

**Times are subject to change. Please refer back for updates.*

| Monday, July 18 | | | | |
|---|------------|----------|---|--|
| Salon A | Start Time | End Time | Presentation Title | Authors |
| Opening Remarks | 8:00 AM | 8:30 AM | | |
| Plenary Panel | 8:30 AM | 9:00 AM | Stress Corrosion Cracking of Ni-Based Alloys in Water Cooled Reactors: From the «Coriou Effect» to the Use of Tracers | Damien Feron |
| | 9:00 AM | 9:30 AM | A Brief History of Zirconium Alloys in Nuclear Applications | Arthur Motta and Bruce Kammenzind |
| | 9:30 AM | 10:00 AM | Nature Will Exploit Any Weakness – Steam Generator Secondary Side Issues | Michael Wright (CNL) |
| | 10:00 AM | 10:20 AM | Morning Break - Sponsored by Studsvik Salon B | |
| Salon A | Start Time | End Time | Presentation Title | Authors |
| PWR SCC Initiation NBAs Chair: Mychailo Toloczko (Pacific Northwest National Laboratory) Vice Chair: Elaine West and Sonya Pemberton | 10:20 AM | 10:45 AM | Cold Spray For Mitigation Of Stress Corrosion Cracking In Alloy 600 | Mike Ickes, Parsi Arash (Westinghouse Electric Company) |
| | 10:45 AM | 11:10 AM | Some Effects Of Surface Finish And LWR Environment On Environmentally-Assisted Crack Initiation In Alloy 182 | Marc Vankeerberghen (SCK CEN), Aki Toivonen, Alice Dinu (RATEN), Anna Hojna (Research Centre Rez), Bojan Zajec (Slovenian National Building and Civil Engineering Institute), Fabio Scenini (University of Manchester), Francisco Perosanz (CIEMAT), Jill Meadows (Jacobs), Liberato Volpe, Michael Grimm (Framatome GmbH), Radek Novotny (Directorate General Joint Research Center, Unit G.I.4-Nuclear Reactor Safety and Emergency Preparedness), Rik-Wouter Bosch (SCK CEN), Stefan Ritter (Paul Scherrer Institute), Zaiqing Que (VTT Technical Research Centre of Finland) |
| | 11:10 AM | 11:35 AM | The Role Of Delta Phase In The Stress Corrosion Cracking (SCC) Of Alloy 718 In Simulated Pressurized Water Reactor (PWR) Primary Water (PW) Environment | Mi Wang (Studsvik Nuclear AB), Gary Was and Miao Song (University of Michigan) |
| | 11:35 AM | 12:00 PM | The SCC Initiation Behavior Of Alloy 600 And SS 316L In Simulated PWR Primary Water Environments With Low Dissolved Hydrogen | Hsiang-Ling Shih, Meiya Wang, Liang-Hsuan Chen, Tsung-Kuang Yeh (National Tsing Hua University) |
| | 12:00 PM | 1:20 PM | Lunch on Your Own | |
| | 1:20 PM | 1:45 PM | Understanding the Effect of Water Chemistry and Surface Grinding on the Stress Corrosion Cracking Initiation of Filler Metal 82 | Nic Supornpaibul, Fabio Scenini, Grace Burke, and Jonathan Duff (University of Manchester), Yun Wang (Hitachi Ltd.) |
| | 1:45 PM | 2:10 PM | Influence Of Cavitation Peening On The Propagation Of Stress Corrosion Cracks With Various Depths In Alloy 182 Exposed To PWR Primary Water | Daniel Brimbal, Antoine Marion, Chris Waskey, Darren Wood (Framatome), Dojun Na (KHNP), Eric Visse, Jean-Paul Massoud (EDF), Maxime Berthaud (Framatome), Mychailo Toloczko, Ryan Bouffieux (PNNL), Sophie Maingot (EDF) |
| Salon C&D | Start Time | End Time | Presentation Title | Authors |
| Irradiation Damage of Plant Materials Chair: Jeremy Busby Vice Chairs: Colin Judge and Jared Smith | 10:20 AM | 10:45 AM | Mechanistic Understanding Of Irradiation Assisted Stress Corrosion Cracking | Gary Was (University of Michigan) |
| | 10:45 AM | 11:10 AM | Characterization Of Materials Showing Large Differences In IASCC Response | Anders Jenssen and Daniel Jadernas (Studsvik Nuclear AB), Kristina Lindgren and Mattias Thuvander (Chalmers University of Technology), Peter Chou (EPRI) |
| | 11:10 AM | 11:35 AM | Acceleration Of Ni2cr Ordered Phase Formation Via Proton Irradiation | Cole Evered (Oregon State University), David Sprouster (Stony Brook), Julie Tucker, Nicholas Aerne (Oregon State University) |
| | 11:35 AM | 12:00 PM | Examination Of IASCC In 304 Stainless Steel Core Shroud From A Commercial Boiling Water Reactor (BWR) | Matthew Olszta, Daniel Schreiber, Danny Edwards, Karen Kruska (PNNL), Peter Chou (EPRI) |
| | 12:00 PM | 1:20 PM | Lunch on Your Own | |
| | 1:20 PM | 1:45 PM | Evaluating Irradiation Damage In CANDU Components By Characterizing Surrogate Material Harvested From The Decommissioned NRU Reactor At Chalk River Laboratories-Application To The CANDU Calandria Tubesheet Degradation | Mitchell Mattucci (CNL), Brian Connolly, Grace Burke (University of Manchester), Jared Smith, Nicolas HUIN, Qiang Wang (CNL) |
| Salon E | Start Time | End Time | Presentation Title | Authors |
