic Energy Agency

Takeshi Aoki - Japan Atomic Energy Agency

Yuji Fukaya - Japan Atomic Energy Agency

Yukio Tachibana - Japan Atomic Energy Agency

Dynamic Modeling of Modular High Temperature Gas-Cooled Reactor Cogeneration System and Control Design Under the Condition of Turbine Isolation

Technical Paper Publication: ICONE31-131854

Xuan Lin - Tsinghua University

Zhe Dong - Tsinghua University

Fan Chen - Tsinghua University

Shuqiao Zhou - Tsinghua University

Chao Guo - Tsinghua University

Duo Li - Tsinghua University

Weidong Sun - Tsinghua University

Performance Analysis and Optimization Scheme Evaluation of Control Rod Drop Collision in Gas-Cooled Microreactor

Technical Paper Publication: ICONE31-132023

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

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

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

07-08: Numerical Analyses

8/8/2024 8:30AM–10:00AM - Liben 3

Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Qi Zhang - Nuclear Power Institute of China

Co-Chair: Xiaoyang Xie - Tsinghua University

Numerical Investigation on the Thermal-Hydraulic and Flow Induced Vibration Characteristics in LBE-Cooled Helical Cruciform Fuel and Wire-Wrapped Fuel

Technical Paper Publication: ICONE31-133402

Qi Zhang - Nuclear Power Institute of China

Haoyu Wang - Nuclear Power Institute of China

Junxian Cao - Nuclear Power Institute of China

Yuanming Li - Nuclear Power Institute of China

Chenxi Li - Nuclear Power Institute of China

Zhenhai Liu - Nuclear Power Institute of China

Numerical Study on Molten Stainless Steel and Lead Bismuth Eutectic Interaction for Lead-Cooled Fast Reactors Using the ACENA Code With Experimental Validation

Technical Paper Publication: ICONE31-134796

Shuowang Fan - Shanghai Nuclear Engineering Research and Design Institute Co., Ltd.

Yutong Chen - Xi'an Jiaotong University

Dalin Zhang - Xi'an Jiaotong University

Xiaoli Wu - Nuclear Power Institute of China

Wenxi Tian - Xi'an Jiaotong University

Suizheng Qiu - Xi'an Jiaotong University

Guanghui Su - Xi'an Jiaotong University

Numerical Simulation on the Thermal Hydraulic Characteristics in Pool-Type Fast Reactor Based on the New-Designed Passive Dynamic Residual Heat Removal Valve

Technical Paper Publication: ICONE31-135327

Yuan-Shu Qu - North China Electric Power University

Yu-Hao Zhang - North China Electric Power University

Hai-Qi Zhao - North China Electric Power University

Dao-Gang Lu - North China Electric Power University

Microscopic Turbulence Topology Analysis of the Cross Flow Over a Square Arranged Tube Bundle Using Direct Numerical Simulation

Technical Paper Publication: ICONE31-136171

Xiaoyang Xie - Tsinghua University

Houjian Zhao - North China Electric Power University

Xiaowei Li - Tsinghua University

Xinxin Wu - Tsinghua University

Numerical Study of Gas Flow and Diffusion Driven by Buoyancy in a Multi-Openings Compartment

Technical Paper Publication: ICONE31-136244

Jinghua Jiang - Shanghai Jiaotong University

Peizheng Hu - Shanghai Jiao Tong University

Lili Tong - Shanghai Jiao Tong University

Xuewu Cao - Shanghai Jiao Tong University

Three-Dimensional Numerical Simulation on DRACS and PRACS Heat Removal Ways of Natural Circulation Based on the PLANDTL-DHX Experimental Device

Technical Paper Publication: ICONE31-136974

Haijie Song - North China Electric Power University

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

Haiqi Zhao - North China Electric Power University

Yuhao Zhang - North China Electric Power University

Daogang Lu - North China Electric Power University

Xueyuan Zhang - North China Electric Power University

07-19: Entrainment and Droplet Characteristics

8/8/2024 8:30AM–10:00AM - Palmovka 1

Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Bo Wang - Harbin Engineering University

Co-Chair: Kohei Yuki - Sanyo-Onoda City University

Research on the Re-Entrainment Mechanism in Corrugated Plate Driers in the Nuclear Field

Technical Paper Publication: ICONE31-132379

Bo Wang - Harbin Engineering University

Ru Li - Tsinghua University

Jiangkuan Li - Harbin Engineering University

Sichao Tan - Harbin Engineering University

Ruifeng Tian - Harbin Engineering University

Coalescence-Induced Irregular Particle-Droplet Removal

Technical Paper Publication: ICONE31-134534

Yanzhi Li - Tsinghua University

Jiayu Du - Tsinghua University

Qi Min - Tsinghua University

Libin Sun - Tsinghua University

Study on the Flash Evaporation Characteristics of High-Temperature and High-Pressure Water Immersion Jet and the Behavioral Mechanism of Iodine in Liquid Pool

Technical Paper Publication: ICONE31-135611

Han Wu - Harbin Engineering University

Haifeng Gu - Harbin Engineering University

Evaporation of Alkali Metal Sodium Droplet in the Circular Tube

Technical Paper Publication: ICONE31-136993

Songsheng Tang - State Key Lab. of Multiphase Flow in Power Engineering, Shaanxi Key Lab. of Advanced Nuclear Energy and Technology

Kailun Guo - State Key Lab. of Multiphase Flow in Power Engineering, Shaanxi Key Lab. of Advanced Nuclear Energy and Technology

Shiyu Tian - State Key Lab. of Multiphase Flow in Power Engineering, Shaanxi Key Lab. of Advanced Nuclear Energy and Technology

Yugao Ma - Nuclear Power Institute of China

Jinkun Zhao - Shanghai Nuclear Engineering Research & Design Institute Co., Ltd.

Guanghui Su - State Key Lab. of Multiphase Flow in Power Engineering, Shaanxi Key Lab. of Advanced Nuclear Energy and Technology

Suizheng Qiu - State Key Lab. of Multiphase Flow in Power Engineering, Shaanxi Key Lab. of Advanced Nuclear Energy and Technology

Wenxi Tian - State Key Lab. of Multiphase Flow in Power Engineering, Shaanxi Key Lab. of Advanced Nuclear Energy and Technology

State of Leidenfrost Droplets: Equilibrium, Oscillation, and Trampolining

Technical Presentation Only: ICONE31-134873

Jiayu Du - Tsinghua University

Yanzhi Li - Tsinghua University

Qi Min - Tsinghua University

Libin Sun - Tsinghua University

Droplet Evaporation Characteristics on High-Temperature Porous Surfaces for Cooling Fuel Debris

Technical Paper Publication: ICONE31-135281

Kohei Yuki - Tokyo University of Science

Naoki Horiguchi - Japan Atomic Energy Agency

Hiroyuki Yoshida - Japan Atomic Energy Agency

Kazuhisa Yuki - Tokyo University of Science

02-09: Physics and Transport Theory - I

8/8/2024 8:30AM–10:00AM - Karlin 1

Chair: Hakan Ozaltun - U.S. Nuclear Regulatory Commission

Co-Chair: Martin Lovecký - University of West Bohemia

Co-Chair: Shichang Liu - North China Electric Power University

Total Monte Carlo Uncertainty Analysis of VVER-440 Spent Nuclear Fuel in LWR and HWR Reactor Environment

Technical Paper Publication: ICONE31-136014

Martin Lovecký - University of West Bohemia

Jiří Závorka - University of West Bohemia

Tomáš Kořínek - Czech Technical University in Prague

Radek Skoda - Czech Technical University in Prague

Neutronics Study and Conceptual Design for Small Sodium-Cooled Fast Reactor Annular Fuel

Technical Paper Publication: ICONE31-134304

Bin Ye - Southwest University of Science and Technology

Ayodeji A. Ala - Southwest University of Science and Technology

Neutronics Research on Annular Axial-Non-Uniform Minor Actinides Transmutation Targets in Commercial Pressurized Water Reactor

Technical Paper Publication: ICONE31-135114

Bin Ye - Southwest University of Science and Technology

Ayodeji A. Ala - Southwest University of Science and Technology

Three-Dimensional Refined Depletion Calculation of Helical-Cruciform Nuclear Fuel Assembly

Technical Paper Publication: ICONE31-135085

Duan Qianni - Xian Jiaotong University

Li Wei - Xian Jiaotong University

Wu Junmei - Xian Jiaotong University

Development and Initial Analysis of a Neutron Diffusion Model for Teplator Using COMSOL Multiphysics Code

Technical Paper Publication: ICONE31-133182

Dipanjan Ray - University of West Bohemia

Martin Lovecký - University of West Bohemia

Jiří Závorka - University of West Bohemia

Radek šKoda - Czech Technical University

Calculation of Radiation Field and Shutdown Dose Rate for Fusion Reactor Based on cosRMC

Technical Paper Publication: ICONE31-134661

Shichang Liu - North China Electric Power University

Zhenyu Wang - North China Electric Power University

Rui Che - North China Electric Power University

04-12: SMRs, Advanced Reactors and Fusion

8/8/2024 8:30AM–10:00AM - Karlin 3

Chair: Rosa Lo Frano - University of Pisa

Conceptual Design of High-Power Nuclear Power System on the Surface of Mars

Technical Paper Publication: ICONE31-135644

Yansong Han - Tsinghua University

Thermodynamic Characteristics Analysis of Helium Xenon Mixed Working Medium Space Closed Brayton Cycle Nuclear Reactor

Technical Paper Publication: ICONE31-135685

Yuhang Liu - Harbin Institute of Technology

Yulan Zhao - Harbin Institute of Technology

Kunlin Cheng - Harbin Institute of Technology

Haochun Zhang - Harbin Institute of Technology

ASME BPVC Section III Division 4 Fusion Construction Code Roadmap

Technical Presentation Only: ICONE31-133048

Thomas Davis - Oxford Sigma

V&V of Accident Behaviors in Silicon Carbide Fuel Matrices for High-Temperature Gas-Cooled Reactors
Technical Presentation Only: ICONE31-135182
Yosuke Nishimura - The University of Tokyo
Avadhesh Sharma - The University of Tokyo
Anna Gubarevich - Tokyo Institute of Technology
Katsumi Yoshida - Tokyo Institute of Technology
Koji Okamoto - The University of Tokyo

Methodology Development for Explosion Hazard Evaluation in Hydrogen Production System Using High Temperature Gas-Cooled Reactor
Technical Paper Publication: ICONE31-135407
Keisuke Morita - Japan Atomic Energy Agency
Takeshi Aoki - Japan Atomic Energy Agency
Atsushi Shimizu - Japan Atomic Energy Agency
Hiroyuki Sato - Japan Atomic Energy Agency

04-13: SMRs, Advanced Reactors and Fusion

8/8/2024 8:30AM–10:00AM - Karlin 4

Chair: Rosa Lo Frano - University of Pisa

Establish and Analysis of an Optimized System for Hydrogen Production From Nuclear Energy in China
Technical Paper Publication: ICONE31-130730
Ping Wang - China Nuclear Power Engineering Co., Ltd.
Li Fan - China Nuclear Power Engineering Co., Ltd.
Yibo Luo - China Nuclear Power Engineering Co., Ltd.

Multi-Objective Optimization Design for Nuclear-Coupled Distributed Multi-Energy System in Alpine Regions
Technical Paper Publication: ICONE31-135307
Xiaoxiao Ren - Xi'an Jiaotong University
Chao Jiang - Nuclear Power Institute of China
Jinshi Wang - Xi'an Jiaotong University
Sifan Yang - Xi'an Jiaotong University
Quanbin Zhao - Xi'an Jiaotong University
Junjie Yan - Xi'an Jiaotong University

Hydrogen Production by High Temperature Steam Electrolysis Coupled With a Small Modular Reactor: Cross-Comparison Between Various Thermal Architectures
Technical Paper Publication: ICONE31-135501
Nicolas Tauveron - CEA
David Haubensack - CEA
Pierre Dumoulin - CEA
Nicolas Alpy - CEA

Technology Review and Safety Assessment of Nuclear-Renewable Hybrid Energy Systems With Light-Water Small Modular Reactors
Technical Paper Publication: ICONE31-136037
Alessandro De Angelis - University of Pisa
Michele Frignani - Ansaldo Nucleare S.p.A.
Andrea Pucciarelli - University of Pisa
Oleksandr Sevbo - ENERGORISK
Miriam Minchole Lapuente - Empresarios Agrupados Internacional
Christophe Schneidesch - TRACTEBEL
Claire Vaglio-Gaudard - CEA, DES, IRESNE, DER/SESI
Joachim Miss - IRSN
Thorsten Hollands - GRS
Walter Ambrosini - University of Pisa

CFD-DEM Simulation on Gas-Solid Separation and Sphere Packing Behaviors in a Storage Bin of the Small Absorber Sphere System
Technical Paper Publication: ICONE31-135598
Tianjin Li - Tsinghua University
Haitao Hu - Tsinghua University
He Yan - Tsinghua University
Xingzhong Diao - Tsinghua University

Effects of Mixed Inert Gases on Design of Centrifugal Compressors for Space Nuclear Reactor
Technical Paper Publication: ICONE31-135992
Risheng Xu - Tsinghua University
Wenkui Ma - Tsinghua University
Ping Ye - Tsinghua University
Gang Zhao - Tsinghua University
Xiaoyong Yang - Tsinghua University

08-05: Computational Fluid Dynamics (CFD) and Applications - V

8/8/2024 8:30AM to 10:00AM - Palmovka 2

Chair: Yassin Hassan - Texas A&M

Co-Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Kei Ito -

Co-Chair: Ruihan Jing - Harbin Engineering University

Co-Chair: Enping Zhu - Shanghai Jiaotong University

Numerical Investigation on the Enhancement of Steam-Air Condensation Heat Transfer Outside Spiral Pipes

Technical Paper Publication: ICONE31-135038

Ruihan Jing - Heilongjiang Provincial Key Laboratory of Nuclear Power System & Equipment

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

Haozhi Bian - Heilongjiang Provincial Key Laboratory of Nuclear Power System & Equipment

Xinyi Shen - Heilongjiang Provincial Key Laboratory of Nuclear Power System & Equipment

Xu Zhang - Harbin Engineering University

Shuhang Zhou - Heilongjiang Provincial Key Laboratory of Nuclear Power System & Equipment

Xiang Peng - Heilongjiang Provincial Key Laboratory of Nuclear Power System & Equipment

Study of the Effect of Different P/D Ratios on the Thermal-Hydrodynamic Performance of Lead-Cooled Fast Reactor Fuel Assemblies

Technical Paper Publication: ICONE31-135052

Yangguang Zhang - North China Electric Power University

Daogang Lu - North China Electric Power University

Qiong Cao - North China Electric Power University

Xiaotian Wang - North China Electric Power University

An Online State Estimation Method Based on Quantum Genetic Algorithm for Space Nuclear Reactors

Technical Paper Publication: ICONE31-135080

Enping Zhu - Shanghai Jiaotong University

Xiang Chai - Shanghai Jiaotong University

Numerical Simulation and Analysis of Condensation-Induced Water Hammer in Heat Exchangers for Residual Heat Removal System in Nuclear Power Plant

Technical Paper Publication: ICONE31-135113

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

Feng Xiong - North China Electric Power University

Jiaqi Pan - China Nuclear Power Engineering Co., Ltd.

Ruiyang Tu - North China Electric Power University

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

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

Zhengyu Chen - North China Electric Power University

Zihao Zhang - North China Electric Power University

Wentao Guo - North China Electric Power University

Shengfei Wang - North China Electric Power University

Numerical Simulation Study on Axial Mixing Characteristics of Fuel Assembly

Technical Paper Publication: ICONE31-135170

Xiaoyang Zhang - China Institute of Atomic Energy

Junhan Wei - China Institute of Atomic Energy

Minfu Zhao - China Institute of Atomic Energy

Hydrodynamic Characteristics of Single Phase Flowing Through Orifice Plate

Technical Paper Publication: ICONE31-135197

Min Qiao - CNNC Key Laboratory on Nuclear Reactor Thermal Hydraulics Technology

Xiao Deng - Nuclear Power Institute of China

Dawei Pan - Sichuan University

Weixing Huang - Sichuan University

08-09: Computational Fluid Dynamics (CFD) and Applications - IX

8/8/2024 8:30AM–10:00AM - Palmovka 3

Chair: Yassin Hassan - Texas A&M

Co-Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Wenxing Liu -

Co-Chair: Herve Cordier - EDF

Co-Chair: Ossama Halim - Università di Pisa

CFD Modeling of a Full Clogging Event in a Pumping Station With Neptune_CFD Solver

Technical Paper Publication: ICONE31-135781

Sebastien Natchez - EDF

Romain Ceyrolle - EDF

Vincent Loizeau - EDF

Herve Cordier - EDF

Research on Convection Heat Transfer Performance of High-Temperature Helium-Argon Mixed Gas

Technical Paper Publication: ICONE31-135839

Lisha Xu - Nuclear Power Institute of China

Zicheng Qiu - Nuclear Power Institute of China

Jianjun Xu - Nuclear Power Institute of China

Numerical Analysis of Thermal-Stratification for Upper Plenum in Pool-Type Sodium Fast Reactors

Technical Paper Publication: ICONE31-135878

Mingdi Xing - China Institute of Atomic Energy

Daoxi Cheng - China Institute of Atomic Energy

Xiaoyao Ma - 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

Ruizhi Li - China Institute of Atomic Energy

Weilong Gao - China Institute of Atomic Energy

Analytical Study of Melt Spreading in Shallow Pool Observed in PULIMS-E10 Test Using MSPREAD Implemented With Molten Jet Quench Model

Technical Paper Publication: ICONE31-135902

Wataru Kikuchi - Nuclear Regulation Authority

Akitoshi Hotta - Nuclear Regulation Authority

Koetsu Ito - Advance Soft Corporation

Hiroaki Yugo - Advance Soft Corporation

Mamoru Shimizu - Advance Soft Corporation

A Stabilization Strategy of Multi-Resolution Multiphase MPS Method

Technical Paper Publication: ICONE31-136067

Yubao Zhong - Xi'an Jiaotong University

Sijun Li - Xi'an Jiaotong University

Ronghua Chen - Xi'an Jiaotong University

Kailun Guo - Xi'an Jiaotong University

Wenxi Tian - Xi'an Jiaotong University

A Comparative Analysis of CFD Approaches to Model Wire-Wrapped Fuel Bundle and Experimental Validation

Technical Paper Publication: ICONE31-136113

Ossama Halim - Università di Pisa

Andrea Pucciarelli - Università di Pisa

Nicola Forgione - Università di Pisa

12-04 Risk Assessments and Management - Session 4

8/8/2024 8:30 AM to 10:00 AM - Palmovka 4

Chair: Arun Veeramany - Pacific Northwest National Laboratory

Co-Chair: Hidemasa Yamano - Japan Atomic Energy Agency

Co-Chair: Mahesh Pandey - University of Waterloo

Co-Chair: Anton Prins - Risk Management and Consultancy

Co-Chair: Arnold Yuan - Ryerson University

Co-Chair: Ivan Vrbanic - APoSS d.o.o., Zabok, Croatia

Co-Chair: Jaroslav Holy - UJV Řež, a.s.

Co-Chair: Yoshihisa Nishi - Central Research Institute of Electric Power Industry

Co-Chair: Zhegang Ma - Idaho National Laboratory

Co-Chair: Wei Deng - China Nuclear Power Engineering Co., Ltd.

Co-Chair: Thomas Vogan - Sargent & Lundy

Co-Chair: Tao Yu -

Co-Chair: He Wang - Harbin Engineering University

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

Effect of Different Temperature Probability Curve Fitting Methods on the System Reliability for PCCS in AP1000
Technical Paper Publication: ICONE31-135769
Yu Yu - North China Electric Power University
Guanyu Liu - North China Electric Power University
Wanxin Feng - North China Electric Power University
Houjian Zhao - North China Electric Power University
Xuefeng Lyu - North China Electric Power University

Risk-Informed Defense-in-Depth Strategy for Nuclear Power Plant
Technical Paper Publication: ICONE31-135793
Qianwen Liu - China Nuclear Power Engineering Co., Ltd.
Yuxiang Wu - China Nuclear Power Engineering Co., Ltd.
Yuhan Wang - China Nuclear Power Engineering Co., Ltd.

Design Management Platform Maturity Research and Improvement Application
Technical Paper Publication: ICONE31-135862
Haili Shi - China Nuclear Power Engineering Co., Ltd.
Yuefei Hu - China Nuclear Power Engineering Co., Ltd.
Wenzhao Zhao - China Nuclear Power Engineering Co., Ltd.

Study on the PSA Application in Emergency Operating Procedure Development
Technical Paper Publication: ICONE31-135954
Chao Ma - China Nuclear Power Engineering Co., Ltd.
Churan Feng - China Nuclear Power Engineering Co., Ltd.
Jinyan Du - China Nuclear Power Engineering Co., Ltd.
Jian Yang - China Nuclear Power Engineering Co., Ltd.

Safety Evaluation and Optimization of Nuclear Power Plant Under Adaptive Sampling
Technical Paper Publication: ICONE31-136531
Linfeng Li - Shenzhen University
Zhen Zhang - Shenzhen University
Anqi Xu - Shenzhen University
Ting Wen - Shenzhen University
Xiaomeng Dong - Shenzhen University
Ming Yang - Shenzhen University
Linxian Chen - Shenzhen University
Yong Liu - Shenzhen University

Research on the Application of Risk-Managed Technical Specifications in Passive Nuclear Power Plants
Technical Paper Publication: ICONE31-136866
Zhen Yan - NPRI
Jiajian Wang - NPRI
Gang Ma - SMNP
Jianwen Sun - NPRI
Zhenqi Wang - SMNP
Dalin Liu - NPRI
Shuting Wang - NPRI
Sheng Zhu - NPRI

01-06: Nuclear Plant Operation, Modification, Life Extension, Maintenance and Life Cycle - VI

8/8/2024 8:30AM–10:00AM - Karlin 2

Chair: Guoqiang Wang - Westinghouse Electric Co.
Co-Chair: Pascal Duranton - Framatome
Co-Chair: Furu Jing - Harbin Engineering University
Co-Chair: Young Sun Jang - KONES Corp. Co.

