

Call for Abstracts

The 21st International Conference on Water Chemistry in Nuclear Reactor Systems

Programs: Chemistry Program (P41.09.03) September 9-14, 2018 Hyatt Regency San Francisco, San Francisco, California, USA

Background

The conference on Water Chemistry of Nuclear Reactor Systems focuses on the latest developments in science and technology of water chemistry control in nuclear reactor systems from around the world.

EPRI will be the host organization with the conference being held in San Francisco, CA, USA.

The conference provides a forum where utility professionals, engineers, scientists, university researchers, research institutes, and service organizations come together to address the challenges and opportunities of water chemistry control. Nuclear power plant chemistry plays a critical role in materials integrity, fuel integrity and performance, radiation field management, cooling water sustainability, and the overall economic viability of plant operations. This conference offers an important chemistry technology transfer opportunity for the global nuclear industry.

Safety and reliability remain at the forefront of Light and Heavy Water Reactor operation. Operating experience, imparting important lessons to be shared and learned, as well as industry research and assessments provide a rich resource from which one can distill important information to help improve and optimize plant performance. Participants will have the ability to gain important insights and knowledge during the conference not only from oral presentations, with the opportunity to ask questions, and poster presentations, which offer a more intimate setting for knowledge transfer, but also from the opportunity to directly interact with peers from around the globe during the many breaks and conference dinner.

In addition, a separate but coordinated workshop on radiation chemistry and electrochemistry will be held at the end of the week. This workshop offers participants the opportunity to exchange and discuss important work and information on various aspects of radiation and electrochemistry effects in the nuclear industry.

Who Should Attend

Utility professionals, engineers, scientists, university researchers, research institutes, and service organizations

TECHNICAL TOPIC AREAS: MAIN CONFERENCE

PWR, VVER, AND CANDU/PHWR OPERATING EXPERIENCE

Primary coolants, including dissolved hydrogen, pH, lithium, boric acid, enriched boric acid, potassium, ammonia, zinc, activity buildup, and radiation control

PRESSURIZED WATER SCIENTIFIC STUDIES

Fundamental and laboratory studies, computer modeling and analyses

BWR OPERATING EXPERIENCE

Hydrogen water chemistry, noble metal, zinc, materials corrosion, radiolysis, combustible gas management, activity build-up, and radiation control

BOILING WATER SCIENTIFIC STUDIES

Fundamental and laboratory studies, computer modeling and analyses

SECONDARY WATER CHEMISTRY (STEAM CYCLE)

Steam generator degradation, sludge management, lay-up optimization, flow-accelerated corrosion, corrosion product transport, amines, filming amine, and dispersant

LIFE TIME MANAGEMENT AND PLANT AGING

Chemistry and corrosion issues related to lifetime management and long term operation

AUXILIARY SYSTEMS, WATER AND WASTE TREATMENT SYSTEM

Water purity control, chemistry control in auxiliary systems, monitoring technologies, performance metrics, scale mitigation, mic control, waste water management

CHEMISTRY AND FUEL PERFORMANCE

Effects of chemistry on fuel performance, crud related fuel performance and failure issues –including crud induced power shifts, crud induced localized corrosion, shadow corrosion, tramp uranium and fission products

MAINTENANCE (DECONTAMINATION, CLEANING)

Decontamination, chemical cleaning (steam generator, heat exchanger), fuel cleaning, water chemistry control during long term shutdown

FUTURE TREND AND NEW DEVELOPMENT/SCIENTIFIC BASIS

Chemistry developments for future reactor systems including supercritical water, GEN IV and other advanced systems

CHEMISTRY OPTIMIZATION PROGRAMS AND COMPLIANCE MANAGEMENT

Development and pre-implementation assessment of Utility Chemistry Optimization Programs, and Chemistry Program Management, audits, sampling, monitoring, analysis programs

TECHNICAL TOPIC AREAS: WORKSHOP

- Fundamental research on radiation chemistry & electrochemistry
- Operating experience: chemical reactions in coolant, corrosion prevention, and corrosion environmental monitoring
- Radiation chemistry and electrochemistry of next generation reactors, supercritical reactors, fusion reactors, etc...
- Radiation chemistry and electrochemistry aspects of transport, storage, reprocessing of spent fuel, and treatment and disposal of radioactive waste

Accommodations

Please help support the conference by staying at the Hyatt Regency San Francisco. Attendees are responsible for making their own hotel reservations. To obtain the special group rate of \$279 per night, please mention EPRI NPC Conference.

Hyatt Regency San Francisco 5 Embarcadero Center San Francisco, California, USA, 94111 Phone: 888.591.1234 (Reservations) The Reservation block will be open September 9th, 2017. EPRI Conference Rate: \$279 per night

Special Conference Rate Deadline: August 17, 2018

Technical Contact

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Meeting Planner

Linda Nelson, CMP

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Key Deadlines

November 15, 2017
March 16, 2018
June 30, 2018
August 3, 2018
August 10, 2018

Only one speaker profile per presentation will be needed.

SCHEDULE OF EVENTS

Sunday, September 9, 2018

6:00 pm – 7:30 pm

Registration and Welcome Reception

Monday, September 10, 2018

9:00 am – 5:30 pm General Session

Tuesday, September 11, 2018

8:30 am – 5:30 pm General Session

Wednesday, September 12, 2018

8:30 am – 5:30 pm General Session 6:30 pm – 9:30 pm Banquet Dinner

Thursday, September 13, 2018

8:30 am – 5:30 pm General Session (end of Conf)

Friday, September 14, 2018

8:30 am – 5:30 pm

m Workshop

As part of the conference, there will be dedicated time allotted for a daily poster session and table-top exhibits.

Electronic Abstract Submission

Please submit electronic abstracts of 250 words or less within the listed technical topic areas.

Please submit your abstract to <u>NPC Abstracts</u> or by copying and pasting the following link. https://www.conferenceabstracts.com/cfp2/login.asp?Even tKey=DIWLWXAL.

Product ID:

Month 2017

Electric Power Research Institute

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Sponsorship Opportunities

Please contact Linda Nelson to discuss sponsorship opportunities: Inelson@toplanahead.com

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