| Concrete Chair: Elena Tajuelo Rodriguez (Oak Ridge National Laboratory) Vice Chairs: Nishant Garg (University of Illinois Urbana-Champaign) and Thomas Rosseel (Oak Ridge National Laboratory) | 10:20 AM | 10:45 AM | A Novel Approach To Simulate Realistic Concrete Microstructures Under Irradiation | Amani Cheniour, David Arregui Mena, Elena Tajuelo Rodriguez, Thomas Rosseel, Yann Le Pape, Yujie Li (ORNL) |
| | 10:45 AM | 11:10 AM | Assessment Of Neutron Irradiation Damage In Aggregates | Elena Tajuelo Rodriguez, Jan Ilavsky, Lawrence M Anovitz (ORNL), Michael Cheshire (Chevron), Thomas Rosseel, Yann Le Pape (ORNL) |

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| | 11:10 AM | 11:35 AM | Raman Imaging For High-Resolution Mineral Mapping Of Granite | Nishant Garg (University of Illinois Urbana-Champaign), Amani Cheniour, Elena Tajuelo Rodriguez (ORNL), Krishna Chaitanya Polavaram (University of Illinois Urbana-Champaign), Yann Le Pape (ORNL) |
| | 11:35 AM | 12:00 PM | Thermo-Hygro-Mechanical Modeling Of ASR-Induced Degradation In A Reinforced Concrete Nuclear Containment Vessel | Amit Jain, Benjamin Spencer, Sudipta Biswas (INL) |
| | 12:00 PM | 1:20 PM | Lunch on Your Own | |
| | 1:20 PM | 1:45 PM | Understanding Impact Of Gamma Radiation On C-S-H Using 1H & 29Si NMR | Nishant Garg and Aniruddha Baral (University of Illinois Urbana-Champaign), Elena Tajuelo Rodriguez and Yann Le Pape (ORNL) |
| Salon E | Start Time | End Time | Presentation Title | Authors |
| Cables Chair: Leo Fifield Vice Chairs: Larry Cunningham and Mohammad Ali | 2:10 PM | 2:35 PM | Low Voltage Cable Condition Monitoring To Detect Global Degradation And Localization Techniques For Aging Management At Nuclear Power Plants | Andrew Mantey (EPRI), David Rouison, Lindsay Vasilak (Kinectrics), Pierre Simo (Exelon), Sarajit Banerjee (Kinectrics) |
| | 2:35 PM | 3:00 PM | Evaluation Of Specific Energy Absorption Rate In Aged EPR-Insulated Cables Using Finite Element Analysis | Sean O'Brien, Brian Hinderliter, Margaret Elmer-Dixon, and Melissa Maurer-Jones (University of Minnesota - Duluth), Robert Duckworth (ORNL) |
| | 3:00 PM | 3:25 PM | Determination Of Activation Energies Of Thermally Aged Nuclear Cable Insulation Materials | Donghui Li, Andy Zwoster, Leo Fifield, Madhusudhan Pallaka, Mychal Spencer, Tucker Bisel (PNNL), Yelin Ni |
| | 3:25 PM | 3:45 PM | Afternoon Break - Sponsored by Dominion Engineering, Inc. Salon B | |
| | 3:45 PM | 4:10 PM | Oxygen Consumption As Sensitive Measure Of Polymer Electrical Cable Insulation Aging | Yelin Ni, Andy Zwoster, Donghui Li , Jonathan D Egbert, Katarzyna Grubel, Leo Fifield, Madhusudhan Pallaka, Mychal Spencer, Tucker Bisel (PNNL) |
| | 4:10 PM | 4:35 PM | Evaluation Of Copper Catalytic Effects In Cable Insulation Polymers | Trevor Toll, Casey Sexton, Codi Ferree, Patrick Ward (AMS Corporation) |
| | 4:35 PM | 5:00 PM | Diffusion Limited Oxidation Of XLPE And EPR Nuclear Electrical Cable Insulation | Mychal Spencer, Andy Zwoster, Donghui Li, Leo Fifield, Madhusudhan Pallaka, Tucker Bisel (PNNL), Yelin Ni |
| Salon A | Start Time | End Time | Presentation Title | Authors |
| Plant Chemistry - Day 1 Chair: Michael Wright (CNL) Vice Chairs: Catherine Guerre and Peter Chou (EPRI) | 3:00 PM | 3:25 PM | SCC Initiation And Growth In PWR Primary Water Containing KOH Vs. Lioh | Peter Andresen (JLN Consulting), Peter Chou (EPRI) |
| | 3:25 PM | 3:45 PM | Afternoon Break - Sponsored by Dominion Engineering, Inc. Salon B | |
| | 3:45 PM | 4:10 PM | Potassium Hydroxide For PWR Primary Coolant pH Control: EPRI Program | Keith Fruzzetti, Peter Chou, Dennis Hussey, David Perkins (EPRI) |
| | 4:10 PM | 4:35 PM | The Effect Of Potassium Hydroxide Primary Water Chemistry On The IASCC Behavior Of 304 Stainless Steel | Mike Ickes (Westinghouse Electric Company) |
| | 4:35 PM | 5:00 PM | Comparing Stress Corrosion Cracking Initiation Times Of Sensitized 304 Stainless Steel In KOH And Lioh Primary Water Chemistries With High Levels Of Dissolved Oxygen | Stuart Medway (Jacobs), Peter Chou (EPRI) |
| | 5:00 PM | 5:25 PM | SCC Initiation and Growth Rate Response of A-286 in B/Li and B/K Solutions at 340C | Peter Andresen (Andresen Consulting), Peter Chou (EPRI) |
| Salon C&D | Start Time | End Time | Presentation Title | Authors |
| Testing on Irradiated Materials Chair: Gary Was (University of Michigan) Vice Chairs: Anders Jenssen (Studsvik Nuclear AB) and Lefu Zhang | 3:00 PM | 3:25 PM | Acceleration Of 316L Stainless Steel Corrosion By Proton-Irradiation-Induced Displacement Damage In Hydrogenated Steam | Rigel Hanbury, Gary Was (University of Michigan) |
| | 3:25 PM | 3:45 PM | Afternoon Break - Sponsored by Dominion Engineering, Inc. Salon B | |