Adaptive Refinement Simulation Model of Condenser Based on the Mechanism-AI Coupling Modeling Paradigm
Technical Paper Publication: ICONE31-135134
Furu Jing - Harbin Engineering University
Ruojun Xue - Harbin Engineering University
Jiaming Tang - Harbin Engineering University
Haofang Chong - Harbin Engineering University

Investigation in Design Technology of Load Follow Without Changing Soluble Boron of Hualong One
Technical Paper Publication: ICONE31-135183
Cui Huaiming - Nuclear Power Institute of China
Ning Zhonghao - Nuclear Power Institute of China
Liu Tongxian - Nuclear Power Institute of China
Wang Chenlin - Nuclear Power Institute of China
Li Tianya - Nuclear Power Institute of China
Cai Yun - Nuclear Power Institute of China

Seismic Response of NPP Considering the Non-Linear Soil-Structure Interaction Effects With DRM
Technical Paper Publication: ICONE31-135202
Young Sun Jang - KONES Corp. Co.
Youngoh Lee - KONES Corp. Co.

Research on Dynamic Rod Measurement Method Based on Torch Software Package for PWR
Technical Paper Publication: ICONE31-135284
Yun Cai - Nuclear Power institute of China
Tianya Li - Nuclear Power Institute of China
Rui Guo - Nuclear Power Institute of China
Tongxian Liu - Nuclear Power Institute of China
Qing Li - Nuclear Power Institute of China
Lingfang Yang - Nuclear Power Institute of China
Wenbo Zhao - Nuclear Power Institute of China

Load-Following Control of Nuclear Reactor Using Variable-Order Fuzzy Fractional Pid Controller Based on the Fractional-Space Neutron Point Kinetics Model
Technical Paper Publication: ICONE31-135371
Hetao Sun - Harbin Engineering University
Hailemichael Guadie Mengsitu - Harbin Engineering University
Xiuchun Luan - Harbin Engineering University
Jie Zhou - Harbin Engineering University
Junling Wang - Harbin Engineering University
Zhida Yang - Harbin Engineering University

Dynamic Entropy Investigation of Feed Water Heater in Nuclear Power Plant During Start-Up Process
Technical Paper Publication: ICONE31-135392
Zhijiang Zhang - Harbin Engineering University
Zhaofei Tian - Harbin Engineering University
Xiaoyu Ma - Harbin Engineering University

04-07: SMRs, Advanced Reactors, and Fusion

8/8/2024 10:30AM–12:00PM - Florenc 2

Chair: Rosa Lo Frano - University of Pisa
Co-Chair: Hitesh Bindra - Purdue University

Development of Thermal–Hydraulic and Safety Analysis Code for a Heat Pipe Cooled Reactor
Technical Paper Publication: ICONE31-133432
Guanghui Jiao - Harbin Enginering University
Genglei Xia - Harbin Engineering University
Tao Zhou - Harbin Engineering University
Jianjun Wang - Harbin Enginering University

Optimization of Inventory Control Strategies for Part Load Operation in a sCO2 Recuperated Brayton Cycle for a 5 MWth Heat Pipe Micro Modular Reactor
Technical Paper Publication: ICONE31-133703
Matthias Peiretti - University of Stuttgart
Markus Hofer - University of Stuttgart
Michael Buck - University of Stuttgart
Ruggero Meucci - University of Stuttgart
Jörg Starflinger - University of Stuttgart

Thermo-Neutronics Coupled Simulation of a Heat Pipe Reactor Based on COMSOL
Technical Paper Publication: ICONE31-135246
Jingyu Nie - Xi'an Jiaotong University
Binqian Li - Xi'an Jiaotong University
Yingwei Wu - Xi'an Jiaotong University
Jing Zhang - Xi'an Jiaotong University
Guoliang Zhang - China Nuclear Power Technology Research Institute
Qisen Ren - China Nuclear Power Technology Research Institute
Yanan He - Xi'an Jiaotong University
Guanghui Su - Xi'an Jiaotong University

The Neutronics Analysis of Heat Pipe Cooled Traveling Wave Reactor Designs With High-Assay Low-Enrichment Uranium and Natural Uranium
Technical Paper Publication: ICONE31-136201
Po Hu - Shanghai Jiao Tong University
Kunfeng Ma - Shanghai Jiao Tong University

Optimal Design of a Coupling System of Heat Pipe Cooled Reactor With Energy Storage System

Technical Paper Publication: ICONE31-136516

Limin Liu - Shanghai Jiao Tong University

Ziyin Liu - Shanghai Jiao Tong University

Ziang Guo - Shanghai Jiao Tong University

Hanyang Gu - Shanghai Jiao Tong University

Numerical Investigation of High-Temperature Heat Pipes With Different Wick Structures Under Non-Uniform Heating Boundary Conditions

Technical Paper Publication: ICONE31-137029

Kailun Guo - Xi'an Jiaotong University

Qishi Sun - Xi'an Jiaotong University

Hao Sun - China Nuclear Power Technology Research Institute

Chenlong Wang - Xi'an Jiaotong University

Kang Chen - Shanghai Nuclear Engineering Research & Design Institute Co., Ltd.

Wenxi Tian - Xi'an Jiaotong University

Guanghui Su - Xi'an Jiaotong University

Suizheng Qiu - Xi'an Jiaotong University

07-09: Simulations and Predictions - I

8/8/2024 10:30AM–12:00PM - Liben 3

Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Mengqi Wu - Tsinghua University

Co-Chair: Hideki Yagihashi - Nuclear Regulation Authority Japan

Data Augmentation for Discharging Time Prediction of Particle Flow: A Deep Learning and Style Transfer Approach

Technical Paper Publication: ICONE31-132744

Mengqi Wu - Tsinghua University

Yang Liu - Tsinghua University

Bin Li - Tsinghua University

Zhen Zhang - Tsinghua University

Nan Gui - Tsinghua University

Jiyuan Tu - Royal Melbourne Institute of Technology University

Simulation Study on the Transient Operating Characteristics of Natural Circulation Coupled With PCM Energy Storage Module for the Passive Containment Cooling System

Technical Paper Publication: ICONE31-134301

Yufan Huang - Xi'an Jiaotong University

Han Wang - Xi'an Jiaotong University

Weixiong Chen - Xi'an Jiaotong University

Xiaohu Yang - Wuhan Second Ship Design and Research Institute

Shaodan Li - Wuhan Second Ship Design and Research Institute

Junjie Yan - Xi'an Jiaotong University

Simulation Study of Transient Characteristics of Liquid Lead-Bismuth Recirculation Loop

Technical Paper Publication: ICONE31-134551

Zhenhua Sheng - North China Electric Power University

Zhen Yang - North China Electric Power University

Tengjun Geng - North China Electric Power University

Shengfei Wang - North China Electric Power University

Haicai Lv - North China Electric Power University

Wentao Guo - North China Electric Power University

Fang Liu - North China Electric Power University

Fenglei Niu - North China Electric Power University

Validation of Trace Simulation for PWR Plant Small-Break LOCA

Technical Paper Publication: ICONE31-134596

Hideki Yagihashi - Nuclear Regulation Authority

Kaho Goto - Nuclear Regulation Authority

Masashi Sekine - Nuclear Regulation Authority

Naofumi Tsukamoto - Nuclear Regulation Authority

Prediction of Flow Field in Heat Transfer Tube of Natural Circulating Steam Generator Based on Neural Network

Technical Paper Publication: ICONE31-134725

He Zhang - Harbin Engineering University

Biao Liang - Harbin Engineering University

Bo Wang - Harbin Engineering University

Jiangkuan Li - Harbin Engineering University

Rui Han - Harbin Engineering University

Sichao Tan - Harbin Engineering University

Ruifeng Tian - Harbin Engineering University

07-20: Thermal-Hydraulics Research and Applications - I

8/8/2024 10:30AM–12:00PM - Palmovka 1

Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Wen He - Tsinghua University

Co-Chair: Weiyu Chu - Harbin Engineering University

Research on the Film Thickness Characteristics of Jet Condenser Nozzle

Technical Paper Publication: ICONE31-135712

Weiyu Chu - Harbin Engineering University

Chonghai Huang - Wuhan Second Ship Design and Research Institute

Qi Xiao - Wuhan Second Ship Design and Research Institute

Zhaoming Meng - Harbin Engineering University

Yilin Fu - Harbin Engineering University

Assessment of the Force-Balance Model in Predicting the Bubble Departure Diameter in Inclined Channels

Technical Paper Publication: ICONE31-131958

Wen He - Tsinghua University

Jinyu Han - Tsinghua University

Chenru Zhao - Tsinghua University

Hanliang Bo - Tsinghua University

Application of Modal Decomposition Techniques for Reduced-Order Modelling of Once-Through Steam Generator

Technical Paper Publication: ICONE31-132735

Yifan Xu - Harbin Engineering University

Minjun Peng - Harbin Engineering University

Genglei Xia - Harbin Engineering University

The Effective Thermal Conductivity Model of Dispersion Fuel Elements Based on Effective Matrix Approximation

Technical Paper Publication: ICONE31-133655

Tianchen Qiu - Tsinghua University

Jun Sun - Tsinghua University

Study on Scaling Method for Natural Circulation Instability in Narrow Channel

Technical Paper Publication: ICONE31-134167

Yao Yao - Southeast University

Tao Zhou - Southeast University

Dongli Huang - Southeast University

Jianyu Tang - Southeast University

Wenbin Liu - Southeast University

Shilei Dun - Southeast University

Analysis of Energy Dissipation Effect of Fluid-Filled Capacitive Structure in the Water Hammer Process

Technical Paper Publication: ICONE31-134432

Linqing Yang - Tsinghua University

Benke Qin - Tsinghua University

Yanlin Li - Tsinghua University

Yue Ma - Tsinghua University

Hanliang Bo - Tsinghua University

02-10: Physics and Transport Theory - II

8/8/2024 10:30 AM to 12:00 PM - Karlin 1

Chair: Hakan Ozaltun - U.S. Nuclear Regulatory Commission

Co-Chair: Zhang Hongjian - Tsinghua University

Co-Chair: Baoxin Yuan - China Academy of Engineering Physics

Further Research on Neutron Noise Calculation Under Plate Fuel Failure Conditions Based on Frequency Domain Finite Element Method

Technical Paper Publication: ICONE31-132052

Baoxin Yuan - China Academy of Engineering Physics

Huiyi Lv - SouthWest University of Science and Technology

Herong Zeng - China Academy of Engineering Physics

Jie Zheng - China Academy of Engineering Physics

Zihan Chen - China Academy of Engineering Physics

Huan Huang - China Academy of Engineering Physics

Songbao Zhang - China Academy of Engineering Physics

Dazhi Qian - China Academy of Engineering Physics

Improved Athermal Recombination Corrected Dpa Model for Displacement Damage Cross-Section Calculation
Technical Paper Publication: ICONE31-135163
Wen Yin - Harbin Engineering University
Tiejun Zu - Xi'an Jiaotong University
Liangzhi Cao - Xi'an Jiaotong University

Thermal Cut-Off Energy for Accurate Analysis of Prismatic High-Temperature Gas-Cooled Reactor
Technical Paper Publication: ICONE31-130801
Satoshi Takeda - Osaka University
Takanori Kitada - Osaka University
Akio Yamamoto - Nagoya University
Kazuya Yamaji - Mitsubishi Heavy Industries, Ltd.
Hiroki Koike - Mitsubishi Heavy Industries, Ltd.
Koji Asano - Mitsubishi Heavy Industries, Ltd.

Evaluation of Expansion Reactivity Based on Reactivity Coefficient for Sodium-Cooled Fast Reactor
Technical Paper Publication: ICONE31-132277
Satoshi Takeda - Osaka University
Takanori Kitada - Osaka University
Eiji Hoashi - Osaka University
Takafumi Okita - Osaka University

Validation of Doppler Reactivity Feedback in SPERT-III E-Core With the Best-Estimate Transient Code Trac Toshiba Version
Technical Paper Publication: ICONE31-134116
Tohru Egawa - Toshiba Energy Systems & Solutions Corporation
Mikio Tokashiki - Toshiba Energy Systems & Solutions Corporation
Takamasa Miyaji - Toshiba Energy Systems & Solutions Corporation
Takanori Fukunaga - Toshiba Energy Systems & Solutions Corporation

Research on the Dependency Between Transuranic Isotopes and Burnup in Pebble Bed High-Temperature Reactors
Technical Paper Publication: ICONE31-132764
Zhang Hongjian - Tsinghua University
Zhu Qing - Tsinghua University
Zhang Liguo - Tsinghua University
Ma Tao - Tsinghua University

02-13: Structural Evaluation, Performance Assessment, Multiphysics Coupling - III

8/8/2024 10:30AM–12:00PM - Karlin 3

Chair: Hakan Ozaltun - U.S. Nuclear Regulatory Commission
Co-Chair: Kun Zhuang - Nanjing University of Aeronautics and Astronautics
Co-Chair: Zhengang Duan - Chongqing University

Investigation on Burst Behaviors of Cr-Coated Cladding Under Simulated Loca Conditions
Technical Paper Publication: ICONE31-134397
Zhengang Duan - Chongqing University
Bo Yuan - Chongqing University
Qinglong Wen - Chongqing University
Kang Chen - Chongqing University

Neutronics-Mechanics Coupling for Fast Transient Simulation in Molten Salt Reactors
Technical Paper Publication: ICONE31-133060
Théo Vidril - CEA
Stanislas De Lambert - CEA
Nicolas Lelong - CEA
Florence Drui - CEA
Cyril Patricot - CEA
Elsa Merle - Grenoble INP, CNRS

Improvement of Thermal Feedback Model in Bamboo-Core From Parallel-Channel to Subchannel
Technical Paper Publication: ICONE31-135973
Hengrui Zhang - Xi'an Jiaotong University
Yunzhao Li - Xi'an Jiaotong University
Sicheng Wang - Xi'an Jiaotong University
Yisong Li - Xi'an Jiaotong University
Yiling Liang - Xi'an Jiaotong University

Method Research on the Model Optimization of Whole-Core Fuel-Assembly Bowing Based on 3D Variational Algorithm and the Measurement Values
Technical Paper Publication: ICONE31-136183
Lin Guo - Xi'an Jiaotong University
Kai Zhang - Xi'an Jiaotong University

Chenghui Wan - Xi'an Jiaotong University

Hongchun Wu - Xi'an Jiaotong University

Neutronic and Thermal-Hydraulic Analysis for a Small Liquid-Solid Dual-Fuel Reactor With Different Fuel Types

Technical Paper Publication: ICONE31-134828

Zhichao Qiu - Nanjing University of Aeronautics and Astronautics

Kun Zhuang - Nanjing University of Aeronautics and Astronautics

Yongzhan Wang - Nanjing University of Aeronautics and Astronautics

Xiaoyu Wang - Nanjing University of Aeronautics and Astronautics

Lina Deng - Nanjing University of Aeronautics and Astronautics

Yingzheng Wang - Nanjing University of Aeronautics and Astronautics

Sipeng Wang - Nanjing University of Aeronautics and Astronautics

04-14: SMRs, Advanced Reactors and Fusion

8/8/2024 10:30AM–12:00PM - Karlin 4

Chair: Rosa Lo Frano - University of Pisa

Current Results of BME NTI in the ECC-SMART Project: Different Analysis on the SCW-SMR

Technical Paper Publication: ICONE31-135760

Tamás Varju - Budapest University of Technology and Economics

Attila Kiss - Budapest University of Technology and Economics

Csenge Antók - Budapest University of Technology and Economics

Boglárka Babcsány - Budapest University of Technology and Economics

Ildikó Boros - Budapest University of Technology and Economics

Péter Mészáros - Budapest University of Technology and Economics

Zeno Bertesina - Budapest University of Technology and Economics

Szabolcs Czifrus - Budapest University of Technology and Economics

Differential Method for Predicting Heat Transfer Deterioration Regimes in Supercritical Channels and Rod Assemblies

Technical Paper Publication: ICONE31-136180

Vladislav Filonov - IPP-Centre LLC

Yuliia Filonova - IPP-Centre LLC

Olexander Kovalenko - IPP-Centre LLC

Dmitriy Fedorov - IPP-Centre LLC

Evaluation of Three-Dimensional Initial Dynamics of the Decompression Wave at LB LOCA in the Advanced Supercritical Reactor ECC-SMART

Technical Paper Publication: ICONE31-136271

Vladislav Filonov - IPP-Centre LLC

Yaroslav Dubyk - IPP-Centre LLC

Olexander Kovalenko - IPP-Centre LLC

Yuliia Filonova - IPP-Centre LLC

Dmitriy Fedorov - IPP-Centre LLC

Effect of the Heat Transfer Correlation Choice on the Coupled Assessment of Energy Release and Stress-Strain State of an Elementary Supercritical Fuel Rod Under Nuclear Heating Conditions

Technical Paper Publication: ICONE31-136275

Vladislav Filonov - IPP-Centre LLC

Olexander Kovalenko - IPP-Centre LLC

Yaroslav Dubyk - IPP-Centre LLC

Yuliia Filonova - IPP-Centre LLC

Dmitriy Fedorov - IPP-Centre LLC

A Preliminary Thermodynamic Model of Hydrogen Generation Using Solid Oxide Electrolysis Cell (SOEC) Coupled With a High-Temperature Gas-Cooled Reactor

Technical Paper Publication: ICONE31-135353

Wenxiu Gao - Tsinghua University

Xiongbin Liu - Tsinghua University

Zhende Zhou - Huaneng Nuclear Energy Technology Research Institute

Xiaowei Li - Tsinghua University

08-06: Computational Fluid Dynamics (CFD) and Applications - VI

8/8/2024 10:30AM–12:00PM - Palmovka 2

Chair: Yassin Hassan - Texas A&M

Co-Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Sofiane Benhamadouche - Electricite De France R & D

Co-Chair: Samuel Oke - Harbin Engineering University

Co-Chair: Zhelun Ai - Sun Yat-sen University

Research on CFD Calculation and Analysis Technology of Porous Media in Sodium Cooled Fast Reactor Core

Technical Paper Publication: ICONE31-135291

Yuchen Sun - Harbin Engineering University

Guangliang Chen - Harbin Engineering University

Xinli Yin - Harbin Engineering University

Hao Qian - Harbin Engineering University

Yizhi Tian - Harbin Engineering University

Senyong Zhang - Harbin Engineering University

Menglai Li - Harbin Engineering University

Study on the Flow Characteristics and Impact of Wet Steam Condensation in Nuclear Power Steam Turbine

Technical Paper Publication: ICONE31-135359

Zhuojun Jiang - Chongqing University

Wan Sun - Chongqing University

Simiao Tang - Chongqing University

Liangming Pan - Chongqing University

Luteng Zhang - Chongqing University

Zaiyong Ma - Chongqing University

Numerical Simulation of Steam-Seawater Suppression Technology for Miniature Containment

Technical Paper Publication: ICONE31-135394

An Cao - Harbin Engineering University

Shipeng Niu - China Nuclear Power Engineering Co., Ltd

Jianfa Li - China Nuclear Power Engineering Co., Ltd

Yongzhen Hua - China Nuclear Power Engineering Co., Ltd

Xiangjie Qi - Harbin Engineering University

Jiayu Xiao - Harbin Engineering University

Zhaoming Meng - Harbin Engineering University

Numerical Analysis and Model Evaluation on Flow and Heat Transfer Characteristics of LBE in a Pipe Based on DNS Data

Technical Paper Publication: ICONE31-135396

Zhelun Ai - Sun Yat-sen University

Jie Li - Sun Yat-sen University

Yumeng Sun - Sun Yat-sen University

Heng Miao - Sun Yat-sen University

Numerical Investigation of Convective Heat Transfer Performance of Hybrid Nanofluid Flowing Through Square Channel in PWR Fuel Rod Assembly

Technical Paper Publication: ICONE31-135419

Samuel Oke - Harbin Engineering University

Puzhen Gao - Harbin Engineering University

Olatomide Fadodun - Obafemi Awolowo University

Mathew A. Jayeola - Harbin Engineering University

Numerical Investigation of Vapor-Liquid Direct Contact Condensation Heat Transfer Behavior Under the Spray Condition

Technical Paper Publication: ICONE31-135440

Yiwei Wang - Harbin Engineering University

Hongyang Wei - Harbin Engineering University

Puzhen Gao - Harbin Engineering University

Ruifeng Tian - Harbin Engineering University

Sichao Tan - Harbin Engineering University

08-10: Computational Fluid Dynamics (CFD) and Applications - X

8/8/2024 10:30AM–12:00PM - Palmovka 3

Chair: Yassin Hassan - Texas A&M

Co-Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Tomas Korinek - Czech Technical University in Prague

Co-Chair: Shunyang Li - Tsinghua University

Coupled Thermal-Hydraulics and Neutron Transport Calculations of Small Modular Reactor Using Serpent, OpenFOAM and SubChanFlow Codes

Technical Paper Publication: ICONE31-136127

Tomas Korinek - Czech Technical University in Prague

Jiri Zavorka - University of West Bohemia

Martin Lovecky - University of West Bohemia

Radek Skoda - Czech Technical University in Prague

Numerical Simulation of Nucleate Boiling Process by High-Order Lattice Boltzmann Method

Technical Paper Publication: ICONE31-136142

Shunyang Li - Tsinghua University

Li Wan - Tsinghua University

Nan Gui - Tsinghua University

Xingtuan Yang - Tsinghua University

Jiyuan Tu - Royal Melbourne Institute of Technology University

Shengyao Jiang - Tsinghua University

Study of Compressible Flow in Tubes Containing Mesh Structures

Technical Paper Publication: ICONE31-136153

Jun Xu - Nuclear Power Institute of China

Hongxing Yu - Nuclear Power Institute of China

Jian Deng - Nuclear Power Institute of China

Yu Liu - Nuclear Power Institute of China

Luteng Zhang - Chongqing University

Langlang Tian - Chongqing University

Lei Zhong - Nuclear Power Institute of China

Study on Single-Phase Flow and Heat Transfer Characteristics of Vertical Narrow Rectangular Channel With Nonuniform Heating

Technical Paper Publication: ICONE31-136177

Zhu Di - Harbin Engineering University

Sun Ruilei - Harbin Engineering University

Li Yang - Harbin Engineering University

Tan Sichao - Harbin Engineering University

Tian Ruifeng - Harbin Engineering University

Numerical Investigation of Natural Convection Heat Transfer Characteristics in a Swinging Cavity

Technical Paper Publication: ICONE31-136322

Lize Xing - Tsinghua University

Xiongbin Liu - Tsinghua University

08-11: Computational Fluid Dynamics (CFD) and Applications - XI

8/8/2024 10:30AM–12:00PM - Palmovka 4

Chair: Yassin Hassan - Texas A&M

Co-Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Yasuo Hattori - Central Research Institute of Electric Power Industry

Co-Chair: Vladimir Stevanovic - University of Belgrade

Co-Chair: Tomasz Kwiatkowski - National Centre for Nuclear Research

Numerical Simulation of Pool Boiling With Two-Fluid and Grid-Resolved Wall Model

Technical Paper Publication: ICONE31-136496

Milan Petrovic - University of Belgrade

Vladimir Stevanovic - University of Belgrade

Milica Ilic - University of Belgrade

Sanja Milivojevic - University of Belgrade

Evaluation of Hydrodynamic Effects for Flow Accelerated Corrosion (FAC) at Weld Section

Technical Presentation Only: ICONE31-130797

Ryo Morita - Central Research Institute of Electric Power Industry

Tomohisa Yuasa - Central Research Institute of Electric Power Industry

Yuta Uchiyama - Central Research Institute of Electric Power Industry

Takayuki Yamagata - Niigata University

Optimization Design of High-Temperature Gas-Cooled Core Coolant Channel Based on NURBS

Technical Presentation Only: ICONE31-132598

Qi Lu - Nuclear Power Institute of China

Wenbin Han - Nucleaer Power Institute of China

Jian Deng - Nuclear Institue of China

Fluid-Induced Vibration Assessment in Main Steam Pipe Using Computational Fluid Dynamics

Technical Presentation Only: ICONE31-135693

Haein Lee - KEPCO-ENC

Ahram Lee - KEPCO-ENC

Younho Won - KEPCO-ENC

Gon Hwangbo - KEPCO-ENC

Analysis of Flow Pulsations in Triangular and Square Rod Bundles

Technical Presentation Only: ICONE31-136058

Tomasz Kwiatkowski - National Centre for Nuclear Research

Anna Talarowska - European Nuclear Society Young Generation Network

Afaque Shams - King Fahd University of Petroleum and Minerals

Osman Siddiqui - King Fahd University of Petroleum and Minerals

A Eulerian-Lagrangian Investigation on Graphite Aerosol Transport in the Containment During a Water-Ingress Accident of HTGR

Technical Presentation Only: ICONE31-136361

Yiyang Zhang - Institute of Nuclear and New Energy Technology

Zhu Fang - Institute of Nuclear and New Energy Technology

Xinxin Wu - Institute of Nuclear and New Energy Technology

Libin Sun - Institute of Nuclear and New Energy Technology

01-07: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - VII

8/8/2024 10:30AM–12:00PM - Karlin 2

Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Pascal Duranton - Framatome

Co-Chair: Saeko Tokuomi - Kumamoto University

Co-Chair: Xiuchun Zhang - Harbin Engineering University

Remote Tapping Inspection Method Employing a String Shooter

Technical Paper Publication: ICONE31-135414

Saeko Tokuomi - Kumamoto University

Kazuya Mori - Kumamoto University

Yasutaka Ohshima - Kumamoto University

Research on the Criteria for Single Protection Channel Power Failure in Nuclear Power Plants

Technical Paper Publication: ICONE31-135415

Xiuchun Zhang - Harbin Engineering University

Hong Xia - Harbin Engineering University

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

Shaomin Zhu - Harbin Engineering University

Jiyu Zhang - Harbin Engineering University

Junjun Xu - Suzhou Nuclear Power Research Institute Co., Ltd.

Yingying Jiang - Harbin Engineering University

Wenzhe Yin - Harbin Engineering University

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

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

Research and Application of Containment Structural Health Monitoring System During Operation of Nuclear Power Plant

Technical Paper Publication: ICONE31-135418

Song Mengyan - China Nuclear Power Engineering Company

Yao Di - China Nuclear Power Engineering Company

Zhang Chaoqi - China Nuclear Power Engineering Company

Jiang Di - China Nuclear Power Engineering Company

Zhang Peiyao - China Nuclear Power Engineering Company

Predictions of Component Remaining Useful Life Using Bayesian LSTM for Reactor Coolant Pump

Technical Paper Publication: ICONE31-135439

Renyi Xu - Science and Technology on Reactor System Design Technology Laboratory

Yan Wang - Science and Technology on Reactor System Design Technology Laboratory

Minjun Peng - Harbin Engineering University

Huaiming Cui - Science and Technology on Reactor System Design Technology Laboratory

Hang Wang - Harbin Engineering University

Chengxiao Kuang - Science and Technology on Reactor System Design Technology Laboratory

Research on Fault Diagnosis Framework of Nuclear Power Plant Rotating Equipment Based on Unity3D

Technical Paper Publication: ICONE31-135447

Zhujun Jia - Harbin Engineering University

Hong Xia - Harbin Engineering University

Wenzhe Yin - Harbin Engineering University

Yingying Jiang - Harbin Engineering University

Functional Failure Probability Assessment of Passive Systems Based on Meta-Model

Technical Paper Publication: ICONE31-135651

Shiqi Zhang - Harbin Engineering University

Minjun Peng - Harbin Engineering University

Genglei Xia - Harbin Engineering University

Chenyang Wang - Harbin Engineering University

He Shang - Harbin Engineering University

07-10: Simulations and Predictions - II

8/8/2024 3:00PM–4:30PM - Liben 3

Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Bo Wang - Harbin Engineering University

Co-Chair: Deyang Gao - Tsinghua University

Research on Long Term Trend Prediction of Nuclear Power Plants Based on Integrated Framework

Technical Paper Publication: ICONE31-134726

Canyi Tan - Harbin Engineering University

Biao Liang - Harbin Engineering University

Bo Wang - Harbin Engineering University

Jiangkuan Li - Harbin Engineering University

Rui Han - Harbin Engineering University

Sichao Tan - Harbin Engineering University

Ruifeng Tian - Harbin Engineering University

Research on Accident Prediction of Nuclear Power Plants Based on Deep Learning

Technical Paper Publication: ICONE31-134779

Wei Lv - Harbin Engineering University

Tong Li - Harbin Engineering University

Bo Wang - Harbin Engineering University

Sichao Tan - Harbin Engineering University

Jiangkuan Li - Harbin Engineering University

Ruifeng Tian - Harbin Engineering University

Research on Key Parameter Prediction Technology of Small Modular Pressurized Water Reactor Under Ocean Conditions

Technical Paper Publication: ICONE31-134788

Yiheng Cheng - Harbin Engineering University

Tong Li - Harbin Engineering University

Sichao Tan - Harbin Engineering University

Bo Wang - Harbin Engineering University

Zhengxi He - Nuclear Power Institute of China

Ruifeng Tian - Harbin Engineering University

Molecular Dynamics Simulation of the Nanostructure-Induced Bubble Nucleation
Technical Paper Publication: ICONE31-134821
Deyang Gao - Tsinghua University
Yue Ma - Tsinghua University
Hanliang Bo - Tsinghua University

Prediction of Sensor Data Accuracy in Thermal Experimental Benches Using GRU-GCN Neural Network Model
Technical Paper Publication: ICONE31-134843
Linjun Yang - Harbin Engineering University
Tong Li - Harbin Engineering University
Yongchao Liu - Harbin Engineering University
Bo Wang - Harbin Engineering University
Jiangkuan Li - Harbin Engineering University
Jiming Wen - Harbin Engineering University
Sichao Tan - Harbin Engineering University
Ruifeng Tian - Harbin Engineering University

Prediction of Thermal-Hydraulic Parameters for Autonomous Load Following LFR Core Using Surrogate Model
Technical Paper Publication: ICONE31-134988
Kefan Zhang - University of Science and Technology of China
Wenshun Duan - University of Science and Technology of Chian
Junjia Zhang - University of Science and Technology of China
Hongli Chen - University of Science and Technology of China

07-11: Simulations and Predictions - III

8/8/2024 3:00PM–4:30PM - Palmovka 4

Chair: Guoqiang Wang - Westinghouse Electric Co.
Co-Chair: Guido Mazzini - Centrum výzkumu Řež s. r. o.
Co-Chair: Zhiyuan Sun - Tsinghua University

Comparative Investigation of Eulerian and VOF Models in Gas-Liquid Two-Phase Flow Simulation
Technical Paper Publication: ICONE31-135117
Zhiyuan Sun - Tsinghua University
Wen He - Tsinghua University
Jinyu Han - Tsinghua University
Zhanwei Liu - Tsinghua University
Hanliang Bo - Tsinghua University

CFD Simulations of Helium Flow Through Partial Heating Pebble Bed
Technical Paper Publication: ICONE31-135126
Jiajie Li - Tsinghua University
Yu Ji - Tsinghua University
Jun Sun - Tsinghua University

Inquiry on the Effect of Heating Structures in the Prediction of Flow Stability at Supercritical Pressures
Technical Paper Publication: ICONE31-135176
Alessio Betti - Università di Pisa
Andrea Pucciarelli - Università di Pisa
Walter Ambrosini - Università di Pisa

OpenFOAM Based Benchmarking Simulations of Xenon Gas Behavior in Molten Lead for Advanced Fast Reactors
Technical Paper Publication: ICONE31-135256
Emir Hanic - Harbin Engineering University
Xiang Wang - Harbin Eingineering University

Simulation of Energy Well Micro Modular Reactor Using System Codes
Technical Paper Publication: ICONE31-135616
Guido Mazzini - Centrum Výzkumu Řež s. r. o.
Marek Bencik - UJV s.a.s.
Mathieu Reungoat - Centrum Výzkumu Rez s.r.o.

Neutronics/Thermal-Hydraulics Coupling Simulation Using JAMPAN in a Single BWR Fuel Assembly

Technical Paper Publication: ICONE31-135974

Tomohiro Kamiya - Japan Atomic Energy Agency

Taku Nagatake - Japan Atomic Energy Agency

Ayako Ono - Japan Atomic Energy Agency

Kenichi Tada - Japan Atomic Energy Agency

Ryoichi Kondo - Japan Atomic Energy Agency

Yasunobu Nagaya - Japan Atomic Energy Agency

Hiroyuki Yoshida - Japan Atomic Energy Agency

07-21: Thermal-Hydraulics Research and Applications - II

8/8/2024 3:00PM–4:30PM - Palmovka 1

Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Hongwei Jiang - Harbin Engineering University

Co-Chair: Yoshihiro Ishikawa - Rasa Industries, Ltd.

Advanced Radioactive Material Removal System Using Silver Zeolite (7) Evaluation of Noble Gas Adsorption Characteristics by XeA

Technical Paper Publication: ICONE31-134643

Yoshihiro Ishikawa - Rasa Industries, Ltd.

Koji Endo - Rasa Industries, Ltd.

Tadashi Narabayashi - Tokyo Tech

Yasuhiro Kawahara - Kimura Chemical Plants

Yuta Nakasaka - Hokkaido University

Development and Preliminary Validation of the Fine Fuel Cell Subchannel Analysis Code Cunlun

Technical Paper Publication: ICONE31-134838

Hongwei Jiang - Harbin Engineering University

Guangliang Chen - Harbin Engineering University

Zhaofei Tian - Harbin Engineering University

Design Calculation of Ultra-High Temperature and High Pressure Helium-Xenon Mixed Gas Radiator

Technical Paper Publication: ICONE31-135059

Yongwang Xu - China Institute of Atomic Energy

Minghui Duan - China institute of Atomic Energy

Junhan Wei - China institute of Atomic Energy

Minfu Zhao - China Institute of Atomic Energy

Dongxu Zhang - China Institute of Atomic Energy

Qingyuan Li - China Institute of Atomic Energy

Study on the Dynamic Characteristics of the Supercritical CO2 Recompression Brayton Cycle for a Single Island Lead-Bismuth Generator Set

Technical Paper Publication: ICONE31-135095

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

Hongzhi Li - Xi'an Thermal Power Research Institute Co., Ltd.

Yujia Zhou - Xi'an Thermal Power Research Institute Co., Ltd.

Research on Computation Method of Bubble Volume Based on Machine Learning

Technical Paper Publication: ICONE31-135162

Yongwang Ding - Tsinghua University

Xinxing Liu - Harbin Engineering University

Zhaoming Meng - Harbin Engineering University

Han Zhang - Tsinghua University

Fu Li - Institute of Nuclear and New Energy Technology

02-11: Structural Evaluation, Performance Assessment, Multiphysics Coupling - I

8/8/2024 3:00PM–4:30PM - Karlin 1

Chair: Hakan Ozaltun - U.S. Nuclear Regulatory Commission

Co-Chair: Ao Zhang - Shanghai Institute of Applied Physics

Co-Chair: Jiri Zavorka - University of West Bohemia

Molten Salt Reactor Multi-Physics Simulations by Using a MOOSE-Based Application Suanni

Technical Paper Publication: ICONE31-136944

Ao Zhang - Shanghai Institute of Applied Physics

Ming Dai - Shanghai Institute of Applied Physics

Shaopeng Xia - Shanghai Institute of Applied Physics

Jingen Chen - Shanghai Institute of Applied Physics

Xiangzhou Cai - Shanghai Institute of Applied Physics

Irradiation-Thermal-Mechanical Coupling Behaviors of a Typical TRISO/SiC Fuel Element Based on Actual Distribution

Technical Paper Publication: ICONE31-135863

Zhang Liangjie - Nuclear Power Institute of China

Chen Ping - Nuclear Power Institute of China

Liu Shichao - Nuclear Power Institute of China

Wang Haoyu - Nuclear Power Institute of China

Wei Chong - Northwestern Polytechnical University

Pan Xiaoqiang - Nuclear Power Institute of China

Numerical Simulation Research on Irradiation-Thermal-Mechanical Behavior of CDM Fuel in Different Types of Reactors

Technical Paper Publication: ICONE31-135696

Changbing Tang - Nuclear Power Institute of China

Yuanming Li - Nuclear Power Institute of China

Haoyu Liao - Nuclear Power Institute of China

A Review of the Performance Analysis of Plate Type Fuel Elements in High-Flux Reactors

Technical Paper Publication: ICONE31-135005

Yue Song - Tsinghua University

Heng Xie - Tsinghua University

Meng Lv - Tsinghua University

Structural Design and Analysis of Plate-Type Fuel Assembly of Research Reactor

Technical Paper Publication: ICONE31-132740

Hyun-Jung Kim - Korea Atomic Energy Research Institute

Young-Wook Tahk - Korea Atomic Energy Research Institute

Dong-Hyun Kim - Korea Atomic Energy Research Institute

Analysis of the Effect of Random Bowing of the Fuel Pin on the Power Distribution in the Fuel Assembly

Technical Paper Publication: ICONE31-136287

Jiri Zavorka - University of West Bohemia

Martin Lovecky - University of West Bohemia

Radek Skoda - Czech Technical University in Prague

Petra Monhartova - ŠKODA JS a.s

02-14: Structural Evaluation, Performance Assessment, Multiphysics Coupling - IV

8/8/2024 3:00PM–4:30PM - Karlin 3

Chair: Hakan Ozaltun - U.S. Nuclear Regulatory Commission

Co-Chair: Quanyao Ren - Nuclear Power Institute of China

Co-Chair: Cuijie Pan - China Institute of Atomic Energy

Experimental Study on the Liquid Film Behaviors of Annular Flow in the Rectangular Channel

Technical Paper Publication: ICONE31-136299

Quanyao Ren - Science and Technology on Reactor System Design Technology Laboratory

Zeng-Ping Pu - Science and Technology on Reactor System Design Technology Laboratory

Qingche He - Science and Technology on Reactor System Design Technology Laboratory

Haidong Liu - Chongqing University of Technology

Hui He - Shanghai Jiaotong University

Zhong Xiao - Science and Technology on Reactor System Design Technology Laboratory

Liang-Ming Pan - Chongqing University

The Solitary Wave and Advanced Nuclear Energy System

Technical Presentation Only: ICONE31-135355

Jin Huang - East China University of Technology

Benchmark Critical Experiments of Two Slab Cores Containing 19.75% Enriched Uranyl Nitrate Solution
Technical Presentation Only: ICONE31-139495
Qi Zhou - China Institute of Atomic Energy
Qingfu Zhu - China Institute of Atomic Energy
Zhaodong Xia - China Institute of Atomic Energy
Yuting Cheng - China Institute of Atomic Energy
Huanxing Li - China Institute of Atomic Energy

Theoretical and Experimental Validation of Core Management System Code Package of the Annular Fuel
Technical Presentation Only: ICONE31-139586
Cuijie Pan - 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
Geng Zhang - China Institute of Atomic Energy
Yuting Cheng - China Institute of Atomic Energy

04-08: SMRs, Advanced Reactors and Fusion

8/8/2024 3:00PM–4:30PM - Florenc 2

Chair: Rosa Lo Frano - University of Pisa

Preliminary Core Design Analysis of Core Criticality and Heat Transfer of the All-Solid-State Micro-Reactor
Technical Paper Publication: ICONE31-135017
Takeshi Koike - Mitsubishi Heavy Industries, Ltd.
Koji Asano - Mitsubishi Heavy Industries, Ltd.
Mizuki Yamada - Mitsubishi Heavy Industries, Ltd.
Satoru Kamohara - Mitsubishi Heavy Industries, Ltd.
Tadakatsu Yodo - Mitsubishi Heavy Industries, Ltd.
Nozomu Murakami - Mitsubishi Heavy Industries, Ltd.

Preliminary Design and Transient Simulation of a Nuclear-Solar Hybrid System Using an Open-Air Brayton Cycle
Technical Paper Publication: ICONE31-135136
Jiaolong Deng - Shanghai JiaoTong University
Chaoran Guan - Shanghai JiaoTong University
Xiaojing Liu - Shanghai JiaoTong University
Hui He - Shanghai JiaoTong University
Xiang Chai - Shanghai JiaoTong University

Feasibility and Safety Analysis of Solid-State Core Reactor for Lunar Surface Exploration
Technical Paper Publication: ICONE31-135172
Yugao Ma - Nuclear Power Institute of China
Jiahao Lu - Chengdu University of Technology
Yue Liu - Chengdu University of Technology
Suyi Zhang - Chengdu University of Technology
Muhao Zhang - Chengdu University of Technology

Criteria for Selecting Nuclear Reactors for Merchant Shipping
Technical Paper Publication: ICONE31-135177
Jan Emblemsvag - Norwegian University of Science and Technology
César Hueso Ordóñez - IDOM
Cristian Garrido Tamm - IDOM
Terje Strand - Norwegian University of Science and Technology
Helge Thoresen - Norwegian University of Science and Technology
Javier Santos Ortigosa - IDOM
Alejandria Perez - KTH Royal Institute of Technology
Yolanda Mugica Colilles - IDOM
Alba Esteban Izquierdo - IDOM

Application of Virtual Reality Technology in Human Factors Verification of Nuclear Power Plant Design
Technical Paper Publication: ICONE31-136054
Dong Hao - China Nuclear Power Engineering Co., Ltd.
Yanfang Fan - China Nuclear Power Engineering Co., Ltd.
Binghe Bai - China Nuclear Power Engineering Co., Ltd.