| | 3:45 PM | 4:10 PM | Cracking Behavior Of Decommissioned Baffle Plates In Light Water Reactor Environment | Yiren Chen (Argonne National Laboratory), Appajosula Rao (US NRC), Bogdan Alexandreanu (Argonne National Laboratory) |
| | 4:10 PM | 4:35 PM | Effect Of Water Chemistry On Crack Growth Rates In Neutron Irradiated X-750 And XM-19 | John Jackson, Drew Johnson, Michael Heighes (INL), Peter Andresen (Andresen Consulting), Robert Carter (EPRI) |
| | 4:35 PM | 5:00 PM | Investigations On The Effect Of Cold Work And Proton Irradiation On The EAC Behavior Of Austenitic Stainless Steels | Matthias Herbst (Framatome) |
| Tuesday, July 19 | | | | |
| Salon A | Start Time | End Time | Presentation Title | Authors |
| New and Novel Manufacturing Methodolgies (AM, HIP, Weld) Chair: Myles Connor (GE Research) Vice Chairs: Fabio Scenini (University of Manchester), Matthew Olszta (PNNL), and Mike McMurtrey | 8:20 AM | 8:45 AM | Elucidating The Effect Of Build And Build Direction On The Corrosion Of Selective Laser Sintered Additively Manufactured 316L Stainless Steel | Elizabeth Getto, Elizabeth Farna, Jonathan Gibbs, Jordan McLaughlin, Michelle Koul, Raymond Santucci, Taylor Gray (United States Naval Academy) |
| | 8:45 AM | 9:10 AM | Hydrothermal Corrosion And High Temperature Steam Oxidation Of Additively Manufactured And PM-HIP Fecral Alloys | Rajnikant Umretiya, Andrew Hoffman (GE Research), Dan Lutz (Global Nuclear Fuel Americas), Evan Dolley, Nikole Kucza, Raul Rebak (GE Research), Russ Fawcett (GNF), Vipul Gupta (GE Research) |

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| | 9:10 AM | 9:35 AM | Microstructure And Mechanical Properties Of Additively Manufactured 316L Stainless Steel. | Karyn Cooper, Jennifer Borg, Stuart Medway (Jacobs) |
| | 9:35 AM | 10:00 AM | Performance Of Laser Additively Manufactured Alloys In Light Water Reactor Environments | Bogdan Alexandreanu, Xuan Zhang and Yiren Chen (Argonne National Laboratory) |
| | 10:00 AM | 10:20 AM | Morning Break - Sponsored by GE Research Salon B | |
| | 10:20 AM | 10:45 AM | Preliminary Results From Assessment Of Advanced Manufacturing Technologies (AMT) For Reactor Materials And Components | Mark Yoo, Matthew Hiser, Amy Hull (USNRC) |
| | 10:45 AM | 11:10 AM | PWSCC Crack Growth Rate Testing Of Wrought And HIP Alloy 625 In A PWR Environment. | Jennifer Borg, Stuart Medway, Felicity Pickering, Charlotte Smith (Jacobs) |
| | 11:10 AM | 11:35 AM | Weldability And Corrosion Properties Of Austenitic Stainless Steel And Low Alloy Steel Manufactured Using PM-HIP Method | Gidong Kim, Kang-myung Seo, Sang Woo Song, Seunghyun Kim, Yong-joon Kang (Korea Institute of Materials Science) |
| Salon C&D | Start Time | End Time | Presentation Title | Authors |
| SCC Testing under BWR and other Chemistry Chair: Peter Andresen (Andresen Consulting) Vice Chairs: Robert Carter and Ziqing Zhai (PNNL) | 8:20 AM | 8:45 AM | Proposed Crack Growth Rate Disposition Curves For Stress Corrosion Cracking Of Alloy 82 In BWR Environments | Peter Andresen (Andresen Consulting), Katsuhiko Kumagai, Robert Carter |
| | 8:45 AM | 9:10 AM | Evaluation On Applicability Of Nickel-Base Alloy Weld Materials With High Chromium Content In BWR Environment | Takahiro Hayashi, Daiki Tanaka, Hidenori Takahashi, Yoshinori Katayama, Yumiko Tsuchiya (Toshiba Energy Systems & Solutions Corporation) |
| | 9:10 AM | 9:35 AM | SCC Of Alloy 82 Weld Metal In BWR Water | Peter Andresen (JLN Consulting) |
| | 9:35 AM | 10:00 AM | The Effect Of Specimen Size On The Stress Corrosion Crack Growth Rate Of 10% Cold Worked Type 316L In BWR Environment | Johan Stjärnsäter, Anders Jenssen (Studsvik Nuclear AB), Elena Calota (Swedish Radiation Authority), Hannah Johansson (Forsmark Kraftgrupp AB) |
| | 10:00 AM | 10:20 AM | Morning Break - Sponsored by GE Research Salon B | |
| | 10:20 AM | 10:45 AM | SCC Growth In BWR-NWC Of A Low-Alloy Steel With Intermediate S-Content Tested At K Between 50 And 70 Mpa√M | Anders Jenssen, Martin Bjurman (Studsvik Nuclear AB), Björn Forssgren (Ringhals AB), Elena Calota (Swedish Radiation Safety Authority), Johan Stjärnsäter (Studsvik Nuclear AB) |
| | 10:45 AM | 11:10 AM | Contribution Of Cathodic Reaction Inside Crevice On Propagation Of Crevice Corrosion Of 304L SS In Chloride Solution | Yutaka Watanabe, Kazuki Yakata (Tohoku University), Yuichi Fukaya (Tokyo Electric Power Company Holdings, Inc.) |
| Salon E | Start Time | End Time | Presentation Title | Authors |
| Modelling of SCC, Fatigue and Other Material Degradation Phenomena Chair: Yongfeng Zhang Vice Chairs: Benjamin Anglin (Naval Nuclear Laboratory) and Suraj Persaud | 8:20 AM | 8:45 AM | Alloy 182 Models for the Prediction of the Susceptibility to SCC of BMI Nozzle J-welds | Thierry Couvant (EDF R&D) |