Numerical Simulation of Agglomeration Characteristics of Liquid Lead-Bismuth Eutectic (LBE) Impurity Particles
Technical Paper Publication: ICONE31-135019
Dingsheng Lu - Xi'an Jiaotong University
Yupeng Yang - Xi'an Jiaotong University
Xiao Pang - Xi'an Jiaotong University
Chenglong Wang - Xi'an Jiaotong University
Wenxi Tian - Xi'an Jiaotong University
Suizheng Qiu - Xi'an Jiaotong University
G.H. Su - Xi'an Jiaotong University

08-07: Computational Fluid Dynamics (CFD) and Applications - VII

8/8/2024 3:00PM–4:30PM - Palmovka 2

Chair: Yassin Hassan - Texas A&M
Co-Chair: Guoqiang Wang - Westinghouse Electric Co.
Co-Chair: Tian Ruifeng - Harbin Engineering University
Co-Chair: Tianyi Huang - Tsinghua University
Co-Chair: Junshuai Sun - Harbin Engineering University

Simulation Study of Nuclear Heating Reactor Control Method in Slight Boiling Operation Mode
Technical Paper Publication: ICONE31-135458
Tianyi Huang - Tsinghua University
Jun Sun - Tsinghua University
Heng Xie - Tsinghua University

Numerical Study of Flow-Induced Vibration of Square Tube Bundle Structures Under Ocean Conditions Based on Large Eddy Simulation
Technical Paper Publication: ICONE31-135476
Junshuai Sun - Harbin Engineering University
Rulei Sun - Harbin Engineering University
Xiaoqiang He - Harbin Engineering University
Jiming Wen - Harbin Engineering University
Sichao Tan - Harbin Engineering University
Ruifeng Tian - Harbin Engineering University

Study on Flow Fluctuation Attenuation in the L-Shaped Pipe With Spring Vibrator
Technical Paper Publication: ICONE31-135505
Sipeng Wang - Nanjing University of Aeronautics and Astronautics
Jin Chen - Nanjing University of Aeronautics and Astronautics
Zehang Kang - Nanjing University of Aeronautics and Astronautics
Zhongcheng Yue - Nanjing University of Aeronautics and Astronautics
Kun Zhuang - Nanjing University of Aeronautics and Astronautics

Coherent Structure Numerical Simulation and Heat Transfer Study of Reactor Coolant
Technical Paper Publication: ICONE31-135545
Lixuan Zhang - Harbin Engineering University
Guangliang Chen - Harbin Engineering University
Zhaofei Zhang - Harbin Engineering University
Hao Qian - Harbin Engineering University
Yuhang Zhang - Harbin Engineering University
Rui Li - Harbin Engineering University

New Turbulent Prandtl Number Model for Liquid Metal Based on DNS Results
Technical Paper Publication: ICONE31-135583
Hao Fu - North China Electric Power University
Houjian Zhao - North China Electric Power University
Xiaowei Li - Tsinghua University
Xinxin Wu - Tsinghua University
Xuefeng Lyu - North China Electric Power University
Fang Liu - North China Electric Power University
Yu Yu - North China Electric Power University
Wei Xu - North China Electric Power University

Analysis of Hydrogen Transport Operation Under Multiple Drive Sources in Containment
Technical Paper Publication: ICONE31-135609
Xinyan Liu - Harbin Engineering University
Li Gao - China Nuclear Power Engineering Co. Ltd.
Zongwen Hu - China Nuclear Power Engineering Co. Ltd.
Zhongning Sun - Harbin Engineering University
Haozhi Bian - Harbin Engineering University
Zixiang Ye - Harbin Engineering University

05-04: Nuclear Engineering and Safety Analysis

8/8/2024 3:00PM–4:30PM - Karlin 4

Chair: Fredrick McCrory - Sandia National Laboratories

Co-Chair: Brian Fant - Bechtel

Co-Chair: Alessandro Petruzzi - Nuclear and Industrial Engineering

Co-Chair: Dmitry Grishchenko - KTH Royal Institute of Technology

Co-Chair: Scott Sanborn - Sandia National Laboratories

Co-Chair: Takeshi Yamada - Hitachi-Ge Nuclear Energy, Ltd.

Co-Chair: Tomohiko Ikegawa - Hitachi

Co-Chair: Hideki Horie - Toshiba Corp

Co-Chair: Patrick Frias - U.S. Department of Energy

Co-Chair: Hongxing Yu - Nuclear Power Institute of China

Co-Chair: Si-chao Tan - Harbin Engineering University

Co-Chair: Ronghua Chen - Xi'An Jiao Tong University

Co-Chair: Songtao Ji -

Seismic Fluid-Structure-Interaction Analysis of NHR200-II Fuel Assembly

Technical Paper Publication: ICONE31-132757

Musen Lin - Tsinghua University

Xingtuan Yang - Tsinghua University

Dingqu Wang - Tsinghua University

Junzheng Zheng - Institute Tsinghua University

Yuchen Hao - Shanghai Electro-mechanical Engineering Institute

Songyang Li - Tsinghua University

Wentao Hao - Tsinghua University

Wei Xiong - Tsinghua University

Yueyuan Jiang - Tsinghua University

Construction and Exploration of a Diagnostic Platform for High-Temperature Gas-Cooled Reactor Units

Technical Paper Publication: ICONE31-133789

Cui Mao - Tsinghua University

Haisheng Liu - Tsinghua University

Di Geng - Tsinghua University

Yuhua Liu - Tsinghua University

Zaizhe Yin - Tsinghua University

Effect of Structure-Soil-Structure Interaction on the Seismic Response of the Nuclear Building of Small Modular Reactor

Technical Paper Publication: ICONE31-136085

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

Xiaoying Sun - China Nuclear Power Engineering Co., Ltd.

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

Radioactive Source Term of Lead-Bismuth SMR and the Environmental Impact

Technical Presentation Only: ICONE31-136160

Muyi Ni - Sun Yat-sen University

Wei Wang - Sun Yat-sen University

Man Jiang - Huazhong University of Science and Technology

Yuqing Wang - Sun Yat-sen University

Yingwu Jiang - Sun Yat-sen University

Experimental Investigation on the Heat Transfer Capacity of a Prototypically Long Straight Thermosiphon Bundle for Nuclear Spent Fuel Pool Passive Cooling

Technical Paper Publication: ICONE31-136234

Sergio Iván Cáceres Castro - University of Stuttgart

Rudi Kulenovic - University of Stuttgart

Jörg Starflinger - University of Stuttgart

Analysis of the Dynamic Behaviour of a Nuclear Containment Structure Under Missile Impact

Technical Paper Publication: ICONE31-136867

Rosa Lo Frano - University of Pisa

Salvatore Angelo Cancemi - University of Pisa

Michela Angelucci - University of Pisa

Giovanni Pugliese - University of Pisa

05-05: Radiation Science and Nuclear Materials

8/8/2024 3:00PM–4:30PM - Palmovka 3

Chair: Fredrick McCrory - Sandia National Laboratories

Co-Chair: Brian Fant - Bechtel

Co-Chair: Alessandro Petruzzi - Nuclear and Industrial Engineering

Co-Chair: Dmitry Grishchenko - KTH Royal Institute of Technology

Co-Chair: Scott Sanborn - Sandia National Laboratories

Co-Chair: Takeshi Yamada - Hitachi-Ge Nuclear Energy, Ltd.

Co-Chair: Tomohiko Ikegawa - Hitachi

Co-Chair: Hideki Horie - Toshiba Corp.

Co-Chair: Patrick Frias - U.S. Department of Energy

Co-Chair: Hongxing Yu - Nuclear Power Institute of China

Co-Chair: Si-chao Tan - Harbin Engineering University

Co-Chair: Ronghua Chen - Xi'An Jiao Tong University

Co-Chair: Songtao Ji -

Climate Change: Overview of the Process and Methodologies Used by EDF for Taking Into Account the Effects of Climate Change in the Design of Nuclear Power Plants

Technical Paper Publication: ICONE31-131809

Herve Cordier - EDF

Amelie Joly - EDF

AWCC Simulations Based on Monte Carlo Code RMC

Technical Paper Publication: ICONE31-132066

Yuanhao Gou - Tsinghua University

Zhaoyuan Liu - Tsinghua University

Conglong Jia - Tsinghua University

Dacai Zhang - Tsinghua University

Hao Luo - Tsinghua University

Kan Wang - Tsinghua University

Conduct a Tritium Radiation Safety Assessment on the Heating System Directly Supplied by the Steam From the Secondary Loop of the High-Temperature Gas-Cooled Reactor

Technical Paper Publication: ICONE31-132181

Wenyi Wang - Tsinghua University

Chuan Li - Tsinghua University

Jianzhu Cao - Tsinghua University

Feng Xie - Tsinghua University

Hong Li - Tsinghua University

Model Development and Behavioral Characteristics of Radionuclides in Oceanic Biota

Technical Paper Publication: ICONE31-132278

Priscilla Obeng Oforiwaa - Tsinghua University

Xiaole Zhang - Tsinghua University

Guofeng Su - Tsinghua University

Monte Carlo Simulation of Response of β-Delayed Neutron Inspection System for Fuel Cladding Damage

Technical Paper Publication: ICONE31-134218

Weihua Zhang - Tsinghua University

Liguo Zhang - Tsinghua University

Jianzhu Cao - Tsinghua University

In Situ Measurement of the Solubility, Diffusivity, Permeability and Chemical Form of Hydrogen Isotope in Liquid Lead-Bismuth

Technical Presentation Only: ICONE31-134387

Yingwu Jiang - Sun Yat-sen University

Jiewei Wu - Sun Yat-sen University

Fuhao Ji - Sun Yat-sen University

Junkang Yang - Sun Yat-sen University

Muyi Ni - Sun Yat-sen University

01-08: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - VIII

8/8/2024 3:00PM–4:30PM - Karlin 2

Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Pascal Duranton - Framatome

Co-Chair: Yanjie Tuo - Shanghai Jiao Tong University

Co-Chair: Ze Zhu - Xi'an Jiaotong University

Intelligent Fault Diagnosis of Rotating Machinery Based on Deep Neural Network

Technical Paper Publication: ICONE31-135724

Xiuchun Zhang - Harbin Engineering University

Hong Xia - Harbin Engineering University

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

Shaomin Zhu - Harbin Engineering University

Yingying Jiang - Harbin Engineering University

Jiyu Zhang - Harbin Engineering University

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

Wenzhe Yin - Harbin Engineering University

Modular Structure Selection and Design of Hualong Reactor Plant

Technical Paper Publication: ICONE31-135725

Man Xu - China Nuclear Power Engineering Co., Ltd.

Minghao Tang - China Nuclear Power Engineering Co., Ltd.

Xiaopan Jia - China Nuclear Power Engineering Co., Ltd.

Data Sharing and Business Collaboration – The Refined Management Process of Bulk Materials for Nuclear Power Projects

Technical Paper Publication: ICONE31-135764

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

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

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

Xia Xinpei - China Nuclear Power Engineering Co., Ltd.

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

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

Zheng Yanling - China Nuclear Power Engineering Co., Ltd.

Enhancing Nuclear Power Plant Operational Forecasting With Transformer Neural Networks: A Time-Series Data Approach

Technical Paper Publication: ICONE31-135879

Yanjie Tuo - Shanghai Jiao Tong University

Xiaojing Liu - Shanghai Jiao Tong University

Research on the Reactor Coolant Pump Fault Diagnosis Based on Typical Fault Mode Test and Deep Learning Algorithm Model

Technical Paper Publication: ICONE31-135905

Cui Huaiming - Nuclear Power Institute of China

Kuang Chengxiao - Nuclear Power Institute of China

A Control-Oriented Hybrid Model for Nuclear Reactors Based on Neural Network

Technical Paper Publication: ICONE31-135988

Ze Zhu - Xi'an Jiaotong University

Wenlong Liang - Xi'an Jiaotong University

Baiqing Ye - Xi'an Jiaotong University

Qingfeng Jiang - Xi'an Jiaotong University

Pengfei Wang - Xi'an Jiaotong University

15-14

8/8/2024 4:45PM–6:15PM - Palmovka 1

Chair: Shripad Revankar - Purdue University
Co-Chair: Vladimir Stevanovic - University of Belgrade
Co-Chair: Wolfgang Hansen - Technical University Dresden
Co-Chair: Gonzalo Jimenez - Universidad Politécnica de Madrid
Co-Chair: Jovica Riznic - Canadian Nuclear Safety Commission
Co-Chair: Rosa Lo Frano - University of Pisa
Co-Chair: Hitesh Bindra - Purdue University
Co-Chair: Suyuan Yu - Tsinghua University
Co-Chair: Satoshi Takeda - Osaka University
Co-Chair: Liangming Pan - Chongqing University
Co-Chair: Hui He - Shanghai Jiao Tong University
Co-Chair: Longxiang Zhu - Chongqing University
Co-Chair: Mingjun Wang - Xi'an Jiaotong University
Co-Chair: Jianjun Wang - Harbin Engineering University
Co-Chair: Ping Ye - Tsinghua University
Co-Chair: Hideharu Takahashi - NA

Evaluation of Thermal Performance for Lead Use Rods in TPBAR
Technical Presentation Only: ICONE31-148681
Mie Azuma - Pacific Northwest National Laboratory
Nate Carstens - Pacific Northwest National Laboratory
Emily Stull - Pacific Northwest National Laboratory
Robert Gates - Pacific Northwest National Laboratory

Review of Transient Analysis and Accident Simulation Codes for Nuclear Reactor
Technical Paper Publication: ICONE31-135003
Xinze Qiu - Tsinghua University
Tao Liu - Tsinghua University
Jiejuan Tong - Tsinghua University
Liguo Zhang - Tsinghua University
Yuzeng Wu - Marine Design & Research Institute of China

Study of Gravity Effect on the Operating Characteristics of High-Temperature Bending Heat Pipes
Technical Paper Publication: ICONE31-130470
Zhipeng Zhang - Xi'an Jiaotong University
Chenglong Wang - Xi'an Jiaotong University
Kailun Guo - Xi'an Jiaotong University
Wenxi Tian - Xi'an Jiaotong University
Guanghui Su - Xi'an Jiaotong University
Suizheng Qiu - Xi'an Jiaotong University

02-12: Structural Evaluation, Performance Assessment, Multiphysics Coupling - II

8/8/2024 4:45PM–6:15PM - Karlin 1

Chair: Hakan Ozaltun - U.S. Nuclear Regulatory Commission
Co-Chair: Ruihan Li - Tsinghua University
Co-Chair: zhang yuanji - Lanzhou University

High-Fidelity Depletion-Pebble-Flow Coupling Simulation of Pebble Bed Reactor HTR-PM
Technical Paper Publication: ICONE31-134641
Ruihan Li - Tsinghua University
Jingang Liang - Tsinghua University

Ding She - Tsinghua University
Weijian Zhang - Tsinghua University

Development Progress of Neutronics and Thermal Hydraulic Calculation Program NECP-Panda for Pebble-Bed High Temperature Gas-Cooled Reactor
Technical Paper Publication: ICONE31-134649
Yuxuan Wu - Xi'an Jiaotong University
Yongping Wang - Xi'an Jiaotong University
Shuai Qin - Xi'an Jiaotong University
Liangzhi Cao - Xi'an Jiaotong University
Hongchun Wu - Xi'an Jiaotong University
Yong Luo - Huaneng Nuclear Energy Technology Research Institute

TRISO Particle Behavior Analyses of an HTR-10 Type Reactor Employing the OTTO Operation Scheme
Technical Paper Publication: ICONE31-136107
Junxiao Zhang - Harbin Engineering University
Songyang Liu - Huaneng Nuclear Energy Technology Research Institute
Junhao Xie - Harbin Engineering University
Tian Zhang - Harbin Engineering University

Hydrodynamics of High-Density Particles in a Multistage Fluidized Bed With Downcomers
Technical Paper Publication: ICONE31-133171
Yiming Zhang - China University of Petroleum-Beijing
Ying Yang - China University of Petroleum-Beijing
Huan Wang - CNNC No. 7 Research and Design Institute Co.
Shuyue Li - China University of Petroleum-Beijing
Yongmin Zhang - China University of Petroleum-Beijing
Xiuhua Wu - CNNC No. 7 Research and Design Institute Co.

Study on the Influence of Tube Wall Effect on Detection Efficiency of BF3 Counter Tube
Technical Paper Publication: ICONE31-134388
Yuanji Zhang - Lanzhou University
Zhumin Jiang - Nuclear Power Institute of China
Zhiqi Guo - Lanzhou University
Dianwei Zhou - Lanzhou University
Yunchuang Wang - Nuclear Power Institute of China
Yunli Xie - Nuclear Power Institute of China

02-15: Generic Topics and Reviews

8/8/2024 4:45PM–6:15PM - Karlin 3

Chair: Hakan Ozaltun - U.S. Nuclear Regulatory Commission
Co-Chair: Ding Chen - China Institute of Nuclear Industry Strategy
Co-Chair: Lei Shi - China Institute of Nuclear Industry Strategy

Further Study of China's Strategy for Closed Nuclear Fuel Cycle Development Against the Carbon Neutrality Target
Technical Paper Publication: ICONE31-133248
Ding Chen - China Institute of Nuclear Industry Strategy
Lei Shi - China Institute of Nuclear Industry Strategy
Jiqiang Su - China Institute of Nuclear Industry Strategy
Yan An - China Institute of Nuclear Industry Strategy
Yihan Wang - China Institute of Nuclear Industry Strategy

Policy Study of Spent Fuel in Different Countries
Technical Paper Publication: ICONE31-135560
Lei Shi - China Institute of Nuclear Industry Strategy
Jiqiang Su - China Institute of Nuclear Industry Strategy
Ding Chen - China Institute of Nuclear Industry Strategy
Yan An - China Institute of Nuclear Industry Strategy

Research on Refueling Efficiency of Fuel Handling and Storage System in Hualong Two
Technical Presentation Only: ICONE31-136008
Hu Yue Fei - China Nuclear Power Engineering
Shi Haili - China Nulear Power Engineering
Li Xiuyuan - China Nuclear Power Engineering
Zhou Chao - China Nuclear Power Engineering

Study on the Development Path of Interim Storage for Spent Fuel in China
Technical Paper Publication: ICONE31-136022
Lei Shi - China Institute of Nuclear Industry Strategy
Haoran Lu - China Institute of Nuclear Industry Strategy
Yihan Wang - China Institute of Nuclear Industry Strategy
Jian Hu - China Institute of Nuclear Industry Strategy

Study on the Characteristics of Nuclear Fuel Industry
Technical Paper Publication: ICONE31-136048
Lei Shi - China Institute of Nuclear Industry Strategy
Yihan Wang - China Institute of Nuclear Industry Strategy
Hongjun Liu - China Institute of Nuclear Industry Strategy
Honglin Zhang - China Institute of Nuclear Industry Strategy

11-03 Core Melt Issues

8/8/2024 4:45 PM to 6:15 PM - Palmovka 2

Chair: Luteng Zhang - Chongqing University

Co-Chair: Ivo Kljenak - Jozef Stefan Institute

Co-Chair: Guoqiang Wang - Westinghouse Electric Co.

Experimental Investigation on the Survival of Cooling Tube in the Molten Pool

Technical Paper Publication: ICONE31-134398

Jie Pei - 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 Powerr Engineering Co., Ltd.

Research on Heat Transfer Calculation of Ellipsoidal Melt Pool

Technical Paper Publication: ICONE31-134536

Peng Liu - Southeast university

Tao Zhou - Southeast University

Haolei Zhang - Southeast University

Xiaofang Liu - Southeast University

Experimental Study of the Heat Transfer Performance and the Shell Layers of the Two-Layer Stratified Melting Corium

Technical Paper Publication: ICONE31-135101

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

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

Jie Pei - China Nuclear Power Engineering Co., Ltd.

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

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

Experimental Studies on Two-Layer Stratified Molten Pool Heat Transfer With Water and N-Octanol

Technical Paper Publication: ICONE31-136323

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

Jie Pei - China Nuclear Power Engineering Co., Ltd.

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

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

Experimental Study on the Coolability of Molten Core Materials Discharged Into a Depth- and Volume-Limited Sodium Plenum

Technical Paper Publication: ICONE31-135809

Kenichi Matsuba - Japan Atomic Energy Agency

Shinya Kato - Japan Atomic Energy Agency

Kenji Kamiyama - Japan Atomic Energy Agency

Assan Akaev - National Nuclear Center of the Republic of Kazakhstan

Alexandr Vurim - National Nuclear Center of the Republic of Kazakhstan

Viktor Baklanov - National Nuclear Center of the Republic of Kazakhstan

04-09: SMRs, Advanced Reactors and Fusion

8/8/2024 4:45PM–6:15PM - Florenc 2

Chair: Rosa Lo Frano - University of Pisa

Co-Chair: Hitesh Bindra - Purdue University

Preliminary Investigation of THFR Passive Residual Heat Removal System

Technical Paper Publication: ICONE31-133151

Yuan Huang - Tsinghua University

Wei Xu - North China Electric Power University

Heng Xie - Tsinghua University

Lei Shi - Tsinghua University

The Steady States and DLOFC Accident Analysis of HTR-PM in the OTTO Operation Scheme

Technical Paper Publication: ICONE31-133310

Songyang Liu - Huaneng Nuclear Energy Technology Research Institute

Xuelin Li - Huaneng Nuclear Energy Technology Research Institute

Yong Luo - Huaneng Nuclear Energy Technology Research Institute

Wei Liu - Huaneng Nuclear Energy Technology Research Institute

Qin Zhou - Huaneng Nuclear Energy Technology Research Institute

Cheng Gu - Huaneng Nuclear Energy Technology Research Institute

Tian Zhang - Harbin Engineering University

Study on Analytical Model of Permanent Magnet Eddy Current Retarder for High Temperature Gas-Cooled Reactor

Technical Paper Publication: ICONE31-134170

Hongyu Wu - Tsinghua University

He Yan - Tsinghua University

Yujie Dong - Tsinghua University

Xingzhong Diao - Tsinghua University

Research on a Very-High-Temperature Gas-Cooled Reactor-Driven Hydrogen-Electricity Cogeneration System

Technical Paper Publication: ICONE31-134847

Hang Ni - Tsinghua University

Xinhe Qu - Tsinghua University

Gang Zhao - Tsinghua University

Jie Wang - Tsinghua University

Wei Peng - Tsinghua University

Design of a He-Xe Gas-Cooled Nuclear Microreactor System Based on Detailed Models of the Cycle Components

Technical Paper Publication: ICONE31-134951

Chaoran Guan - Shanghai Jiao Tong University

Xiang Chai - Shanghai Jiao Tong University

Tengfei Zhang - Shanghai Jiao Tong University

Xiaojing Liu - Shanghai Jiao Tong University

Effect of Air Impurities on the Characteristics of Helium Discharge at High Temperature and High Pressure

Technical Paper Publication: ICONE31-135193

Chuping Yang - Tsinghua University

Yinan Geng - Tsinghua University

Jie Wang - Tsinghua University

08-04: Computational Fluid Dynamics (CFD) and Applications - IV

8/8/2024 4:45PM–6:15PM - Karlin 4

Chair: Yassin Hassan - Texas A&M

Co-Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Jinbiao Xiong - Shanghai Jiao Tong University

Co-Chair: Zihao Zhang - North China Electric Power University

Co-Chair: Anxiang Ma - Tsinghua University

Numerical Simulation of Condensation-Induced Water Hammer With Dynamic Valve Control Using an Advanced Phase Change Model

Technical Paper Publication: ICONE31-134958

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

Zihao Zhang - North China Electric Power University

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

Ruiyang Tu - North China Electric Power University

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

Feng Xiong - North China Electric Power University

Zhengyu Chen - North China Electric Power University

Wentao Guo - North China Electric Power University

Shengfei Wang - North China Electric Power University

Cfd Simulation of Water Hammer Induced by Condensation Using an Improved Phase Change Model

Technical Paper Publication: ICONE31-134963

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

Ruiyang Tu - North China Electric Power University

Daping Lin - China Nuclear Power Engineering Co., Ltd.

Feng Xiong - North China Electric Power University

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

Xiaoxin Long - North China Electric Power University

Zhengyu Chen - North China Electric Power University

Zihao Zhang - North China Electric Power University

Wentao Guo - North China Electric Power University

Shengfei Wang - North China Electric Power University

Numerical Simulation of Turbulent Cross Flow Over Helical Tube Bundles With Supporting Structure

Technical Paper Publication: ICONE31-134964

Anxiang Ma - Tsinghua University

Xiaoyang Xie - Tsinghua University

Houjian Zhao - North China Electric Power University

Xiaowei Li - Tsinghua University

Xinxin Wu - Tsinghua University

Fluid-Structure Coupling Analysis of U-Type Tube Bundle in PWR Steam Generator

Technical Paper Publication: ICONE31-134975

Yingying Jiang - Harbin Engineering University

Hong Xia - Harbin Engineering University

Lanxin Sun - Harbin Engineering University

Shuang Li - Harbin Turbine Company Limited

Jinming Zhang - Harbin Engineering University

Direct Numerical Simulation Study on Turbulent Flow and Heat Transfer Behavior of Helium-Xenon Gas Mixture in a Round Pipe

Technical Paper Publication: ICONE31-134985

Ruini Zhang - Nuclear Power Institute of China

Jian Deng - Nuclear Power Institute of China

Zonglan Wei - Nuclear Power Institute of China

Qi Lu - Nuclear Power Institute of China

Wenbin Han - Tsinghua University

08-08: Computational Fluid Dynamics (CFD) and Applications - VIII

8/8/2024 4:45PM–6:15PM - Liben 3

Chair: Yassin Hassan - Texas A&M

Co-Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Wenxi Tian - Xi'an Jiaotong University

Co-Chair: Cheng Peng - Shanghai University of Electric Power

Co-Chair: Liu Jing - Shanghai Jiao Tong University

Understanding the Flow Anisotropic Turbulent Flow in the Subchannel of Fuel Assembly Under Effect of the Bare Rod and Mixing Vane Grid by LES

Technical Paper Publication: ICONE31-135617

Siwei Qi - Southeast University

Bin Han - Southeast University

Tianyang Xing - Southeast University

Xiaoliang Zhu - Southeast University

Bao-Wen Yang - DEQD Institute for Advanced Research in Multiphase Flow and Energy Transfer

Yuanyuan Yin - Southeast University

Aiguo Liu - DEQD Institute for Advanced Research in Multiphase Flow and Energy Transfer

Shenghui Liu - Southeast University

Numerical Simulation of Richtmyer-Meshkov Instability at Vapor-Liquid Interface Under Single and Double Bubbles' Conditions

Technical Paper Publication: ICONE31-135626

Helin Chen - Shanghai University of Electric Power

Cheng Peng - Shanghai University of Electric Power

Dong Li - Shanghai University of Electric Power

Jian Deng - Nuclear Power Institute of China

Impact of Tube Fouling on Steam Generator Performance Using a Thermal-Hydraulic Code

Technical Paper Publication: ICONE31-135643

Liu Jing - Shanghai Jiao Tong University

Li Zhen - Fujian Fuqing Nuclear Power Co., Ltd.

Xiong Zhenqin - Shanghai Jiao Tong University

Gao Yuan - Fujian Fuqing Nuclear Power Co., Ltd.

Lin Yuchen - Fujian Fuqing Nuclear Power Co., Ltd.

Shi Linpeng - Shanghai Jiao Tong University

Numerical Investigation on Interphase Interaction and Interplume Effects of Multi-Hole Steam Injection Condensation Based on ADS 1-3

Technical Paper Publication: ICONE31-135676

Jibin Xu - North China Electric Power University

Hao Zheng - China Nuclear Power Engineering Co., Ltd.

Xihao Shen - North China Electric Power University

Yuhao Zhang - North China Electric Power University

Daogang Lu - North China Electric Power University

Investigation of the Heat Transfer Properties of Natural Circulation Flow in the Irradiation Channel of the HFETR

Technical Paper Publication: ICONE31-135738

Shuai Jin - Nuclear Power Institute of China

Sheng Sun - Nuclear Power Institute of China

Wenhua Yang - Nuclear Power Institute of China

Junping Si - Nuclear Power Institute of China

Yixing Xu - Nuclear Power Institute of China

Jin Lei - Nuclear Power Institute of China

The Influences of Key Factors on the Gas Diffusion in the Material Irradiation Tests Based on the Regulation of Gas Composition

Technical Paper Publication: ICONE31-135739

Yixiong Sun - Nuclear Power Institute of China

Wenhua Yang - Nuclear Power Institute of China

Sheng Sun - Nuclear Power Institute of China

Liang Zhang - Nuclear Power Institute of China

Wenbin Zhao - Nuclear Power Institute of China

Shuai Jin - Nuclear Power Institute of China

Jin Lei - Nuclear Power Institute of China

Jinkang Cheng - Nuclear Power Institute of China

01-09: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - IX

8/8/2024 4:45 PM to 6:15 PM - Karlin 2

Chair: Guoqiang Wang - Westinghouse Electric Co.

Co-Chair: Pascal Duranton - Framatome

Co-Chair: Antony Hurst - Engineering Analysis Services Limited

Co-Chair: Martin Kykal - ES Group Europe s.r.o.

Research on Energy-Saving Operation Optimization of Circulating Water System Under CHP of Nuclear Energy Comprehensive Utilization

Technical Paper Publication: ICONE31-136033

Fang Wu - SPIC Nuclear Energy Co. Ltd.

Te Tang - Shanghai Nuclear Engineering Research & Design Institute Co. Ltd.

Weili Liu - SPIC Nuclear Energy Co. Ltd.

Yingnan Li - SPIC Nuclear Energy Co. Ltd.

Xinzhuang Wu - Shanghai Nuclear Engineering Research & Design Institute Co. Ltd.

Experiment and Simulation Analysis for Performance of Squat Shear Wall in Nuclear Island

Technical Paper Publication: ICONE31-136045

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

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

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

Development of Requirements for Demonstrating Structural Integrity of the Highest Reliability Components

Technical Paper Publication: ICONE31-136097

Antony Hurst - EASL, A Division of Kinectrics

Louis Chang - EASL, A Division of Kinectrics

Mike Nielsen - EASL, A Division of Kinectrics

Sam Holcroft - EASL, A Division of Kinectrics

NPP Modification Opportunity by Hydrogen Technologies Implementation: Assessment in Frame of the Euratom Project NPHyCo

Technical Paper Publication: ICONE31-136129

Martin Kykal - ES Group Europe s.r.o.

Oleksandr Mazurok - ES Group LLC

Martin Glueckler - Framatome GmbH

Cecilia Herrero Moriana - Tecnatom

Canet Serin - Framatome GmbH

Vasyl Korolchuk - ES Group LLC

A Study of Vortex Shadding Acts on Steel Vent Stack Based on Eu Standards

Technical Paper Publication: ICONE31-136166

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

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

Tang Minghao - China Nuclear Power Engineering Co., Ltd.

Progress in Isolation Analysis and Experimental Research of HPR1000 Nuclear Island Plant

Technical Paper Publication: ICONE31-136330

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

Jian Chen - China Nuclear Power Engineering Co., Ltd.; Tsinghua University

Xiaoying Sun - China Nuclear Power Engineering Co., Ltd.

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

Hehuan Ren - China Nuclear Power Engineering Co., Ltd.

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Dates & Times:

Monday, August 5	10:00AM–8:00PM
Tuesday, August 6	10:00AM–4:00PM
Wednesday, August 7	10:00AM–4:00PM
Thursday, August 8	9:30AM–3:00PM

Location: Congress Hall Foyer, Lower Level

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8 — Computational Fluid Dynamics (CFD) and Applications	Yassin Hassan	Prashant Jain Elia Merzari Sofiane Benhamadouche Yacine Addad Milorad Dzodzo Mie Azuma Yan Bartosiewitcz Vasilii Volkov Afaque Shams Anas Alwafi	Kei Ito Hiroyuki Yoshida Yasuo Hattori	Wenxi TIAN Jinbiao XIONG Ruifeng TIAN Jian WU Wenxing LIU
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14 — Nuclear Education and Public Acceptance	Leon Cizelj	Yassin Hassan Asif Arastu Rosa lo Frano	Hiroshige Kikura Hideharu Takahashi	Yongmei WANG Kan WANG Puzhen GAO Wei WANG
15 — Student Paper Competition	Shripad Revankar	Vladimir Stevanovic Wolfgang Hansen Gonzalo Jimenez Jovica Riznic Rosa lo Frano Hitesh Bindra	Satoshi Takeda Hideharu Takahashi	Suyuan YU Liangming PAN Hui HE Longxiang ZHU Mingjun WANG Jianjun WANG Ping YE

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Xinnuo	E.	07-16: Heat Transfer - I	134530	8/7/2024	4:45PM–6:15PM	4	74

Noura	Elsalamouny	15-12	136274	8/7/2024	8:30AM–10:00AM	5	60
Jan	Emblemsvåg	04-08: SMRs, Advanced Reactors, and Fusion	135177	8/8/2024	3:00PM–4:30PM	3	101
Shuowang	Fan	07-08: Numerical Analyses	134796	8/8/2024	8:30AM–10:00AM	1	82
Ruan	Fang	05-02: Nuclear Safety and Emergency Preparedness	134549	8/5/2024	3:00PM–4:30PM	3	33
Churan	Feng	12-03 Risk Assessments and Management - Session 3	135096	8/7/2024	8:30AM–10:00AM	0	63
Wenpei	Feng	07-13: SMR and Advanced Reactors - II	134758	8/7/2024	4:45PM–6:15PM	0	73
Zhenyu	Feng	15-10	135457	8/6/2024	1:00PM–2:30PM	1	43
Zhiyuan	Feng	02-08: Methods Development, Computational Approaches - II	134943	8/7/2024	4:45PM–6:15PM	5	77
Yuliia	Filonova	04-14: SMRs, Advanced Reactors, and Fusion	136180	8/8/2024	10:30AM–12:00PM	1	93
Yuliia	Filonova	04-14: SMRs, Advanced Reactors, and Fusion	136271	8/8/2024	10:30AM–12:00PM	2	93
Yuliia	Filonova	04-14: SMRs, Advanced Reactors, and Fusion	136275	8/8/2024	10:30AM–12:00PM	3	93
Scott	Franz	07-15: Single and Multi-Phase Flow - II	136239	8/7/2024	3:00PM–4:30PM	3	67
Jintao	Fu	10-01: Advanced Manufacturing 1	133650	8/5/2024	1:00PM–2:30PM	3	17
Koji	Fujikura	15-06	134875	8/7/2024	8:30AM–10:00AM	5	58
Kota	Fujiwara	12-02 Risk Assessments and Management - Session 2	135030	8/6/2024	5:00PM–6:30PM	3	56
Hajime	Furuichi	04-02: SMRs, Advanced Reactors, and Fusion	134289	8/5/2024	3:00PM–4:30PM	1	39
Deyang	Gao	07-10: Simulations and Predictions - II	134821	8/8/2024	3:00PM–4:30PM	3	98
Jiarong	Gao	05-03: Digitalization and Fault Detection	135091	8/5/2024	4:45PM–6:15PM	4	40
Jiaxuan	Gao	11-01 Severe Accident Mitigation Strategies	135370	8/6/2024	1:00PM–2:30PM	2	46
Wenxiu	Gao	04-14: SMRs, Advanced Reactors, and Fusion	135353	8/8/2024	10:30AM–12:00PM	4	93
Zhibo	Gao	15-08	135196	8/6/2024	5:00PM–6:30PM	2	50
Xuyao	Geng	04-04: SMRs, Advanced Reactors, and Fusion	133388	8/7/2024	3:00PM–4:30PM	5	69
Xuyao	Geng	07-22: Thermal-Hydraulics Research and Applications - III	135619	8/5/2024	1:00PM–2:30PM	1	19
Yiwa	Geng	07-04: Experiments and Analyses - III	135143	8/6/2024	5:00PM–6:30PM	1	52
Yiwa	Geng	07-15: Single and Multi-Phase Flow - II	135702	8/7/2024	3:00PM–4:30PM	2	67
Menghang	Gong	08-03: Computational Fluid Dynamics (CFD) and Applications - III	134632	8/5/2024	4:45PM–6:15PM	0	38
Yuanhao	Gou	05-05: Radiation Science and Nuclear Materials	132066	8/8/2024	3:00PM–4:30PM	1	104
Chaoran	Guan	04-09: SMRs, Advanced Reactors, and Fusion	134951	8/8/2024	4:45PM–6:15PM	4	109
Minyang	Gui	07-13: SMR and Advanced Reactors - II	136580	8/7/2024	4:45PM–6:15PM	5	74
Chao	Guo	03-03: Reliability and Safety Systems	135387	8/7/2024	8:30AM–10:00AM	1	62
Haoxuan	Guo	13-02: Computer Code V&V - II	134868	8/6/2024	5:00PM–6:30PM	2	57
Jian	Guo	13-01: Computer Code V&V - I	134175	8/6/2024	1:00PM–2:30PM	1	49
Jingni	Guo	02-14: Structural Evaluation, Performance Assessment, Multiphysics Coupling - IV	134482	8/8/2024	3:00PM–4:30PM	2	
Kailun	Guo	04-07: SMRs, Advanced Reactors, and Fusion	137029	8/8/2024	10:30AM–12:00PM	5	90
Lin	Guo	02-13: Structural Evaluation, Performance Assessment, Multiphysics Coupling - III	136183	8/8/2024	10:30AM–12:00PM	3	92
Pengya	Guo	07-06: Experiments and Analyses - V	135932	8/6/2024	5:00PM–6:30PM	1	52
Shujie	Guo	12-03 Risk Assessments and Management - Session 3	135680	8/7/2024	8:30AM–10:00AM	5	64
Yinan	Guo	04-05: SMRs, Advanced Reactors, and Fusion	135657	8/7/2024	4:45PM–6:15PM	3	78
Izabela	Gutowska	04-01: SMRs, Advanced Reactors, and Fusion	135989	8/5/2024	1:00PM–2:30PM	5	23
Ossama	Halim	08-09: Computational Fluid Dynamics (CFD) and Applications - IX	136113	8/8/2024	8:30AM–10:00AM	5	87
Jasmine	Hamelberg	15-03	133273	8/5/2024	4:45PM–6:15PM	0	33
Bin	Han	08-08: Computational Fluid Dynamics (CFD) and Applications - VIII	135617	8/8/2024	4:45PM–6:15PM	0	110
Bin	Han	04-10: SMRs, Advanced Reactors and Fusion	135935	8/7/2024	3:00PM–4:30PM	0	69
Huchen	Han	07-07: Experiments and Analyses - VI	135743	8/7/2024	8:30AM–10:00AM	2	61
Wenbin	Han	04-06: SMRs, Advanced Reactors, and Fusion	135237	8/8/2024	8:30AM–10:00AM	1	81
Yansong	Han	04-12: SMRs, Advanced Reactors, and Fusion	135644	8/8/2024	8:30AM–10:00AM	0	84
Dong	Hao	04-08: SMRs, Advanced Reactors, and Fusion	136054	8/8/2024	3:00PM–4:30PM	4	101
Shuai	Hao	07-12: SMR and Advanced Reactors - I	134626	8/7/2024	3:00PM–4:30PM	5	65
Yuchen	Hao	09-02: Waste Packages and Monitoring	132843	8/5/2024	3:00PM–4:30PM	0	28
Shuijun	He	09-07: Radiation and Physical Transport Studies	135811	8/6/2024	1:00PM–2:30PM	2	45
Shuijun	He	09-07: Radiation and Physical Transport Studies	135873	8/6/2024	1:00PM–2:30PM	3	45
Sixuan	He	06-02 Nuclear Codes, Standards, Licensing, & Regulatory Issues Session 2	135159	8/5/2024	3:00PM–4:30PM	3	27
Wen	He	07-20: Thermal-Hydraulics Research and Applications - I	131958	8/8/2024	10:30AM–12:00PM	1	91
Xiaoqiang	He	07-05: Experiments and Analyses - IV	135529	8/7/2024	8:30AM–10:00AM	3	61
Kiminobu	Hojo	06-03 Nuclear Codes, Standards, Licensing, & Regulatory Issues Session 3	136517	8/5/2024	4:45PM–6:15PM	3	34
Zhang	Hongjian	02-10: Physics and Transport Theory - II	132764	8/8/2024	10:30AM–12:00PM	5	92
Shigeo	Hosokawa	07-07: Experiments and Analyses - VI	136714	8/7/2024	8:30AM–10:00AM	3	61
Guang	Hu	09-06: Waste Management and Environmental Studies	135796	8/5/2024	4:45PM–6:15PM	3	36
Hao	Hu	09-02: Waste Packages and Monitoring	135542	8/5/2024	3:00PM–4:30PM	4	28
Jifeng	Hu	09-05: Radiation Protection and Dose Assessment	134809	8/5/2024	3:00PM–4:30PM	2	29
Jipu	Hu	04-04: SMRs, Advanced Reactors, and Fusion	124442	8/7/2024	3:00PM–4:30PM	4	69
Po	Hu	04-07: SMRs, Advanced Reactors and Fusion	136201	8/8/2024	10:30AM–12:00PM	3	89
Yingzhe	Hu	02-08: Methods Development, Computational Approaches - II	134556	8/7/2024	4:45PM–6:15PM	3	76
Canxing	Huang	03-04: Advanced Control Strategies	136013	8/7/2024	3:00PM–4:30PM	3	68
Haochen	Huang	13-02: Computer Code V&V - II	135154	8/6/2024	5:00PM–6:30PM	4	57
Jinfeng	Huang	02-14: Structural Evaluation, Performance Assessment, Multiphysics Coupling - IV	135355	8/8/2024	3:00PM–4:30PM	1	100
Ruolin	Huang	07-21: Thermal-Hydraulics Research and Applications - II	134892	8/8/2024	3:00PM–4:30PM	2	28
Tianyi	Huang	08-07: Computational Fluid Dynamics (CFD) and Applications - VII	135458	8/8/2024	3:00PM–4:30PM	0	102
Yuan	Huang	04-05: SMRs, Advanced Reactors, and Fusion	133151	8/7/2024	4:45PM–6:15PM	0	108
Yufan	Huang	07-09: Simulations and Predictions - I	134301	8/8/2024	10:30AM–12:00PM	1	90
Yufei	Huang	09-05: Radiation Protection and Dose Assessment	134891	8/5/2024	3:00PM–4:30PM	0	29
Yuhang	Huang	13-02: Computer Code V&V - II	134823	8/6/2024	5:00PM–6:30PM	1	57
Yuji	Huang	02-02: Nuclear Fuels and Materials – II	134560	8/5/2024	3:00PM–4:30PM	2	29
Antony	Hurst	01-09: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - IX	136097	8/8/2024	4:45PM–6:15PM	2	111
Yasuhiro	Ishijima	02-02: Nuclear Fuels and Materials – II	132312	8/5/2024	3:00PM–4:30PM	0	29
Yoshihiro	Ishikawa	07-21: Thermal-Hydraulics Research and Applications - II	134643	8/8/2024	3:00PM–4:30PM	0	99
Yoshihiro	Ishikawa	07-06: Experiments and Analyses - V	136295	8/6/2024	5:00PM–6:30PM	4	53
Yuta	Isobe	09-07: Radiation and Physical Transport Studies	135877	8/6/2024	1:00PM–2:30PM	4	45
Young Sun	Jang	01-06: Nuclear Plant Operation, Modification, Life Extension, Maintenance and Life Cycle - VI	135202	8/8/2024	8:30AM–10:00AM	2	89
Stepan	Jedlan	15-02	133131	8/5/2024	3:00PM–4:30PM	1	25
Chengzuo	Ji	15-10	135489	8/6/2024	1:00PM–2:30PM	2	43
Yongan	Ji	11-02 Severe Accident Mitigation Phenomena	134969	8/6/2024	5:00PM–6:30PM	3	54
Ningxi	Jia	07-18: Accident Analyses	130093	8/7/2024	4:45PM–6:15PM	0	75
Zhujun	Jia	01-07: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - VII	135447	8/8/2024	10:30AM–12:00PM	4	97
Hongwei	Jiang	07-21: Thermal-Hydraulics Research and Applications - II	134838	8/8/2024	3:00PM–4:30PM	1	99
Jinghua	Jiang	07-08: Numerical Analyses	136244	8/8/2024	8:30AM–10:00AM	4	82
Man	Jiang	05-06: Optimization and Modeling Methods	136167	8/7/2024	3:00PM–4:30PM	5	71
Shunli	Jiang	07-04: Experiments and Analyses - III	135210	8/6/2024	5:00PM–6:30PM	3	52
Yingwu	Jiang	05-05: Radiation Science and Nuclear Materials	134387	8/8/2024	3:00PM–4:30PM	5	104
Yingying	Jiang	08-04: Computational Fluid Dynamics (CFD) and Applications - IV	134975	8/8/2024	4:45PM–6:15PM	3	110
Zhuojun	Jiang	08-06: Computational Fluid Dynamics (CFD) and Applications - VI	135359	8/8/2024	10:30AM–12:00PM	1	94
Guanghui	Jiao	04-07: SMRs, Advanced Reactors, and Fusion	133432	8/8/2024	10:30AM–12:00PM	0	89
Wang	Jie	01-08: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - VIII	135764	8/8/2024	3:00PM–4:30PM	2	105
Antonio	Jiménez-Carrascosa	04-03: SMRs, Advanced Reactors, and Fusion	133069	8/5/2024	4:45PM–6:15PM	3	38
Shuai	Jin	08-08: Computational Fluid Dynamics (CFD) and Applications - VIII	135738	8/8/2024	4:45PM–6:15PM	4	111
Furu	Jing	01-06: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - VI	135134	8/8/2024	8:30AM–10:00AM	0	88
Liu	Jing	08-08: Computational Fluid Dynamics (CFD) and Applications - VIII	135643	8/8/2024	4:45PM–6:15PM	2	110
Ruihan	Jing	08-05: Computational Fluid Dynamics (CFD) and Applications - V	135038	8/8/2024	8:30AM–10:00AM	0	86
Han Young	Joo	14-01: Nuclear Education and Public Acceptance	147520	8/6/2024	1:00PM–2:30PM	2	41
Pilhyeon	Ju	15-13	135808	8/6/2024	1:00PM–2:30PM	2	44
Wen	Junlong	15-05	134313	8/6/2024	5:00PM–6:30PM	0	49
Tomohiro	Kamiya	07-11: Simulations and Predictions - III	135974	8/8/2024	3:00PM–4:30PM	5	99