| | 8:45 AM | 9:10 AM | Experimental Characterization of Grain Boundary Fracture Properties in a FeCr12Ni26Si3 Austenitic Stainless Steel Oxidized in PWR Environment | Rachma Azihari, Jérémy Hure (CEA Saclay), Marc Legros (CEMES-CNRS), Benoît Tanguy (CEA Saclay) |
| | 9:10 AM | 9:35 AM | Phase Field Modeling Of Oxide Growth In An Aged Fe-Cr | Julie Tucker (Oregon State University), Aashique Rezwan (University of Wisconsin Madison), Burkan Isgor, Kofi Oware Sarfo (Oregon State University), Larry Aagesen Jr (INL), Liney Arnadottir (Oregon State University), Yongfeng Zhang (University of Wisconsin Madison) |
| | 9:35 AM | 10:00 AM | Modeling Stress Corrosion Cracking With Explicit 3D Grain Microstructure | Benjamin Anglin, Thomas Webb (Naval Nuclear Laboratory) |
| | 10:00 AM | 10:20 AM | Morning Break - Sponsored by GE Research Salon B | |
| | 10:20 AM | 10:45 AM | Modelling Of IGSCC With Adaptive Framework | Micke Sedlak (KTH Royal Institute of Technology), Pål Efsing (Ringhals AB) |
| | 10:45 AM | 11:10 AM | K / Size Effects on the Crack Growth Rate of Irradiated Stainless Steels of Boiling Water Reactors | Masato Koshiishi (Nippon Nuclear Fuel Development Co., Ltd.), Ryoji Obata (Hitachi-GE Nuclear Energy, Ltd.), Shigeaki Tanaka (Toshiba Energy Systems & Solutions Corporation) |
| Wednesday, July 20 | | | | |
| Salon A | Start Time | End Time | Presentation Title | Authors |
| PWR SCC CG NBAs Chair: Bogdan Alexandreanu (Argonne National Laboratory) Vice Chairs: Eric Focht (US Nuclear Regulatory Commission) and Takaharu Maeguchi | 8:20 AM | 8:45 AM | Effect Of Chromium Dilution On SCC Growth Rate In Inconel Welds | Ainsley Pinkowitz, David Morton, John Mullen, Tyler Moss (Naval Nuclear Laboratory) |
| | 8:45 AM | 9:10 AM | SCC Of Alloy 152/52 Weld Metals, Weld Repairs, Dilution Zones And Hazs | Peter Andresen (JLN Consulting), Chris Wax (EPRI) |
| | 9:10 AM | 9:35 AM | SCC Behavior Of Alloy 52M Weld Butter On SA-508 LAS From The Double-Repair Dissimilar Metal Weld In A PWR Environment | Bogdan Alexandreanu, Yiren Chen (Argonne National Laboratory) |

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| | 9:35 AM | 10:00 AM | Effect Of Heat Treatment, Cold Working And Long-Term Ageing In Air On The Stress Corrosion Cracking Growth Rate In Simulated PWR Primary Water For Commercial TT Alloy 690 And Alloy 52 | Toshio Yonezawa (Retired Tohoku University) |
| | 10:00 AM | 10:20 AM | Morning Break - Sponsored by Kairos Power Salon B | |
| | 10:20 AM | 10:45 AM | Crack Growth Rate Testing Of Alloy 82 In BWR Environments | Anders Jenssen, Johan Stjärnsäter (Studsvik Nuclear AB), Katsuhiko Kumagai (Tokyo Electric Power Company Holdings) |
| Salon C&D | Start Time | End Time | Presentation Title | Authors |
| Plant Chemistry - Day 2 Chair: Michael Wright (CNL) Vice Chairs: Catherine Guerre and Peter Chou (EPRI) | 8:20 AM | 8:45 AM | Understanding The Effects Of Zn Injection And OLNC-Treatment On 316 Stainless Steel Oxide Under Simulated BWR Conditions | Dora Capone, Ben Spencer, Fabio Scenini, Grace Burke (University of Manchester), Hideyuki Hosokawa (Hitachi Ltd.), Jonathan Duff (University of Manchester), Liberato Volpe, Makoto Nagase, Tsuyoshi Ito (Hitachi-GE), Yoichi Wada (Hitachi Ltd.) |
| | 8:45 AM | 9:10 AM | Investigating The Effect Of Phosphates On Lead Induced Stress Corrosion Cracking Of Alloy 690TT | Fabio Scenini, Giulia Mazzei, Grace Burke (University of Manchester), Tony Horner (Rolls Royce) |
| | 9:10 AM | 9:35 AM | Water Chemistry In Fusion Cooling Systems: Assessment Of Borated Water For The DTT Vacuum Vessel | Claudia Gasparrini (Consorzio RFX), Emanuela Martelli (Dipartimento FSN, ENEA C. R. Frascati), Giuseppe Scatigno (EDF), Luigi Di Pace (Dipartimento FSN, ENEA C. R. Frascati), Mauro Dalla Palma (Consorzio RFX), Nicholas Terranova (Dipartimento FSN, ENEA C. R. Frascati), Piergiorgio Sonato, Roberto Rizzieri (Consorzio RFX), Rosaria Villari, Selanna Roccella (Dipartimento FSN, ENEA C. R. Frascati) |
| | 9:35 AM | 10:00 AM | Irradiation-Assisted Stress Corrosion Cracking Of PWR-Irradiated Type 347 Stainless Steel | Mike Ickes (Westinghouse Electric Company), Dong Lijin, Gary Was (University of Michigan) |
| | 10:00 AM | 10:20 AM | Morning Break - Sponsored by Kairos Power Salon B | |
| | 10:20 AM | 10:45 AM | Investigation on Release Rates of Vacuum Tight Threaded Junction (VTTJ) Samples Exposed to Ultrapure Water | Caterina Cavallini, Claudia Gasparrini, Mauro Dalla Palma, Roberto Rizzieri, Piero Agostinetti, Matteo Zaupa, Piergiorgio Sonato (Consorzio RFX), Vaentina Zin, Francesco Montagner, Enrico Miorin (Istituto di Chimica della Materia Condensata e di Tecnologie per l'Energia - CNR), Denis Badocco, Paolo Pastore (Dipartimento di Scienze Chimiche - UNIPD), Alessandro Minarello (Istituto Nazionale di Fisica Nucleare - INFN) |