Ruiqi	Kang	07-05: Experiments and Analyses - IV	135520	8/7/2024	8:30AM–10:00AM	2	60
Zuoyi	Kang	10-03: Advanced Manufacturing 3	135948	8/5/2024	4:45PM–6:15PM	1	34
Mehmet	Kavalci	15-11	135875	8/6/2024	5:00PM–6:30PM	4	119
Yasuhiro	Kawahara	07-05: Experiments and Analyses - IV	135455	8/7/2024	8:30AM–10:00AM	1	60
Ikhwan	Khaleb	08-02: Computational Fluid Dynamics (CFD) and Applications - II	134475	8/5/2024	3:00PM–4:30PM	1	32
Ilyas	Khurshid	07-22: Thermal-Hydraulics Research and Applications - III	136086	8/5/2024	1:00PM–2:30PM	3	19
Wararu	Kikuchi	08-09: Computational Fluid Dynamics (CFD) and Applications - IX	135902	8/8/2024	8:30AM–10:00AM	3	87
Hyun-Jung	Kim	02-11: Structural Evaluation, Performance Assessment, Multiphysics Coupling - I	132740	8/8/2024	3:00PM–4:30PM	4	100
Yoneda	Kimitoshi	12-01 Risk Assessments and Management - Session 1	131637	8/6/2024	1:00PM–2:30PM	3	48
Norikazu	Kinoshita	09-01: Waste Treatment and Decontamination	131634	8/5/2024	1:00PM–2:30PM	1	20
Keito	Kitagawa	15-07	134933	8/6/2024	1:00PM–2:30PM	1	42
Hideharu	Kobayashi	09-03: Decommissioning	135887	8/5/2024	4:45PM–6:15PM	1	36
Yuya	Kodua	09-03: Decommissioning	135953	8/5/2024	4:45PM–6:15PM	2	36
Takeshi	Koike	04-08: SMRs, Advanced Reactors, and Fusion	135017	8/8/2024	3:00PM–4:30PM	0	101
Deyan	Kong	12-01 Risk Assessments and Management - Session 1	131992	8/6/2024	1:00PM–2:30PM	0	48
Tomas	Korinek	08-10: Computational Fluid Dynamics (CFD) and Applications - X	136127	8/8/2024	10:30AM–12:00PM	0	95
Chengxiao	Kuang	01-08: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - VIII	135905	8/8/2024	3:00PM–4:30PM	4	105
Tomasz	Kwiatkowski	08-11: Computational Fluid Dynamics (CFD) and Applications - XI	136058	8/8/2024	10:30AM–12:00PM	4	96
Martin	Kykal	01-09: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - IX	136129	8/8/2024	4:45PM–6:15PM	3	111
Ondřej	Lachout	15-12	136104	8/7/2024	8:30AM–10:00AM	0	59
Guihua	Lai	04-11: SMRs, Advanced Reactors, and Fusion	135206	8/7/2024	4:45PM–6:15PM	2	78
Haehyun	Lee	06-03 Nuclear Codes, Standards, Licensing, & Regulatory Issues Session 3	136158	8/5/2024	4:45PM–6:15PM	2	34
Haein	Lee	08-11: Computational Fluid Dynamics (CFD) and Applications - XI	135693	8/8/2024	10:30AM–12:00PM	3	96
Jinlin	Lee	03-05: Innovations in Nuclear Engineering	134913	8/7/2024	4:45PM–6:15PM	1	77
Yi-Kang	Lee	13-02: Computer Code V&V - II	135213	8/6/2024	5:00PM–6:30PM	5	57
Youho	Lee	09-05: Radiation Protection and Dose Assessment	137567	8/5/2024	3:00PM–4:30PM	4	29
Boyuan	Li	12-03 Risk Assessments and Management - Session 3	135382	8/7/2024	8:30AM–10:00AM	4	64
Dong	Li	08-01: Computational Fluid Dynamics (CFD) and Applications - I	133282	8/5/2024	1:00PM–2:30PM	1	23
Fuhai	Li	01-01: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - I	131787	8/5/2024	1:00PM–2:30PM	2	25
Fuhai	Li	01-03: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - III	133448	8/5/2024	4:45PM–6:15PM	1	40
Hui	Li	15-05	134381	8/6/2024	5:00PM–6:30PM	2	50
Jiajie	Li	07-11: Simulations and Predictions - III	135126	8/8/2024	3:00PM–4:30PM	1	98
Jiaming	Li	08-01: Computational Fluid Dynamics (CFD) and Applications - I	133597	8/5/2024	1:00PM–2:30PM	3	23
Jian	Li	02-06: Fabrication, Fuel Cycle, Shielding, Storage - II	135558	8/7/2024	8:30AM–10:00AM	2	62
Jian	Li	07-18: Accident Analyses	135804	8/7/2024	4:45PM–6:15PM	4	76
Jiangkuan	Li	05-03: Digitalization and Fault Detection	132186	8/5/2024	4:45PM–6:15PM	0	39
Jiaxuan	Li	02-01: Nuclear Fuels and Materials - I	137055	8/5/2024	1:00PM–2:30PM	5	22
Jinpeng	Li	04-10: SMRs, Advanced Reactors, and Fusion	133881	8/7/2024	3:00PM–4:30PM	3	70
Jitao	Li	01-03: Nuclear Plant Operation, Modification, Life Extension, Maintenance and Life Cycle - III	134670	8/5/2024	4:45PM–6:15PM	4	40
Jitao	Li	05-07: System Performance and Safety Enhancements	134769	8/7/2024	4:45PM–6:15PM	0	79
Liangxing	Li	11-02 Severe Accident Mitigation Phenomena	136038	8/6/2024	5:00PM–6:30PM	1	54
Linfeng	Li	12-04 Risk Assessments and Management - Session 4	136531	8/8/2024	8:30AM–10:00AM	4	88
Ruihan	Li	02-12: Structural Evaluation, Performance Assessment, Multiphysics Coupling - II	134641	8/8/2024	4:45PM–6:15PM	0	106
Shu	Li	07-16: Heat Transfer - I	134787	8/7/2024	4:45PM–6:15PM	5	74
Shunyang	Li	08-10: Computational Fluid Dynamics (CFD) and Applications - X	136142	8/8/2024	10:30AM–12:00PM	1	95
Tao	Li	07-03: Experiments and Analyses - II	135097	8/5/2024	4:45PM–6:15PM	4	35
Tianjin	Li	04-13: SMRs, Advanced Reactors, and Fusion	135598	8/8/2024	8:30AM–10:00AM	4	85
Xiaoxi	Li	08-03: Computational Fluid Dynamics (CFD) and Applications - III	134953	8/5/2024	4:45PM–6:15PM	4	39
Xin	Li	09-07: Radiation and physical transport studies	135557	8/6/2024	1:00PM–2:30PM	1	45
Xinyu	Li	04-05: SMRs, Advanced Reactors, and Fusion	134369	8/7/2024	4:45PM–6:15PM	5	78
Xinze	Li	15-01	134501	8/5/2024	1:00PM–2:30PM	5	18
Yanlin	Li	04-03: SMRs, Advanced Reactors, and Fusion	130895	8/5/2024	4:45PM–6:15PM	1	38
Yanzhi	Li	07-19: Entrainment and Droplet Characteristics	134534	8/8/2024	8:30AM–10:00AM	1	83
Yingnan	Li	06-03 Nuclear Codes, Standards, Licensing, & Regulatory Issues Session 3	136091	8/5/2024	4:45PM–6:15PM	1	34
Zefeng	Li	15-07	134981	8/6/2024	1:00PM–2:30PM	3	42
Zhigang	Li	07-22: Thermal-Hydraulics Research and Applications - III	124037	8/5/2024	1:00PM–2:30PM	5	20
Zongyang	Li	07-14: Single and Multi-Phase Flow - I	131786	8/7/2024	3:00PM–4:30PM	2	66
Zhang	Liangjie	02-11: Structural Evaluation, Performance Assessment, Multiphysics Coupling - I	135863	8/8/2024	3:00PM–4:30PM	1	100
Hengji	Liao	08-03: Computational Fluid Dynamics (CFD) and Applications - III	134856	8/5/2024	4:45PM–6:15PM	3	39
Ting Yi	Liao	06-03 Nuclear Codes, Standards, Licensing, & Regulatory Issues Session 3	135819	8/5/2024	4:45PM–6:15PM	0	34
Musen	Lin	05-04: Nuclear Engineering and Safety Analysis	132757	8/8/2024	3:00PM–4:30PM	0	103
Shixin	Lin	02-03: Nuclear Fuels and Materials - III	134554	8/5/2024	4:45PM–6:15PM	3	37
Xuan	Lin	04-06: SMRs, Advanced Reactors, and Fusion	131854	8/8/2024	8:30AM–10:00AM	4	82
Dalian	Liu	03-02: Human Factors and Digitization	134638	8/6/2024	5:00PM–6:30PM	0	55
Dalin	Liu	12-02 Risk Assessments and Management - Session 2	134510	8/6/2024	5:00PM–6:30PM	5	56
Guanyu	Liu	05-01: Probabalistic Safety and Risk Assessment	135100	8/5/2024	1:00PM–2:30PM	3	24
Haidong	Liu	07-14: Single and Multi-Phase Flow - I	131755	8/7/2024	3:00PM–4:30PM	1	66
Jiabao	Liu	07-02: Experiments and Analyses - I	133818	8/5/2024	3:00PM–4:30PM	3	28
Jie	Liu	01-04: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - IV	134882	8/7/2024	3:00PM–4:30PM	4	72
Kexin	Liu	08-03: Computational Fluid Dynamics (CFD) and Applications - III	134729	8/5/2024	4:45PM–6:15PM	2	39
Limin	Liu	04-07: SMRs, Advanced Reactors, and Fusion	136516	8/8/2024	10:30AM–12:00PM	4	90
Minyun	Liu	07-22: Thermal-Hydraulics Research and Applications - III	135342	8/5/2024	1:00PM–2:30PM	0	19
Peng	Liu	11-03 Core Melt Issues	134536	8/8/2024	4:45PM–6:15PM	1	108
Qianwen	Liu	04-10: SMRs, Advanced Reactors, and Fusion	135079	8/7/2024	3:00PM–4:30PM	4	70
Qianwen	Liu	12-04 Risk Assessments and Management - Session 4	135793	8/8/2024	8:30AM–10:00AM	1	88
Ruiyang	Liu	04-03: SMRs, Advanced Reactors, and Fusion	123745	8/5/2024	4:45PM–6:15PM	0	38
Shangyuan	Liu	06-02 Nuclear Codes, Standards, Licensing, & Regulatory Issues Session 2	135727	8/5/2024	3:00PM–4:30PM	4	27
Shichang	Liu	02-09: Physics and Transport Theory - I	134661	8/8/2024	8:30AM–10:00AM	5	84
Shiyu	Liu	03-01: Control and Monitoring Systems	130885	8/6/2024	1:00PM–2:30PM	2	47
Shuo	Liu	07-12: SMR and Advanced Reactors - I	134267	8/7/2024	3:00PM–4:30PM	3	65
Songsong	Liu	07-18: Accident Analyses	135908	8/7/2024	4:45PM–6:15PM	5	76
Songyang	Liu	04-09: SMRs, Advanced Reactors, and Fusion	133310	8/8/2024	4:45PM–6:15PM	1	108
Xinyan	Liu	08-07: Computational Fluid Dynamics (CFD) and Applications - VII	135609	8/8/2024	3:00PM–4:30PM	5	102
Xiuting	Liu	03-05: Innovations in Nuclear Engineering	135711	8/7/2024	4:45PM–6:15PM	3	77
Xuesong	Liu	09-04: Radiation Shielding	132433	8/5/2024	1:00PM–2:30PM	1	21
Xuesong	Liu	02-05: Fabrication, Fuel Cycle, Shielding, Storage - I	136168	8/6/2024	5:00PM–6:30PM	5	54
Yan	Liu	15-03	134562	8/5/2024	4:45PM–6:15PM	4	34
Yapeng	Liu	15-08	135219	8/6/2024	5:00PM–6:30PM	4	51
Yu	Liu	08-02: Computational Fluid Dynamics (CFD) and Applications - II	134466	8/5/2024	3:00PM–4:30PM	0	32
Yu	Liu	01-05: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - V	135066	8/7/2024	4:45PM–6:15PM	4	80
Yuhang	Liu	04-12: SMRs, Advanced Reactors, and Fusion	135685	8/8/2024	8:30AM–10:00AM	1	84
Yuhao	Liu	02-03: Nuclear Fuels and Materials - III	136000	8/5/2024	4:45PM–6:15PM	5	37
Zhanwei	Liu	15-02	132390	8/5/2024	3:00PM–4:30PM	0	25
Zhaoxing	Liu	09-05: Radiation Protection and Dose Assessment	136133	8/5/2024	3:00PM–4:30PM	3	29
Zhe	Liu	08-01: Computational Fluid Dynamics (CFD) and Applications - I	134353	8/5/2024	1:00PM–2:30PM	4	23
Zang	Liye	07-18: Accident Analyses	134296	8/7/2024	4:45PM–6:15PM	1	75
Rosa	Lo Frano	05-04: Nuclear Engineering and Safety Analysis	136867	8/8/2024	3:00PM–4:30PM	5	103
Martin	Lovecký	02-09: Physics and Transport Theory - I	136014	8/8/2024	8:30AM–10:00AM	0	84
Dingsheng	Lu	04-08: SMRs, Advanced Reactors, and Fusion	135019	8/8/2024	3:00PM–4:30PM	5	102
Frank	Lu	04-02: SMRs, Advanced Reactors and Fusion	133224	8/5/2024	3:00PM–4:30PM	4	30
Hongxing	Lu	09-01: Waste Treatment and Decontamination	135411	8/5/2024	1:00PM–2:30PM	3	20
Qi	Lu	08-11: Computational Fluid Dynamics (CFD) and Applications - XI	132598	8/8/2024	10:30AM–12:00PM	2	95
Hanwen	Luo	08-02: Computational Fluid Dynamics (CFD) and Applications - II	134545	8/5/2024	3:00PM–4:30PM	2	32

Hanyu	Luo	07-04: Experiments and Analyses - III	135192	8/6/2024	5:00PM–6:30PM	2	52
Menghao	Luo	07-17: Heat Transfer - II	135530	8/7/2024	4:45PM–6:15PM	4	75
Wenwei	Luo	10-02 Advanced Manufacturing 2	135730	8/5/2024	3:00PM–4:30PM	4	26
Yunhao	Luo	13-01: Computer Code V&V - I	134783	8/6/2024	1:00PM–2:30PM	4	49
Dufeng	Lv	11-01 Severe Accident Mitigation Strategies	135532	8/6/2024	1:00PM–2:30PM	3	46
Anxiang	Ma	08-04: Computational Fluid Dynamics (CFD) and Applications - IV	134964	8/8/2024	4:45PM–6:15PM	2	110
Baisong	Ma	01-02: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - II	134488	8/5/2024	3:00PM–4:30PM	2	31
Chao	Ma	12-04 Risk Assessments and Management - Session 4	135954	8/8/2024	8:30AM–10:00AM	3	88
Wenkui	Ma	04-11: SMRs, Advanced Reactors and Fusion	135642	8/7/2024	4:45PM–6:15PM	0	78
Xiaoyao	Ma	07-15: Single and Multi-Phase Flow - II	134853	8/7/2024	3:00PM–4:30PM	1	67
Yan	Ma	02-03: Nuclear Fuels and Materials - III	134775	8/5/2024	4:45PM–6:15PM	4	37
Yugao	Ma	04-06: SMRs, Advanced Reactors, and Fusion	134125	8/8/2024	8:30AM–10:00AM	0	81
Yugao	Ma	04-08: SMRs, Advanced Reactors, and Fusion	135172	8/8/2024	3:00PM–4:30PM	2	101
Hideo	Machida	06-01 Nuclear Codes, Standards, Licensing, & Regulatory Issues Session 1	126112	8/5/2024	1:00PM–2:30PM	0	19
Tianming	Man	11-02 Severe Accident Mitigation Phenomena	134633	8/6/2024	5:00PM–6:30PM	5	54
Cui	Mao	05-04: Nuclear Engineering and Safety Analysis	133789	8/8/2024	3:00PM–4:30PM	1	103
Kenichi	Matsuba	11-03 Core Melt Issues	135809	8/8/2024	4:45PM–6:15PM	4	108
Shuhei	Matsunaga	10-01: Advanced Manufacturing 1	132637	8/5/2024	1:00PM–2:30PM	0	17
Oleksandr	Mazurok	01-05: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - V	134916	8/7/2024	4:45PM–6:15PM	0	80
Guido	Mazzini	07-11: Simulations and Predictions - III	135616	8/8/2024	3:00PM–4:30PM	4	98
Luhan	Mei	14-01: Nuclear Education and Public Acceptance	131292	8/6/2024	1:00PM–2:30PM	0	41
Xiantao	Meng	02-06: Fabrication, Fuel Cycle, Shielding, Storage - II	135666	8/7/2024	8:30AM–10:00AM	1	62
Song	Mengyan	01-07: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - VII	135418	8/8/2024	10:30AM–12:00PM	2	96
Kazuya	Mori	01-05: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - V	135012	8/7/2024	4:45PM–6:15PM	2	80
Masayoshi	Mori	10-01: Advanced Manufacturing 1	134938	8/5/2024	1:00PM–2:30PM	5	18
Shoji	Mori	07-15: Single and Multi-Phase Flow - II	136501	8/7/2024	3:00PM–4:30PM	5	67
Keisuke	Morita	04-12: SMRs, Advanced Reactors, and Fusion	135407	8/8/2024	8:30AM–10:00AM	4	85
Ryo	Morita	08-11: Computational Fluid Dynamics (CFD) and Applications - XI	130797	8/8/2024	10:30AM–12:00PM	1	95
Pascal	Mosler	15-10	135585	8/6/2024	1:00PM–2:30PM	5	44
Defang	Mu	15-09	135345	8/7/2024	8:30AM–10:00AM	1	59
Merouane	Najar	12-01 Risk Assessments and Management - Session 1	133604	8/6/2024	1:00PM–2:30PM	2	48
Hiroki	Nakamura	02-04: Nuclear Fuels and Materials - IV	134660	8/6/2024	1:00PM–2:30PM	3	46
Hiroaki	Nakanishi	07-07: Experiments and Analyses - VI	134244	8/7/2024	8:30AM–10:00AM	1	61
Ernestas	Narkūnas	09-03: Decommissioning	134264	8/5/2024	4:45PM–6:15PM	4	36
Muyi	Ni	05-04: Nuclear Engineering and Safety Analysis	136160	8/8/2024	3:00PM–4:30PM	3	103
Si	Ni	07-03: Experiments and Analyses - II	135074	8/5/2024	4:45PM–6:15PM	3	35
Jingyu	Nie	04-07: SMRs, Advanced Reactors, and Fusion	135246	8/8/2024	10:30AM–12:00PM	2	89
Rui	Nie	02-01: Nuclear Fuels and Materials - I	135581	8/5/2024	1:00PM–2:30PM	3	22
Yoshihisa	Nishi	12-03 Risk Assessments and Management - Session 3	135815	8/7/2024	8:30AM–10:00AM	3	63
Yosuke	Nishimura	04-12: SMRs, Advanced Reactors, and Fusion	135182	8/8/2024	8:30AM–10:00AM	3	85
Shipeng	Niu	11-01 Severe Accident Mitigation Strategies	127856	8/6/2024	1:00PM– 2:30PM	0	46
Johndel	Obra	15-06	134780	8/7/2024	8:30AM–10:00AM	1	58
Priscilla	Oforiwaa	05-05: Radiation Science and Nuclear Materials	132278	8/8/2024	3:00PM–4:30PM	3	104
Priscilla	Oforiwaa	09-06: Waste Management and Environmental Studies	132442	8/5/2024	4:45PM–6:15PM	0	36
Samuel	Oke	08-06: Computational Fluid Dynamics (CFD) and Applications - VI	135419	8/8/2024	10:30AM–12:00PM	4	94
Shoichiro	Okita	04-06: SMRs, Advanced Reactors and Fusion	131748	8/8/2024	8:30AM–10:00AM	3	81
Joseph	Oncken	03-05: Innovations in Nuclear Engineering	133205	8/7/2024	4:45PM–6:15PM	0	77
Ryoji	Osafune	10-03: Advanced Manufacturing 3	135920	8/5/2024	4:45PM–6:15PM	0	34
Cuijie	Pan	02-14: Structural Evaluation, Performance Assessment, Multiphysics Coupling - IV	139586	8/8/2024	3:00PM–4:30PM	4	101
Byung Gi	Park	04-03: SMRs, Advanced Reactors, and Fusion	147502	8/5/2024	4:45PM–6:15PM	5	38
Jie	Pei	11-03 Core melt issues	134398	8/8/2024	4:45PM–6:15PM	0	108
Yu	Pei	01-02: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - II	130083	8/5/2024	3:00PM–4:30PM	0	31
Matthias	Peiretti	04-07: SMRs, Advanced Reactors and Fusion	133703	8/8/2024	10:30AM–12:00PM	1	89
Zhang	Peiyao	05-07: System Performance and Safety Enhancements	135588	8/7/2024	4:45PM–6:15PM	4	79
Cheng	Peng	08-08: Computational Fluid Dynamics (CFD) and Applications - VIII	135626	8/8/2024	4:45PM–6:15PM	1	110
Lei	Peng	02-04: Nuclear Fuels and Materials - IV	134733	8/6/2024	1:00PM–2:30PM	4	46
Wei	Peng	04-09: SMRs, Advanced Reactors, and Fusion	134847	8/8/2024	4:45PM–6:15PM	3	109
Wei	Peng	15-10	135428	8/6/2024	1:00PM–2:30PM	0	43
Antonin	Povolny	04-02: SMRs, Advanced Reactors, and Fusion	133805	8/5/2024	3:00PM–4:30PM	0	30
Ben	Qi	05-03: Digitalization and Fault Detection	134996	8/5/2024	4:45PM–6:15PM	3	40
Duan	Qianni	02-09: Physics and Transport Theory - I	135085	8/8/2024	8:30AM–10:00AM	3	84
Jianshu	Qiao	15-05	134428	8/6/2024	5:00PM–6:30PM	3	50
Min	Qiao	08-05: Computational Fluid Dynamics (CFD) and Applications - V	135197	8/8/2024	8:30AM–10:00AM	5	86
Guopeng	Qin	02-05: Fabrication, Fuel Cycle, Shielding, Storage - I	135681	8/6/2024	5:00PM–6:30PM	1	53
Tianchen	Qiu	07-20: Thermal-Hydraulics Research and Applications - I	133655	8/8/2024	10:30AM–12:00PM	3	91
Yongping	Qiu	12-03 Risk Assessments and Management - Session 3	135379	8/7/2024	8:30AM–10:00AM	2	63
Zhengzhe	Qu	09-06: Waste Management and Environmental Studies	134283	8/5/2024	4:45PM–6:15PM	1	36
Fengyang	Quan	11-03 Core Melt Issues	136323	8/8/2024	4:45PM–6:15PM	3	108
Lie	Quan	15-08	135207	8/6/2024	5:00PM–6:30PM	3	50
Dipanjan	Ray	02-09: Physics and Transport Theory - I	133182	8/8/2024	8:30AM–10:00AM	4	84
Jiaxing	Ren	15-06	134834	8/7/2024	8:30AM–10:00AM	2	58
Qisen	Ren	02-01: Nuclear Fuels and Materials - I	132169	8/5/2024	1:00PM–2:30PM	1	21
Quanyao	Ren	02-14: Structural Evaluation, Performance Assessment, Multiphysics Coupling - IV	136299	8/8/2024	3:00PM–4:30PM	0	100
Quanyao	Ren	07-07: Experiments and Analyses - VI	138262	8/7/2024	8:30AM–10:00AM	4	61
Xiaoxiao	Ren	04-13: SMRs, Advanced Reactors, and Fusion	135307	8/8/2024	8:30AM–10:00AM	1	85
Zhiyuan	Ren	10-02 Advanced Manufacturing 2	135443	8/5/2024	3:00PM–4:30PM	2	26
Francesco	Rizzo	09-01: Waste Treatment and Decontamination	136066	8/5/2024	1:00PM–2:30PM	4	20
Davide	Rozzia	07-22: Thermal-Hydraulics Research and Applications - III	136859	8/5/2024	1:00PM–2:30PM	4	19
Nakasuga	Ryoei	09-02: Waste Packages and Monitoring	135912	8/5/2024	3:00PM–4:30PM	3	28
Josef	Sabol	02-06: Fabrication, Fuel Cycle, Shielding, Storage - II	136218	8/7/2024	8:30AM–10:00AM	3	62
Josef	Sabol	02-06: Fabrication, Fuel Cycle, Shielding, Storage - II	136232	8/7/2024	8:30AM–10:00AM	4	62
Josef	Sabol	15-12	136237	8/7/2024	8:30AM–10:00AM	4	60
Rohunsingh	Sam	06-02 Nuclear Codes, Standards, Licensing, & Regulatory Issues Session 2	134457	8/5/2024	3:00PM–4:30PM	1	27
Yaodong	Sang	03-01: Control and Monitoring Systems	134377	8/6/2024	1:00PM–2:30PM	3	47
Satya Prakash	Saraswat	13-01: Computer Code V&V - I	134294	8/6/2024	1:00PM–2:30PM	3	49
Yuki	Sato	10-01: Advanced Manufacturing 1	133230	8/5/2024	1:00PM–2:30PM	1	17
He	Shang	15-05	134678	8/6/2024	5:00PM–6:30PM	5	50
Zhengrun	Shang	11-01 Severe Accident Mitigation Strategies	135645	8/6/2024	1:00PM–2:30PM	4	46
Zhenhua	Sheng	07-09: Simulations and Predictions - I	134551	8/8/2024	10:30AM–12:00PM	2	90
Chencheng	Shi	01-09: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - IX	136330	8/8/2024	4:45PM–6:15PM	5	111
Haili	Shi	12-04 Risk Assessments and Management - Session 4	135862	8/8/2024	8:30AM–10:00AM	2	88
Jiajian	Shi	02-02: Nuclear Fuels and Materials – II	134306	8/5/2024	3:00PM–4:30PM	1	29
Lei	Shi	02-15: Generic Topics and Reviews	135560	8/8/2024	4:45PM–6:15PM	1	107
Lei	Shi	02-15: Generic Topics and Reviews	136022	8/8/2024	4:45PM–6:15PM	3	107
Lei	Shi	02-15: Generic Topics and Reviews	136048	8/8/2024	4:45PM–6:15PM	4	107
Lingyue	Shi	01-10: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - X	136536	8/7/2024	3:00PM–4:30PM	0	72
Chen	Shikang	15-06	134863	8/7/2024	8:30AM–10:00AM	3	58
Oksana	Shiman	10-01: Advanced Manufacturing 1	133321	8/5/2024	1:00PM–2:30PM	2	17
Nobuyuki	Shinohara	01-10: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - X	135591	8/7/2024	3:00PM–4:30PM	4	73
Shuvendu	Shivam	15-07	134897	8/6/2024	1:00PM–2:30PM	0	42
Ming	Shu	02-02: Nuclear Fuels and Materials – II	135629	8/5/2024	3:00PM–4:30PM	4	30

Broderick	Sieh	15-09	135269	8/7/2024	8:30AM–10:00AM	0	59
Broderick	Sieh	07-15: Single and Multi-Phase Flow - II	135710	8/7/2024	3:00PM–4:30PM	4	67
De-En	Song	15-13	139314	8/6/2024	1:00PM–2:30PM	3	44
Meihui	Song	04-05: SMRs, Advanced Reactors, and Fusion	133271	8/7/2024	4:45PM–6:15PM	1	78
Meiqi	Song	07-16: Heat Transfer - I	130237	8/7/2024	4:45PM–6:15PM	1	74
Yu	Song	07-03: Experiments and Analyses - II	134990	8/5/2024	4:45PM–6:15PM	1	35
Pietro	Stefanini	07-02: Experiments and Analyses - I	133058	8/5/2024	3:00PM–4:30PM	1	27
Vladimir	Stevanovic	08-11: Computational Fluid Dynamics (CFD) and Applications - XI	136496	8/8/2024	10:30AM–12:00PM	0	95
Vladimir	Stevanovic	15-13	136502	8/6/2024	1:00PM–2:30PM	1	44
Jincheng	Su	04-01: SMRs, Advanced Reactors, and Fusion	135851	8/5/2024	1:00PM–2:30PM	4	22
Yang	Su	07-14: Single and Multi-Phase Flow - I	132493	8/7/2024	3:00PM–4:30PM	4	66
Yuqing	Su	07-02: Experiments and Analyses - I	133890	8/5/2024	3:00PM–4:30PM	4	
Ayumu	Sugiura	15-04	133764	8/6/2024	1:00PM–2:30PM	0	41
Mohamedelmogtabh	Suliman	04-04: SMRs, Advanced Reactors and Fusion	136084	8/7/2024	3:00PM–4:30PM	3	
Mohamedelmogtabh Omer Elfadni	Suliman	05-01: Probabalistic Safety and Risk Assessment	135943	8/5/2024	1:00PM–2:30PM	4	24
John	Sulley	10-03: Advanced Manufacturing 3	136240	8/5/2024	4:45PM–6:15PM	2	35
Qian	Sum	10-03: Advanced Manufacturing 3	136504	8/5/2024	4:45PM–6:15PM	3	
Hetao	Sun	01-06: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - VI	135371	8/8/2024	8:30AM–10:00AM	4	89
Junshuai	Sun	08-07: Computational Fluid Dynamics (CFD) and Applications - VII	135476	8/8/2024	3:00PM–4:30PM	1	102
Qian	Sun	05-02: Nuclear Safety and Emergency Preparedness	134287	8/5/2024	3:00PM–4:30PM	1	32
Yixiong	Sun	08-08: Computational Fluid Dynamics (CFD) and Applications - VIII	135739	8/8/2024	4:45PM–6:15PM	5	111
Yuchen	Sun	08-06: Computational Fluid Dynamics (CFD) and Applications - VI	135291	8/8/2024	10:30AM–12:00PM	0	94
Zhiyuan	Sun	07-11: Simulations and Predictions - III	135117	8/8/2024	3:00PM–4:30PM	0	98
Sohaib	Syed	09-04: Radiation Shielding	133409	8/5/2024	1:00PM–2:30PM	2	21
Satoshi	Takeda	02-10: Physics and Transport Theory - II	130801	8/8/2024	10:30AM–12:00PM	2	92
Satoshi	Takeda	02-10: Physics and Transport Theory - II	132277	8/8/2024	10:30AM–12:00PM	3	92
Aramaki	Takuto	15-11	136046	8/6/2024	5:00PM–6:30PM	5	51
Akinori	Tamura	01-10: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - X	132997	8/7/2024	3:00PM–4:30PM	3	72
Bo	Tan	02-07: Methods Development, Computational Approaches - I	133656	8/7/2024	3:00PM–4:30PM	1	67
Changbing	Tang	02-11: Structural Evaluation, Performance Assessment, Multiphysics Coupling - I	135696	8/8/2024	3:00PM–4:30PM	2	100
Jiaxuan	Tang	11-02 Severe Accident Mitigation Phenomena	135227	8/6/2024	5:00PM–6:30PM	4	54
Longchang	Tang	07-17: Heat Transfer - II	135498	8/7/2024	4:45PM–6:15PM	3	75
Songsheng	Tang	07-19: Entrainment and Droplet Characteristics	136993	8/8/2024	8:30AM–10:00AM	3	83
Yasuyoshi	Taruta	09-03: Decommissioning	135835	8/5/2024	4:45PM–6:15PM	0	35
Nicolas	Tauveron	04-13: SMRs, Advanced Reactors, and Fusion	135501	8/8/2024	8:30AM–10:00AM	2	85
Yingnan	Tian	01-01: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - I	130579	8/5/2024	1:00PM–2:30PM	0	24
Yizhi	Tian	08-03: Computational Fluid Dynamics (CFD) and Applications - III	134682	8/5/2024	4:45PM–6:15PM	1	39
Mikio	Tokashiki	02-10: Physics and Transport Theory - II	134116	8/8/2024	10:30AM–12:00PM	4	92
Saeko	Tokuomi	01-07: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - VII	135414	8/8/2024	10:30AM–12:00PM	0	96
Bowen	Tu	03-04: Advanced Control Strategies	135073	8/7/2024	3:00PM–4:30PM	1	68
Yanjie	Tuo	01-08: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - VIII	135879	8/8/2024	3:00PM–4:30PM	3	105
Yuta	Uchiyama	07-14: Single and Multi-Phase Flow - I	132427	8/7/2024	3:00PM–4:30PM	3	66
Shota	Ueda	07-14: Single and Multi-Phase Flow - I	124804	8/7/2024	3:00PM–4:30PM	0	66
Atsushi	Ui	07-18: Accident Analyses	134485	8/7/2024	4:45PM–6:15PM	2	76
Takahiro	Usui	12-02 Risk Assessments and Management - Session 2	134400	8/6/2024	5:00PM–6:30PM	0	56
Timothy	Valentine	13-03: Computer Code V&V - III	136161	8/7/2024	8:30AM–10:00AM	1	64
Tamás	Varju	04-14: SMRs, Advanced Reactors, and Fusion	135760	8/8/2024	10:30AM–12:00PM	0	93
Julius	Venckus	15-03	133301	8/5/2024	4:45PM–6:15PM	1	33
Théo	Vidril	02-13: Structural Evaluation, Performance Assessment, Multiphysics Coupling - III	133060	8/8/2024	10:30AM–12:00PM	1	92
Kodai	Wadayama	12-02 Risk Assessments and Management - Session 2	133049	8/6/2024	5:00PM–6:30PM	1	56
Jiashuang	Wan	04-10: SMRs, Advanced Reactors and Fusion	136749	8/7/2024	3:00PM–4:30PM	1	69
Bo	Wang	07-19: Entrainment and Droplet Characteristics	132379	8/8/2024	8:30AM–10:00AM	0	83
Bo	Wang	07-09: Simulations and Predictions - I	134725	8/8/2024	10:30AM–12:00PM	4	90
Bo	Wang	07-10: Simulations and Predictions - II	134726	8/8/2024	3:00PM–4:30PM	0	97
Bo	Wang	07-10: Simulations and Predictions - II	134779	8/8/2024	3:00PM–4:30PM	1	97
Bo	Wang	07-10: Simulations and Predictions - II	134788	8/8/2024	3:00PM–4:30PM	2	97
Bo	Wang	07-10: Simulations and Predictions - II	134843	8/8/2024	3:00PM–4:30PM	4	98
Bo	Wang	15-06	134870	8/7/2024	8:30AM–10:00AM	4	58
Changwu	Wang	05-07: System Performance and Safety Enhancements	136245	8/7/2024	4:45PM–6:15PM	5	80
Dongyang	Wang	05-04: Nuclear Engineering and Safety Analysis	136085	8/8/2024	3:00PM–4:30PM	2	103
Hailei	Wang	04-04: SMRs, Advanced Reactors, and Fusion	147500	8/7/2024	3:00PM–4:30PM	2	69
Hailei	Wang	04-03: SMRs, Advanced Reactors, and Fusion	147514	8/5/2024	4:45PM–6:15PM	4	38
He	Wang	05-01: Probabalistic Safety and Risk Assessment	136092	8/5/2024	1:00PM–2:30PM	5	24
Jinghong	Wang	15-11	135753	8/6/2024	5:00PM–6:30PM	2	51
Kailong	Wang	13-03: Computer Code V&V - III	136987	8/7/2024	8:30AM–10:00AM	4	65
Mengxi	Wang	04-02: SMRs, Advanced Reactors, and Fusion	134526	8/5/2024	3:00PM–4:30PM	2	30
Mengyi	Wang	11-03 Core Melt Issues	135101	8/8/2024	4:45PM–6:15PM	2	108
Ning	Wang	05-07: System Performance and Safety Enhancements	135031	8/7/2024	4:45PM–6:15PM	2	29
Pengyi	Wang	02-05: Fabrication, Fuel Cycle, Shielding, Storage - I	136263	8/6/2024	5:00PM–6:30PM	4	54
Ping	Wang	04-13: SMRs, Advanced Reactors, and Fusion	130730	8/8/2024	8:30AM–10:00AM	0	85
Ping	Wang	04-01: SMRs, Advanced Reactors and Fusion	132055	8/5/2024	1:00PM–2:30PM	3	22
Qi	Wang	04-11: SMRs, Advanced Reactors, and Fusion	136988	8/7/2024	4:45PM–6:15PM	1	78
Ruohao	Wang	07-03: Experiments and Analyses - II	134836	8/5/2024	4:45PM–6:15PM	0	35
Shaojie	Wang	01-09: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - IX	136045	8/8/2024	4:45PM–6:15PM	1	111
Shidi	Wang	04-02: SMRs, Advanced Reactors and Fusion	134519	8/5/2024	3:00PM–4:30PM	5	31
Shixian	Wang	15-01	124786	8/5/2024	1:00PM–2:30PM	0	18
Sipeng	Wang	08-07: Computational Fluid Dynamics (CFD) and Applications - VII	135505	8/8/2024	3:00PM–4:30PM	2	102
Songzhe	Wang	04-10: SMRs, Advanced Reactors, and Fusion	135088	8/7/2024	3:00PM–4:30PM	5	70
Suhao	Wang	04-10: SMRs, Advanced Reactors and Fusion	133679	8/7/2024	3:00PM–4:30PM	2	69
Weishuai	Wang	09-07: Radiation and Physical Transport Studies	133398	8/6/2024	1:00PM–2:30PM	0	44
Weixiang	Wang	15-07	135068	8/6/2024	1:00PM–2:30PM	5	43
Wenyi	Wang	05-05: Radiation Science and Nuclear Materials	132181	8/8/2024	3:00PM–4:30PM	2	104
Xiang	Wang	07-11: Simulations and Predictions - III	135256	8/8/2024	3:00PM–4:30PM	3	98
Xiang	Wang	02-08: Methods Development, Computational Approaches - II	135263	8/7/2024	4:45PM–6:15PM	0	76
Xiang	Wang	02-07: Methods Development, Computational Approaches - I	137072	8/7/2024	3:00PM–4:30PM	0	67
Xiaowen	Wang	07-17: Heat Transfer - II	136312	8/7/2024	4:45PM–6:15PM	5	75
Xin	Wang	04-04: SMRs, Advanced Reactors, and Fusion	130713	8/7/2024	3:00PM–4:30PM	0	68
Xin	Wang	12-02 Risk Assessments and Management - Session 2	134815	8/6/2024	5:00PM–6:30PM	2	56
Yanlu	Wang	01-04: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - IV	134800	8/7/2024	3:00PM–4:30PM	3	72
Yating	Wang	15-04	134288	8/6/2024	1:00PM–2:30PM	4	42
Yiwei	Wang	08-06: Computational Fluid Dynamics (CFD) and Applications - VI	135440	8/8/2024	10:30AM–12:00PM	5	94
Yizhen	Wang	02-07: Methods Development, Computational Approaches - I	136647	8/7/2024	3:00PM–4:30PM	3	67
Yue	Wang	02-04: Nuclear Fuels and Materials - IV	131779	8/6/2024	1:00PM–2:30PM	0	45
Yulong	Wang	03-04: Advanced Control Strategies	136009	8/7/2024	3:00PM–4:30PM	2	68
Yuqi	Wang	07-06: Experiments and Analyses - V	136028	8/6/2024	5:00PM–6:30PM	3	53
Zhaoyang	Wang	05-07: System Performance and Safety Enhancements	135061	8/7/2024	4:45PM–6:15PM	3	79
Zhijian	Wang	01-03: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - III	133255	8/5/2024	4:45PM–6:15PM	0	40
Zhikai	Wang	07-17: Heat Transfer - II	135222	8/7/2024	4:45PM–6:15PM	2	75
Zhipeng	Wang	04-09: SMRs, Advanced Reactors, and Fusion	125424	8/8/2024	4:45PM–6:15PM	0	77
Zhipeng	Wang	02-05: Fabrication, Fuel Cycle, Shielding, Storage - I	136353	8/6/2024	5:00PM–6:30PM	2	53
Zhuang	Wang	05-07: System Performance and Safety Enhancements	134999	8/7/2024	4:45PM–6:15PM	1	79