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| Salon E | Start Time | End Time | Presentation Title | Authors |
| Mechanistic Understanding Chair: Thierry Couvant (EDF R&D) Vice Chairs: Bryan Miller, Grace Burke (University of Manchester), and Karen Kruska (PNNL) | 8:20 AM | 8:45 AM | Effect Of Residual Strain On Short Time Oxidation Kinetics In PWR Simulated Primary Water | Rachel English, Bryan Webler (Carnegie Mellon University), John Savchik, Kevin Fisher (Naval Nuclear Laboratory) |
| | 8:45 AM | 9:10 AM | The Effect Of Strain On Surface Residual Stress In Alloy 600 Tensile Specimens | Karyn Cooper, Jennifer Borg, Mark Chatterton, Sonya Pemberton, William Brayshaw, Stuart Medway (Jacobs) |
| | 9:10 AM | 9:35 AM | Effect Of Applied Stress On The Selective Oxidation Of Ni-Base Alloys Exposed To PWR Primary Water And Rhines Pack Environments | Karen Kruska, Brian Riley, Daniel Schreiber, Matthew Olszta, Ziqing Zhai (PNNL) |
| | 9:35 AM | 10:00 AM | Intergranular Oxidation Of Unstressed Alloy 600 SA And Alloy 600TT In PWR Primary Water | Peter Chou (EPRI), Daniel Schreiber, Karen Kruska, Matthew Olszta, Ziqing Zhai (PNNL) |
| | 10:00 AM | 10:20 AM | Morning Break - Sponsored by Kairos Power Salon B | |
| | 10:20 AM | 10:45 AM | Intergranular Oxidation and Oxygen Transport in Ni-20Cr During Exposure to Model Dry and Wet Oxidation Environments | Martin Weiser, Daniel Schreiber, Karen Kruska, Mark Engelhard, Matthew Olszta (PNNL) |
| | 10:45 AM | 11:10 AM | Characterization Of Grain Boundary Cavity Evolution During Long-Term Crack Initiation Testing Of Cold Worked Alloy 690 In Simulated PWR Primary Water | Ziqing Zhai, Jing Wang, Matthew Olszta, Mychailo Toloczko, Stephen Bruemmer (PNNL) |
| | 11:10 AM | 11:35 AM | Effect Of Localized Stress On Initiation Of IGSCC | Takaharu Maeguchi (Mitsubishi Heavy Industries, Ltd.) |
| | 11:35 AM | 12:00 PM | Dealloying And Its Relationship To SCC Of Alloy 800 And Ni-Fe-Cr Alloys In Boiling Caustic Solutions | Hooman Gholamzadeh, Adil Shaik, Bander Alsekhan, Kevin Daub, Mark Daymond, Matthew Topping, Suraj Persaud (Queen's University) |
| | 12:00 PM | 1:20 PM | Lunch on Your Own | |
| | 1:20 PM | 1:45 PM | Long-Term Corrosion Behavior Of Borated Stainless Steel In Simulated Spent Fuel Pool Environment | Dae Hyeon Park (Ulsan National Institute of Science and Technology), Donghee Lee (KHNP), Ji Hyun Kim, JUNHYUK HAM (Ulsan National Institute of Science and Technology), Kiyoun Kim (KHNP), Seung Chang Yoo (Ulsan National Institute of Science and Technology), Yongdeog Kim (KHNP), YUNJU LEE (Ulsan National Institute of Science Technology) |

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| | 1:45 PM | 2:10 PM | Friction Stir Welding – An Advanced Approach To Repair Nuclear Power Plant Components | Wei Tang, Maxim Gussev, Xiang Chen, Thomas Rosseel (ORNL) |
| Salon E | Start Time | End Time | Presentation Title | Authors |
| Plant Operating Experience Chair: Pål Efsing (Ringhals AB) Vice Chair: Ian DE CURIERES (IRSN) | 2:35 PM | 3:00 PM | Leveraging Risk Insights For Aging Management At Nuclear Power Plants | Emma Wong, Andrew Mantey, Jean Smith (EPRI), Samuel Johnson |
| | 3:00 PM | 3:25 PM | Microstructure Characterization Of Alloy 600TT Steam Generator Tubing | Brent Capell (EPRI), Amanda Jenks, Charles Marks (Dominion Engineering, Inc.) |
| Salon A | Start Time | End Time | Presentation Title | Authors |
| Advanced Reactors and SMRs Chair: George Young (Kairos Power) Vice Chairs: Lindsay O'Brien (Los Alamos National Laboratory) and Theodore Besmann (University of South Carolina) | 1:20 PM | 1:45 PM | Investigation Of Structural Materials And Techniques For Microreactor Fabrication | Lindsay O'Brien (Los Alamos National Laboratory) |
| | 1:45 PM | 2:10 PM | Assessing Environmentally Assisted Cracking Of Structural Alloys In Molten Salts | George Young, Andrew Brittan, Anne Demma, Ekaterina Tsotsos (Kairos Power), Jake Quincey, Julie Tucker (Oregon State University), Micah Hackett, Pit Schulze (Kairos Power), Samuel Briggs (Oregon State University) |
| | 2:10 PM | 2:35 PM | Assessing Stainless Steel Compatibility In Flowing Fluoride Salts | Bruce Pint, Cory Parker, Dino Sulejmanovic, Rishi Pillai, Yi Feng Su (ORNL) |
| | 2:35 PM | 3:00 PM | Development And Application Of A Thermochemical Database (MSTDB-TC) To Modeling Corrosion In Molten Salt Reactors | Theodore Besmann, Amir Mofrad, Jacob Yingling (University of South Carolina), Jake McMurray (ORNL), Johnathan Ard, Juliano Schorne-Pinto (University of South Carolina), Kaitlin Johnson (ORNL), Mahmut Aslani, Matthew Christian (University of South Carolina) |