Zixuan	Wang	05-06: Optimization and Modeling Methods	132046	8/7/2024	3:00PM–4:30PM	1	70
Zixuan	Wang	05-06: Optimization and Modeling Methods	132049	8/7/2024	3:00PM–4:30PM	2	71
Zixuan	Wang	13-02: Computer Code V&V - II	135128	8/6/2024	5:00PM–6:30PM	3	57
Feng	Wanxin	05-01: Probabalistic Safety and Risk Assessment	134811	8/5/2024	1:00PM–2:30PM	2	24
Yuezhou	Wei	02-06: Fabrication, Fuel Cycle, Shielding, Storage - II	135590	8/7/2024	8:30AM–10:00AM	0	62
Sarah	Weick	02-04: Nuclear Fuels and Materials - IV	136905	8/6/2024	1:00PM–2:30PM	5	46
Ting	Wen	03-02: Human Factors and Digitization	136549	8/6/2024	5:00PM–6:30PM	4	55
Yuchen	Wen	02-08: Methods Development, Computational Approaches - II	134979	8/7/2024	4:45PM–6:15PM	1	76
Fabian	Wiltschko	07-04: Experiments and Analyses - III	135141	8/6/2024	5:00PM–6:30PM	0	52
Kin Wing	Wong	15-01	130423	8/5/2024	1:00PM–2:30PM	1	18
Steven	Woo	02-12: Structural Evaluation, Performance Assessment, Multiphysics Coupling - II	134649	8/8/2024	4:45PM–6:15PM	1	106
Di	Wu	07-16: Heat Transfer - I	131238	8/7/2024	4:45PM–6:15PM	2	74
Fang	Wu	01-09: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - IX	136033	8/8/2024	4:45PM–6:15PM	0	111
Han	Wu	07-19: Entrainment and Droplet Characteristics	135611	8/8/2024	8:30AM–10:00AM	2	83
Hexin	Wu	07-02: Experiments and Analyses - I	133590	8/5/2024	3:00PM–4:30PM	2	28
Hongyu	Wu	04-09: SMRs, Advanced Reactors and Fusion	134170	8/8/2024	4:45PM–6:15PM	2	109
Jianhui	Wu	02-05: Fabrication, Fuel Cycle, Shielding, Storage - I	134819	8/6/2024	5:00PM–6:30PM	0	53
Mengjie	Wu	02-04: Nuclear Fuels and Materials - IV	133813	8/6/2024	1:00PM–2:30PM	1	45
Mengqi	Wu	07-09: Simulations and Predictions - I	132744	8/8/2024	10:30AM–12:00PM	0	90
Shifa	Wu	03-04: Advanced Control Strategies	134523	8/7/2024	3:00PM–4:30PM	4	68
Wenqiang	Wu	15-10	135549	8/6/2024	1:00PM–2:30PM	3	43
Ze	Xi	01-01: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - I	131874	8/5/2024	1:00PM–2:30PM	3	25
Binzhuo	Xia	15-12	136135	8/7/2024	8:30AM–10:00AM	2	60
Zihan	Xia	07-17: Heat Transfer - II	135118	8/7/2024	4:45PM–6:15PM	0	75
Liu	Xianying	03-02: Human Factors and Digitization	135876	8/6/2024	5:00PM–6:30PM	3	55
Xingyu	Xiao	12-01 Risk Assessments and Management - Session 1	134226	8/6/2024	1:00PM–2:30PM	4	48
Xingyu	Xiao	15-13	146582	8/6/2024	1:00PM–2:30PM	5	44
Tang	Xiaoxuan	03-03: Reliability and Safety Systems	135993	8/7/2024	8:30AM–10:00AM	4	63
Xiaoyang	Xie	07-08: Numerical Analyses	136171	8/8/2024	8:30AM–10:00AM	3	82
Zhinan	Xie	02-07: Methods Development, Computational Approaches - I	136320	8/7/2024	3:00PM–4:30PM	4	68
Lize	Xing	08-10: Computational Fluid Dynamics (CFD) and Applications - X	136322	8/8/2024	10:30AM–12:00PM	5	95
Mingdi	Xing	08-09: Computational Fluid Dynamics (CFD) and Applications - IX	135878	8/8/2024	8:30AM–10:00AM	2	87
Tianyang	Xing	03-03: Reliability and Safety Systems	135960	8/7/2024	8:30AM–10:00AM	2	63
Qiu	Xinze	15-14	135003	8/8/2024	4:45PM–6:15PM	1	106
Feng	Xiong	08-04: Computational Fluid Dynamics (CFD) and Applications - IV	134963	8/8/2024	4:45PM–6:15PM	1	109
Feng	Xiong	08-05: Computational Fluid Dynamics (CFD) and Applications - V	135113	8/8/2024	8:30AM–10:00AM	3	86
Dongyu	Xu	07-13: SMR and Advanced Reactors - II	136096	8/7/2024	4:45PM–6:15PM	3	73
Haoxiang	Xu	15-11	135744	8/6/2024	5:00PM–6:30PM	1	51
Jun	Xu	08-10: Computational Fluid Dynamics (CFD) and Applications - X	136153	8/8/2024	10:30AM–12:00PM	2	95
Lisha	Xu	08-09: Computational Fluid Dynamics (CFD) and Applications - IX	135839	8/8/2024	8:30AM–10:00AM	1	87
Man	Xu	01-08: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - VIII	135725	8/8/2024	3:00PM–4:30PM	1	105
Renyi	Xu	01-07: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - VII	135439	8/8/2024	10:30AM–12:00PM	3	97
Risheng	Xu	04-13: SMRs, Advanced Reactors, and Fusion	135992	8/8/2024	8:30AM–10:00AM	5	85
Tao	Xu	11-01 Severe Accident Mitigation Strategies	139205	8/6/2024	1:00PM–2:30PM	5	47
Xinsheng	Xu	07-12: SMR and Advanced Reactors - I	134275	8/7/2024	3:00PM–4:30PM	4	65
Yifan	Xu	07-20: Thermal-Hydraulics Research and Applications - I	132735	8/8/2024	10:30AM–12:00PM	2	91
Yihua	Xu	15-08	135231	8/6/2024	5:00PM–6:30PM	5	51
Yongwang	Xu	07-21: Thermal-Hydraulics Research and Applications - II	135059	8/8/2024	3:00PM–4:30PM	3	99
Youyou	Xu	03-02: Human Factors and Digitization	134820	8/6/2024	5:00PM–6:30PM	1	55
Yuhan	Xu	09-06: Waste Management and Environmental Studies	135471	8/5/2024	4:45PM–6:15PM	2	36
PengChao	Xue	02-08: Methods Development, Computational Approaches - II	135535	8/7/2024	4:45PM–6:15PM	2	76
Hiroki	Yada	01-02: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - II	134552	8/5/2024	3:00PM–4:30PM	4	31
Hideki	Yagihashi	07-09: Simulations and Predictions - I	134596	8/8/2024	10:30AM–12:00PM	3	90
Takeshi	Yamada	08-02: Computational Fluid Dynamics (CFD) and Applications - II	134499	8/5/2024	3:00PM–4:30PM	3	32
Gaku	Yamazaki	01-03: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - III	134463	8/5/2024	4:45PM–6:15PM	3	40
Jin	Yan	05-02: Nuclear Safety and Emergency Preparedness	134621	8/5/2024	3:00PM–4:30PM	4	33
Xuesong	Yan	02-06: Fabrication, Fuel Cycle, Shielding, Storage - II	130623	8/7/2024	8:30AM–10:00AM	5	62
Zhen	Yan	12-04 Risk Assessments and Management - Session 4	136866	8/8/2024	8:30AM–10:00AM	5	88
Benlin	Yang	05-01: Probabalistic Safety and Risk Assessment	130632	8/5/2024	1:00PM–2:30PM	0	
Paper No. NOT FOUND in pdf							
Benlin	Yang	05-02: Nuclear Safety and Emergency Preparedness	132071	8/5/2024	3:00PM–4:30PM	0	
Paper No. NOT FOUND in pdf							
Chuping	Yang	04-09: SMRs, Advanced Reactors, and Fusion	135193	8/8/2024	4:45PM–6:15PM	5	109
Guorui	Yang	15-12	136126	8/7/2024	8:30AM–10:00AM	1	59
Hao	Yang	11-02 Severe Accident Mitigation Phenomena	136230	8/6/2024	5:00PM–6:30PM	2	
Paper No. NOT FOUND in pdf							
Hui	Yang	02-02: Nuclear Fuels and Materials – II	134744	8/5/2024	3:00PM–4:30PM	3	29
Linqing	Yang	07-20: Thermal-Hydraulics Research and Applications - I	134432	8/8/2024	10:30AM–12:00PM	5	91
Qianye	Yang	02-08: Methods Development, Computational Approaches - II	131880	8/7/2024	4:45PM–6:15PM	4	77
Xiaoliang	Yang	02-04: Nuclear Fuels and Materials - IV	134576	8/6/2024	1:00PM–2:30PM	2	45
Zhenlei	Yang	03-01: Control and Monitoring Systems	130567	8/6/2024	1:00PM–2:30PM	1	47
Yao	Yao	07-20: Thermal-Hydraulics Research and Applications - I	134167	8/8/2024	10:30AM–12:00PM	4	91
Zhuang	Yaping	06-01 Nuclear Codes, Standards, Licensing, & Regulatory Issues Session 1	134481	8/5/2024	1:00PM–2:30PM	4	19
Bin	Ye	02-09: Physics and Transport Theory - I	134304	8/8/2024	8:30AM–10:00AM	1	84
Bin	Ye	02-09: Physics and Transport Theory - I	135114	8/8/2024	8:30AM–10:00AM	2	84
Seda	Yilmaz	15-09	135393	8/7/2024	8:30AM–10:00AM	4	59
Han	Yin	13-01: Computer Code V&V - I	133419	8/6/2024	1:00PM–2:30PM	0	49
Jianming	Yin	02-03: Nuclear Fuels and Materials - III	134410	8/5/2024	4:45PM–6:15PM	2	37
Wen	Yin	02-10: Physics and Transport Theory - II	135163	8/8/2024	10:30AM–12:00PM	1	92
Zhang	Yongkang	09-01: Waste Treatment and Decontamination	130479	8/5/2024	1:00PM–2:30PM	0	20
Masanori	Yoshikawa	04-03: SMRs, Advanced Reactors and Fusion	131784	8/5/2024	4:45PM–6:15PM	2	38
Kotaro	Yoshizaki	12-01 Risk Assessments and Management - Session 1	134339	8/6/2024	1:00PM–2:30PM	5	48
Fu	Youyuan	15-07	135009	8/6/2024	1:00PM–2:30PM	4	43
Fangxiaozhi	Yu	04-01: SMRs, Advanced Reactors, and Fusion	131270	8/5/2024	1:00PM–2:30PM	2	22
Zhonghao	Yu	06-01 Nuclear Codes, Standards, Licensing, & Regulatory Issues Session 1	133784	8/5/2024	1:00PM–2:30PM	1	19
Baoxin	Yuan	02-10: Physics and Transport Theory - II	132052	8/8/2024	10:30AM–12:00PM	0	91
Yuan	Yuan	13-03: Computer Code V&V - III	135368	8/7/2024	8:30AM–10:00AM	0	64
Liu	Yuanda	01-09: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - IX	136166	8/8/2024	4:45PM–6:15PM	4	111
Niu	Yuchen	03-01: Control and Monitoring Systems	134879	8/6/2024	1:00PM–2:30PM	4	47
Luo	Yu-Chen	15-04	133977	8/6/2024	1:00PM–2:30PM	2	42
Ma	Yue	08-01: Computational Fluid Dynamics (CFD) and Applications - I	133295	8/5/2024	1:00PM–2:30PM	2	23
Song	Yue	02-11: Structural Evaluation, Performance Assessment, Multiphysics Coupling - I	135005	8/8/2024	3:00PM–4:30PM	3	100
Hu	Yue Fei	02-15: Generic Topics and Reviews	136008	8/8/2024	4:45PM–6:15PM	2	107
Kohei	Yuki	07-19: Entrainment and Droplet Characteristics	135281	8/8/2024	8:30AM–10:00AM	5	83
Shichang	Yun	15-04	134272	8/6/2024	1:00PM–2:30PM	3	42
Noshi	Yusuke	15-03	134568	8/5/2024	4:45PM–6:15PM	5	34
Jiri	Zavorka	02-11: Structural Evaluation, Performance Assessment, Multiphysics Coupling - I	136287	8/8/2024	3:00PM–4:30PM	5	100
Junyang	Zeng	09-06: Waste Management and Environmental Studies	134279	8/5/2024	4:45PM–6:15PM	4	37
Qifeng	Zeng	02-02: Nuclear Fuels and Materials – II	135893	8/5/2024	3:00PM–4:30PM	5	30
Xiaobo	Zeng	08-01: Computational Fluid Dynamics (CFD) and Applications - I	132562	8/5/2024	1:00PM–2:30PM	0	23
Ao	Zhang	02-11: Structural Evaluation, Performance Assessment, Multiphysics Coupling - I	136944	8/8/2024	3:00PM–4:30PM	0	100
Bin	Zhang	01-02: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - II	134269	8/5/2024	3:00PM–4:30PM	1	31

Dacai	Zhang	04-11: SMRs, Advanced Reactors, and Fusion	135466	8/7/2024	4:45PM–6:15PM	3	79
Haojie	Zhang	06-01 Nuclear Codes, Standards, Licensing, & Regulatory Issues Session 1	134375	8/5/2024	1:00PM–2:30PM	3	19
Hengrui	Zhang	02-13: Structural Evaluation, Performance Assessment, Multiphysics Coupling - III	135973	8/8/2024	10:30AM–12:00PM	2	92
Hong	Zhang	15-05	134630	8/6/2024	5:00PM–6:30PM	4	50
Ji	Zhang	15-11	135637	8/6/2024	5:00PM–6:30PM	0	51
Jiahui	Zhang	07-02: Experiments and Analyses - I	130962	8/5/2024	3:00PM–4:30PM	0	27
Jiarui	Zhang	15-01	134437	8/5/2024	1:00PM–2:30PM	3	18
Jiemin	Zhang	05-06: Optimization and Modeling Methods	134745	8/7/2024	3:00PM–4:30PM	3	71
Jinsong	Zhang	15-03	134557	8/5/2024	4:45PM–6:15PM	3	33
Kefan	Zhang	07-10: Simulations and Predictions - II	134988	8/8/2024	3:00PM–4:30PM	5	98
Kefan	Zhang	07-13: SMR and Advanced Reactors - II	136020	8/7/2024	4:45PM–6:15PM	2	73
Lixuan	Zhang	08-07: Computational Fluid Dynamics (CFD) and Applications - VII	135545	8/8/2024	3:00PM–4:30PM	3	102
Mingqian	Zhang	07-02: Experiments and Analyses - I	132452	8/5/2024	3:00PM–4:30PM	5	28
Naizhe	Zhang	09-03: Decommissioning	135612	8/5/2024	4:45PM–6:15PM	3	36
Qi	Zhang	07-08: Numerical Analyses	133402	8/8/2024	8:30AM–10:00AM	0	82
Qi	Zhang	15-02	134529	8/5/2024	3:00PM–4:30PM	3	25
Qi	Zhang	05-06: Optimization and Modeling Methods	135218	8/7/2024	3:00PM–4:30PM	4	71
Qianping	Zhang	01-04: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - IV	134766	8/7/2024	3:00PM–4:30PM	1	71
Ru	Zhang	15-09	135376	8/7/2024	8:30AM–10:00AM	3	59
Ruibo	Zhang	15-07	134957	8/6/2024	1:00PM–2:30PM	2	42
Ruini	Zhang	08-04: Computational Fluid Dynamics (CFD) and Applications - IV	134985	8/8/2024	4:45PM–6:15PM	4	110
Shiqi	Zhang	01-07: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - VII	135651	8/8/2024	10:30AM–12:00PM	5	97
Shucheng	Zhang	12-02 Risk Assessments and Management - Session 2	135092	8/6/2024	5:00PM–6:30PM	4	56
Shuilin	Zhang	02-01: Nuclear Fuels and Materials - I	135483	8/5/2024	1:00PM–2:30PM	2	21
Tian	Zhang	02-12: Structural Evaluation, Performance Assessment, Multiphysics Coupling - II	136107	8/8/2024	4:45PM–6:15PM	2	107
Tianhao	Zhang	05-03: Digitalization and Fault Detection	134965	8/5/2024	4:45PM–6:15PM	2	40
Wei	Zhang	07-04: Experiments and Analyses - III	135404	8/6/2024	5:00PM–6:30PM	4	52
Weihua	Zhang	05-05: Radiation Science and Nuclear Materials	134218	8/8/2024	3:00PM–4:30PM	4	104
Weijian	Zhang	02-03: Nuclear Fuels and Materials - III	132758	8/5/2024	4:45PM–6:15PM	0	37
Xiaoyang	Zhang	08-05: Computational Fluid Dynamics (CFD) and Applications - V	135170	8/8/2024	8:30AM–10:00AM	4	86
Xiuchun	Zhang	01-07: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - VII	135415	8/8/2024	10:30AM–12:00PM	1	96
Xiuchun	Zhang	01-08: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - VIII	135724	8/8/2024	3:00PM–4:30PM	0	105
Yangguang	Zhang	08-05: Computational Fluid Dynamics (CFD) and Applications - V	135052	8/8/2024	8:30AM–10:00AM	1	86
Yifan	Zhang	07-21: Thermal-Hydraulics Research and Applications - II	135095	8/8/2024	3:00PM–4:30PM	4	99
Yiming	Zhang	02-12: Structural Evaluation, Performance Assessment, Multiphysics Coupling - II	133171	8/8/2024	4:45PM–6:15PM	3	107
Yixin	Zhang	15-09	135354	8/7/2024	8:30AM–10:00AM	2	59
Yiyang	Zhang	08-11: Computational Fluid Dynamics (CFD) and Applications - XI	136361	8/8/2024	10:30AM–12:00PM	5	96
Yuanji	Zhang	02-12: Structural Evaluation, Performance Assessment, Multiphysics Coupling - II	134388	8/8/2024	4:45PM–6:15PM	4	107
Yuhao	Zhang	08-08: Computational Fluid Dynamics (CFD) and Applications - VIII	135676	8/8/2024	4:45PM–6:15PM	3	110
Yuhao	Zhang	07-08: Numerical Analyses	136974	8/8/2024	8:30AM–10:00AM	5	83
Yu-Hao	Zhang	07-08: Numerical Analyses	135327	8/8/2024	8:30AM–10:00AM	2	82
Yulong	Zhang	07-05: Experiments and Analyses - IV	135452	8/7/2024	8:30AM–10:00AM	0	60
Zhijiang	Zhang	01-06: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - VI	135392	8/8/2024	8:30AM–10:00AM	5	89
Zhipeng	Zhang	15-14	130470	8/8/2024	4:45PM–6:15PM	2	106
Zihao	Zhang	08-04: Computational Fluid Dynamics (CFD) and Applications - IV	134958	8/8/2024	4:45PM–6:15PM	0	109
Houjian	Zhao	08-07: Computational Fluid Dynamics (CFD) and Applications - VII	135583	8/8/2024	3:00PM–4:30PM	4	102
Houjian	Zhao	12-04 Risk Assessments and Management - Session 4	135769	8/8/2024	8:30AM–10:00AM	0	88
Jian	Zhao	15-09	135397	8/7/2024	8:30AM–10:00AM	5	59
Xiaopeng	Zhao	12-03 Risk Assessments and Management - Session 3	135305	8/7/2024	8:30AM–10:00AM	1	63
Xingyu	Zhao	02-07: Methods Development, Computational Approaches - I	133607	8/7/2024	3:00PM–4:30PM	2	67
Wu	Zhendong	03-01: Control and Monitoring Systems	130137	8/6/2024	1:00PM–2:30PM	0	47
Hua	Zheng	06-02 Nuclear Codes, Standards, Licensing, & Regulatory Issues Session 2	135279	8/5/2024	3:00PM–4:30PM	2	27
Junzheng	Zheng	05-06: Optimization and Modeling Methods	130816	8/7/2024	3:00PM–4:30PM	0	70
Wang	Zhenlan	07-12: SMR and Advanced Reactors - I	131056	8/7/2024	3:00PM–4:30PM	0	65
Lei	Zhong	07-16: Heat Transfer - I	131657	8/7/2024	4:45PM–6:15PM	3	74
Yubao	Zhong	08-09: Computational Fluid Dynamics (CFD) and Applications - IX	136067	8/8/2024	8:30AM–10:00AM	4	87
Yuntao	Zhong	02-03: Nuclear Fuels and Materials - III	133403	8/5/2024	4:45PM–6:15PM	1	37
Ning	Zhonghao	01-06: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - VI	135183	8/8/2024	8:30AM–10:00AM	1	88
Jinghua	Zhou	12-01 Risk Assessments and Management - Session 1	132467	8/6/2024	1:00PM–2:30PM	1	48
Qi	Zhou	02-14: Structural Evaluation, Performance Assessment, Multiphysics Coupling - IV	139495	8/8/2024	3:00PM–4:30PM	3	101
Wen	Zhou	15-03	133410	8/5/2024	4:45PM–6:15PM	2	33
Yanping	Zhou	06-01 Nuclear Codes, Standards, Licensing, & Regulatory Issues Session 1	133177	8/5/2024	1:00PM–2:30PM	2	19
Yuancheng	Zhou	02-07: Methods Development, Computational Approaches - I	135358	8/7/2024	3:00PM–4:30PM	5	68
Yujia	Zhou	07-12: SMR and Advanced Reactors - I	133714	8/7/2024	3:00PM–4:30PM	2	65
Chaoyi	Zhu	04-06: SMRs, Advanced Reactors, and Fusion	130135	8/8/2024	8:30AM–10:00AM	2	81
Di	Zhu	08-10: Computational Fluid Dynamics (CFD) and Applications - X	136177	8/8/2024	10:30AM–12:00PM	3	95
Enping	Zhu	08-05: Computational Fluid Dynamics (CFD) and Applications - V	135080	8/8/2024	8:30AM–10:00AM	2	86
Sheng	Zhu	04-04: SMRs, Advanced Reactors, and Fusion	132001	8/7/2024	3:00PM–4:30PM	1	69
Ye	Zhu	04-01: SMRs, Advanced Reactors, and Fusion	131299	8/5/2024	1:00PM–2:30PM	1	22
Yunlong	Zhu	03-05: Innovations in Nuclear Engineering	136137	8/7/2024	4:45PM–6:15PM	4	77
Ze	Zhu	01-08: Nuclear Plant Operation, Modification, Life Extension, Maintenance, and Life Cycle - VIII	135988	8/8/2024	3:00PM–4:30PM	5	105
Kun	Zhuang	02-13: Structural Evaluation, Performance Assessment, Multiphysics Coupling - III	134828	8/8/2024	10:30AM–12:00PM	4	93
Wenbin	Zou	15-02	133165	8/5/2024	3:00PM–4:30PM	2	25
Liangzhou	Zuo	10-01: Advanced Manufacturing 1	134157	8/5/2024	1:00PM–2:30PM	4	17

ICONE 32

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- **Track1** ● Nuclear Plant Operation & Maintenance, Engineering and Modification, Operation Life Extension (OLE), and Life Cycle
- **Track2** ● Nuclear Fuel and Material, Reactor Physics and Transport Theory and Fuel• Cycle Technology
- **Track3** ● I&C, Digital Control, and Influence of Human Factors
- **Track4** ● SMRs, Advanced Reactors and Fusion
- **Track5** ● Nuclear Safety, Security, and Cyber Security
- **Track6** ● Nuclear Codes, Standards, Licensing, & Regulatory Issues
- **Track7** ● Thermal-Hydraulics and related Safety Analysis
- **Track8** ● Computational Fluid Dynamics (CFD) and Applications
- **Track9** ● Decontamination & Decommissioning, Radiation Protection, & Waste Management
- **Track10** ● Advanced Methods of Manufacturing for Nuclear Reactors and Components
- **Track11** ● Mitigation Strategies for Beyond Design Basis Events
- **Track12** ● Innovative and Smart Nuclear Power Plant Design
- **Track13** ● Risk Assessments and Management
- **Track14** ● Computer Code Verification and Validation
- **Track15** ● Nuclear Education and Public Acceptance
- **Track16** ● Student Paper Competition

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