| | 3:00 PM | 3:25 PM | High Temperature Corrosion And Stress Corrosion Investigations Of SS316 In Molten Nitrate Salt | George Young, Andrew Brittan (Kairos Power), Andrew Dong (University of California at Berkeley), Anne Demma, Augustus Merwin, Camilla Stitt, Ekaterina Tsotsos, Micah Hackett (Kairos Power), Peter Hosemann (University of California Berkeley), Pit Schulze, Sam Mossadeghian (Kairos Power) |
| | 3:25 PM | 3:45 PM | Afternoon Break | |
| Salon C&D | Start Time | End Time | Presentation Title | Authors |
| Special Topics Chair: Gabriel Ilevbare Vice Chairs: Hong Pyo Kim and Nicolas Huin | 1:20 PM | 1:45 PM | Corrosion Behavior Of Welded Austenitic Stainless Steels In Coastal Atmospheric Environment | Mei-Lin Chen, Tsung-Kuang Yeh (National Tsing-Hua University) |
| | 1:45 PM | 2:10 PM | Effect Of Microstructure On Mechanical Behaviour Of Ni-Base Alloy Dissimilar Metal Welds | Noora Hytönen, Yanling Ge, Zaiqing Que, Sebastian Lindqvist, Jari Lydman, Ulla Ehrnsten (VTT Technical Research Centre of Finland), Paavo Rautala (Teollisuuden Voima Oyj), Iikka Virkkunen (Aalto University), Pål Efsing (Ringhals AB). |
| | 2:10 PM | 2:35 PM | Effects Of A' On Corrosion And Mechanical Properties In Fecral Alloys | Andrew Hoffman (GE Global Research), Dan Lutz (Global Nuclear Fuel Americas), Evan Dolley, Rajnikant Umretiya, Raul Rebak, Richard Blair (GE Global Research), Russ Fawcett (GNF), Timothy Jurewicz (GE Global Research) |
| | 2:35 PM | 3:00 PM | Tests On Chloride-Induced Stress Corrosion Cracking In Austenitic Stainless Steel Welds For Dry Storage Canister Application | Seunghyun Kim, Chang-Young Oh, Dong-Jin Oh, Gidong Kim, Sang Woo Song (Korea Institute of Materials Science) |
| | 3:25 PM | 3:45 PM | Afternoon Break Salon B | |
| Salon C&D | Start Time | End Time | Presentation Title | Authors |
| Life Beyond 80 Chair: Thomas Rosseel (Oak Ridge National Laboratory) Vice Chairs: Bogdan Alexandreanu (Argonne National Laboratory), Frank Garner (Radiation Effects Consulting) and Matthew Hiser (USNRC) | 3:45 PM | 4:10 PM | Long-Term Aging Behavior Of Cold-Worked Alloy 690 In Simulated PWR Primary Water | Ziqing Zhai, Matthew Olszta, Mychailo Toloczko (PNNL) |
| | 4:10 PM | 4:35 PM | Stress Corrosion Cracking Behaviour Of Thermally Aged Alloy 182 | Siddharth Suman, Hans-Peter Seifert, Philippe Spatig, Stefan Ritter (Paul Scherrer Institute) |
| | 4:35 PM | 5:00 PM | Long-Term Performance Of Alloy 690 In LWR Environment | Bogdan Alexandreanu, Wei-Ying Chen, Xuan Zhang, Yiren Chen (Argonne National Laboratory) |
| | 5:00 PM | 5:25 PM | Long-Term Performance Of High-Cr, Nickel-Based Weld Alloys In LWR Environments | Bogdan Alexandreanu, Xuan Zhang, Yiren Chen (Argonne National Laboratory) |
| Salon B | Start Time | End Time | Presentation Title | Authors |
| Poster Session Reception Chair: David Morton (NNL) | | | A Hydrothermal Phase Diagram For The Low-Temperature Synthesis Of Non-Stoichiometric Nickel Ferrite Powders | Bhavani Sasank Nagothi, Kathleen Dunn (SUNY Polytechnic Insistute (CNSE), John Arnason (Fluor Marine Propulsion, LLC) |
| | | | A Novel In-Situ Raman Spectroscopy Corrosion Facility: Oxide Development On 304L Stainless Steel In High Temperature Oxygenated Solutions | Vindel Ramsundar, Suraj Persaud, Mark Daymond, Kevin Daub (Queen's University) |
| | | | Enhanced Resistance To Corrosion And Irradiation Of Nanostructured Steels Fabricated Using Severe Plastic Deformation | Andrew Hoffman, Raul Rebak (GE Research), Maalavan Arivu, Jiaqi Duan, Haiming Wen (Missouri University of Science & Technology) |

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| | | | Examining Alkali Silica Reaction Of Radiation-Damaged Quartz And Feldspar Minerals | Quirina Roode-Gutzmer, Shavkat Akhmadaliev, Astrid Barkleit, Christiane Rößler, Stafan Schymura, Thorsten Stumpf (Helmholtz Zentrum Dresden Rossendorf) |
| | | | Exploring The Influence Of Surface Machining Treatments On Microstructure And Environmentally Assisted Cracking On Alloy 182 | Liberato Volpe, Grace Burke, Jonathan Duff, Fabio Scenini (University of Manchester) |
| | 5:30 PM | 7:00 PM | Manufacturing And Microstructural Factors Impacting The PWSCC Resistance Of PM-HIP Alloy 625 | Timothy Watkins, Philip Platt (Rolls-Royce) |
| | | | Microstructural Characterization of Alloy 182 Weld Metal in the Context of its Stress Corrosion Cracking Behavior in Zinc Water Chemistry of Light Water Reactors | Adrianna Mackiewicz, Kai Chen, Stefan Ritter, Hans-Peter Seifert (Paul Scherrer Institute), Sannakaisa Virtanen (University Erlangen Nuremburg) |
| | | | Radiolysis Modeling Along A PWR Fuel Assembly: A Parametric Analysis | Damien Kaczorowski (Framatome) |
| | | | Study Of The Effect Of Advanced Machining Processes On The Corrosion Behavior Of An Austenitic Stainless Steel 316 L | Alberto Sáez, Francisco Perosanz, Maria Luisa Ruiz-Lorenzo (CIEMAT) |
| | | | The Effect Of Hydrogen And Oxidation Induced Strains On Corrosion Performance Of Zircaloy | Sarah Sherry, Aidan Cole-Baker, Mark Fenwick, Alistair Garner, Jennifer Pryde, Abigail Savage (Jacobs) |
| | | | Understanding Fouling Phenomena Of Venturi Flowmeter And Its Remedial Technology In Nuclear Power Plants | Dongseok Lim (FNC Technology Co., Ltd) |

Thursday, July 21

| Salon A | Start Time | End Time | Presentation Title | Authors |
|---|------------|----------|---|---|
| Life Beyond 80 - Day 2 Chair: Thomas Rosseel (Oak Ridge National Laboratory) Vice Chairs: Bogdan Alexandreanu (Argonne National Laboratory), Frank Garner (Radiation Effects Consulting) and Matthew Hiser (USNRC) | 8:20 AM | 8:45 AM | LWR Aging Management For Life Beyond 80 | Thomas Rosseel, Elena Tajuelo Rodriguez (ORNL), Leo Fifield (PNNL), Xiang Chen (ORNL) |
| | 8:45 AM | 9:10 AM | The Complexity And Challenges Of Irradiation-Induced Phase Instability Phenomenon In Nuclear Power Plant Components | Mihail Merezhko, Diana Merezhko (Insitute of Nuclear Physics), Frank Garner (Radiation Effects Consulting), Maxim Gussev, Thomas Rosseel (ORNL) |
| | 9:10 AM | 9:35 AM | Life Beyond 80: Can Concrete Degradation’ Synergetic Modes Become Showstoppers? | Yann Le Pape, Amani Cheniour, David Arregui Mena, Elena Tajuelo Rodriguez, Paula Bran Anleu, Thomas Rosseel, Yujie Li (ORNL) |
| | 9:35 AM | 10:00 AM | Online Test / Verification Of Cable Insulation Condition | Samuel Glass, Aishwarya Sriraman, Leo Fifield, Mychal Spencer (PNNL) |
| | 10:00 AM | 10:20 AM | Morning Break Salon B | |
| | 10:20 AM | 10:45 AM | Regulatory Research On The Aging Management Of Structures, Systems, And Components In Nuclear Power Plants Supporting Long Term Operation | Mark Yoo, Matthew Hiser, Eric Focht, Amy Hull, Carol Moyer, Robert Tregoning (USNRC) |
| | 10:45 AM | 11:10 AM | EPRI’S Approach To Longer Term Operations | Emma Wong, Andrew Mantey, Jean Smith (EPRI), Samuel Johnson |
| | 11:10 AM | 11:35 AM | U.S. Perspective On Harvesting And Archiving Of Aged Components To Improve Materials Degradation Knowledge And Inform Aging Management | Matthew Hiser (USNRC), Peng Xu, Colin Judge (INL), Jean Smith, (EPRI), Robert Tregoning (USNRC) |
| | 11:35 AM | 12:00 PM | Environmental Degradation Of Materials Considered For Accident Tolerant Fuels In Light Water Reactors. | Raul Rebak, Andrew Hoffman (GE Research), Dan Lutz, Russ Fawcett, Yang Lin (Global Nuclear Fuel) |
| | 12:00 PM | 1:20 PM | Lunch on Your Own | |
| | 1:20 PM | 1:45 PM | Long Range Ordering In Thermally Treated And Cold-Worked Alloy 690 | Daniel Brimbal, Annie Pagès, Bénédicte Gueraud (Framatome), Cecilie Duhamel (Centre des Materiaux - MINES ParisTech), Claude Benhamou (Materials Engineering Consulting), Michael Burke (EPRI), Pierre Joly (Framatome) |
| | 1:45 PM | 2:10 PM | Effect Of Thermal Aging On The Microstructure And Mechanical Properties Of High-Ni And Ni-Base Alloys | Caitlin Huotilainen, Noora Hytönen (VTT Technical Research Centre of Finland), Petri Kytömäki (Fortum Power and Heat Oy), Petteri Lappalainen (VTT Technical Research Centre of Finland), Ritva Korhonen, Santtu Huotilainen (Fortum Power and Heat Oy), Yanling Ge, Zaiqing Que (VTT Technical Research Centre of Finland) |
| | 2:10 PM | 2:35 PM | Discussion On Long Range Ordering Of Ni-Based Alloys Used In BWR Environment | Yun Wang, Ryoji Obata, Shinichi Ishioka (Hitachi-GE Nuclear Energy, Ltd.) |
| Salon C&D | Start Time | End Time | Presentation Title | Authors |

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| PWR Stainless Steel Testing Chair: Tyler Moss (Naval Nuclear Laboratory) Vice Chairs: Jenifer Borg (Jacobs) and Mitch Mattucci (CNL) | 8:20 AM | 8:45 AM | The Temperature Functionality Of Sensitized 304 Stainless Steel SCC Growth In Deaerated Water | David Morton, Tyler Moss (Naval Nuclear Laboratory) |
| | 8:45 AM | 9:10 AM | Proposed Crack Growth Rate Disposition Curves For Stress Corrosion Cracking Of Stainless Steel In PWR Environments | Peter Andresen (Andresen Consulting), Do Jun Shim (EPRI), Takumi Terachi (Kansai Electric), Takuyo Yamada (INSS), Yoshiteru Nomura (MHI) |
| | 9:10 AM | 9:35 AM | Effect Of Dissolved Oxygen On The SCC Susceptibility And Oxidation Of Cold-Worked 316L SS In PWR Primary Water | Thalita De Paula, Catherine Guerre (CEA), Cécilie Duhamel (Centre des Matériaux - Mines Paristech), Frédéric Datcharry (CEA), Ian De Curieres (IRSN), Jérôme Crepin (Centre des Matériaux - Mines Paristech), Marc Maisonneuve (CEA) |
| | 9:35 AM | 10:00 AM | Non-Arrhenius Stress Corrosion Crack Growth Behavior Of 304 Stainless Steel In Deaerated Water | Tyler Moss, David Morton, Denise Paraventi, Justin Hesterberg (Naval Nuclear Laboratory) |
| | 10:00 AM | 10:20 AM | Morning Break Salon B | |
| | 10:20 AM | 10:45 AM | High Temperature Retardation Crack Tip Characterization of 304 Stainless Steel in Deaerated Water | Robert Morris, David Morton, Kevin Fisher, Tyler Moss (Naval Nuclear Laboratory) |
| | 10:45 AM | 11:10 AM | Stress Corrosion Cracking Testing Of Laboratory Processed 304/304L Stainless Steel Elbows And Pipe | Denise Paraventi, Justin Hesterberg, Steph Healey, Tyler Moss (Naval Nuclear Laboratory) |
| | 11:10 AM | 11:35 AM | Effect of Complex Deformation on Corrosion Fatigue and Stress Corrosion Cracking of 304/304L Stainless Steel Elbows in Deaerated and Aerated Water | William Moshier, Kevin Fisher, Justin Hesterberg, Denise Paraventi (FMP, LLC/Naval Nuclear Laboratory) |
| | 11:35 AM | 12:00 PM | Multi-Axial Fatigue Specimen Design, Testing And Fracture Analysis | Eleanor Grieveson, Paul Onwuarolu, Peter Gill, Ben Coult and Alistair Garner (Jacobs) |
| | 12:00 PM | 1:20 PM | Lunch on Your Own | |
| | 1:20 PM | 1:45 PM | Study On Hold Time Effects On Standard Fatigue Specimens And Component Relevant Loading Conditions At Welds Using Bending Specimens From Welded Pipes | Michael Grimm, Matthias Herbst (Framatome) |
| | 1:45 PM | 2:10 PM | Environmental Assisted Fatigue Of A Hollow Cylindrical Specimen In Simulated LWR Water | Mustafa Subasic (KTH Royal Institute of Technology), Jean Smith (EPRI), Mattias Thuvander (Chalmers University of Technology), Pål Efsing (Ringhals AB) |
| | 2:10 PM | 2:35 PM | Crack Growth Behaviour Of Cobalt Based Alloy In High Temperature Water | Takuyo Yamada (Kansai Electric Power Company) |
| Salon E | Start Time | End Time | Presentation Title | Authors |
| Zirconium and Fuel Cladding Chair: Jacqueline Stevens (Framatome) Vice Chairs: Alistair Garner (Jacobs), Heidi Nordin (CNL), and Peng Wang (University of Michigan) | 8:20 AM | 8:45 AM | Adhesion And Wear Resistance Of PVD Nitride-Based Coatings On Zircaloy Substrates | Heidi Nordin, Caitlin Dever, Ryan Matthews (CNL) |
| | 8:45 AM | 9:10 AM | Application Of Digital Image Correlation (DIC) And Infrared Thermography Techniques To Evaluate Fuel Cladding Behavior During Accident Conditions | Samuel Bell, Ben Garrison, Kenneth Kane, Nathan Capps, Ryan Sweet (ORNL) |
| | 9:10 AM | 9:35 AM | Chemistry Change Of CRUD With Various Metal Ion Concentration Conditions In PWR Fuel Cladding | YUNJU LEE (Ulsan National Institute of Science Technology) |
| | 9:35 AM | 10:00 AM | Fatigue Crack Initiation In Zr-2.5Nb Tested In Heavy-Water At 300°C | Heidi Nordin (CNL) |
| | 10:00 AM | 10:20 AM | Morning Break Salon B | |
| | 10:20 AM | 10:45 AM | Investigating The Mechanisms Of Irradiation Creep Using TEM With In-Situ Ion Irradiation And Straining | Conor Gillen, Adeel Shaikh, Aidan Cole-Baker, Alistair Garner, Alistair Norris (Jacobs), Graeme Greaves (University of Huddersfield), Philipp Frankel, Rhys Thomas, Robert Harrison (University of Manchester) |
| | 10:45 AM | 11:10 AM | Laboratory Characterization of Zircaloy-4 Water Channel Material | Cody Williams, James Hyres, Cody Campbell (BWX Technologies, Inc.), Kevin Mon (Framatome), John Beale (EPRI) |
| | 11:10 AM | 11:35 AM | Microstructural Changes In Ion Irradiated Zircaloy-4 And Influence On Corrosion Kinetics | Alistair Garner, Aidan Cole-Baker, Conor Gillen (Jacobs), Kieran Lynch (University of Manchester), Mark Fenwick (Jacobs), Philipp Frankel (University of Manchester), Sam Armson, Sarah Sherry (Jacobs) |
| | 11:35 AM | 12:00 PM | Nanoscale Characterization of the Oxide Formed on a Neutron-Irradiated Zr-2.5Nb Alloy in High Temperature Water | Adil Shaik, Kevin Daub, Mark Daymond, Matthew Topping, Suraj Persaud (Queen's University) |
| | 12:00 PM | 1:20 PM | Lunch on Your Own | |

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| | 1:20 PM | 1:45 PM | Simulation Of Neutron Irradiation Effects On Zr(Fe,Cr) ₂ Precipitates In Zircaloy-4 Using A Two-Step Proton Irradiation | Peng Wang, Gary Was (University of Michigan) |
| | 1:45 PM | 2:10 PM | Small Scale Mechanical Testing Of Cr Coating Cladding | David Frazer (INL), Benjamin Maier (Westinghouse), Colin Judge, Daniel Murray, Fei Teng (INL), Jaworski Allan, Jonathan Wright, Jorie Walters, Luke Olson (Westinghouse) |