

AGENDA: I-SCC WORKSHOP (DAY 1)

Presentation format: This workshop seeks to encourage and emphasis discussion among participants. Presenters are encouraged to use their full timeslot and the audience will be asked to hold their questions until the discussion section at the end of each presentation block.

Access: Entrance to the Keys building is controlled. A member of the organising committee will be stationed at the entrance to usher participants in both mornings. For other times, please call one of the phone numbers listed below.

Day 1:

8:30 – 9:00	Registration, coffee/tea	14:00 – 14:30	<i>Post Irradiation Examination of Liquid Metal Bond Hydride Fuel in Zirconium Cladding</i> Andrew M. Casella (PNNL, USA), David J. Senior (PNNL, USA), Edgar C. Buck (PNNL, USA), Donald R. Olander (UC Berkeley, USA), Kurt A. Terrani (UC Berkeley, USA), <u>Peter Hosemann</u> (UC Berkeley, USA), Mehdi Balooch (UC Berkeley, USA)
9:00 – 9:10	Welcome by workshop coordinator	14:30 – 14:50	Discussion (Chair: M. Floyd)
9:10 – 9:20	Welcome by Doug Rodgers, Director of Fuel Channels Division	14:50 – 15:05	Break
9:20 – 9:30	Welcome by Thambiayah (Nithy) Nitheanandan, Manager of CNL Fuel & Fuel Channel Safety Branch, and Rosaura Ham-Su, Manager of CNL Fuel Development Branch	15:05 – 15:35	<i>Pellet-Associated Cladding Degradation (PACE): A Collaborative Research Consortium to Investigate Pellet Cladding Interaction (PCI)</i> Philipp Fränkel (UoM, UK)
9:30 - 9:45	Introductions	15:35 – 16:05	<i>Use of Ion-beam Irradiation Facilities for the Study of Corrosion</i> Mark Daymond (Queen's, Canada)
9:45 – 10:15	<i>Early History of Power Ramp Failures and Potential Mitigations</i> Kit Coleman (CNL, Canada)	16:05 – 16:25	<i>Microchemistry of Fuel-Sheath Interfaces by X-ray Photoelectron Spectroscopy</i> <u>Than Do</u> (CNL, Canada), William H. Hocking (CNL, Canada), Ian J. Muir (CNL, Canada)
10:15 – 10:30	Break	16:25 – 16:45	Discussion (Chair: P. Fränkel)
10:30 – 11:00	<i>Will This System Fail by Stress Corrosion Cracking?</i> R. Winston Revie (Consultant, Canada)	16:45	Adjourn
11:00 – 11:30	<i>Modern "State of the Art" SCC Testing With On-line Monitoring of Crack Initiation and Crack Growth – Application to I-SCC Questions</i> Mike Wright (CNL, Canada)	==	
11:30-11:50	<i>Application of State of the Art Analytical TEM to SCC Research</i> Suraj Persaud (CNL, Canada)	18:00-22:00	<i>Dinner at Santa Fe Restaurant, located at Shemron Suites Hotel, 112 Deep River Road, Deep River. Each participant and their guest will be responsible for purchasing their own meals.</i>
11:50-12:10	Discussion (Chair: R.W. Revie)		
12:10 – 13:10	Lunch in the Voyageur Room		
13:10 – 13:40	<i>State of the Art on PCI-SCC</i> Markus Piro (CNL, Canada)		
13:40 – 14:00	<i>Modelling of SCC Phenomena</i> B.J. Lewis (RMC, Canada), M. Kleczek, (RMC, Canada) W.T. Thompson (RMC, Canada)		

AGENDA: I-SCC WORKSHOP (DAY 2)

Day 2

8:30 – 9:00	Registration, coffee/tea	11:05 – 11:25	<i>Pellet Cladding Mechanical Interaction and Thermally Induced Fracture Modelling with BISON</i>
9:00 – 9:20	<i>In-situ Neutron Diffraction Study of Zircaloy-4 Subjected to Biaxial Tension</i> <u>Michael A Gharghouri</u> (CNL, Canada), Daniel McDonald (CNL, Canada), Lin Xiao (CNL, Canada)	11:25 – 11:45	<i>Finite Element Modelling of Fuel Sheath Strains and Stresses in Support of a Stress Corrosion Cracking Model</i> <u>Anthony Williams</u> (CNL, Canada), Susan Yatabe (CNL, Canada)
9:20 – 9:40	<i>Deformation Behaviour of Zircaloy-4 Subjected to Uniaxial and Biaxial Loading in Air and Iodine Environment</i> <u>Lin Xiao</u> (CNL, Canada), Rosaura Ham-Su (CNL, Canada), Daniel McDonald (CNL, Canada), Michael Gharghouri (CNBC, Canada)	11:45 – 12:05	<i>Recent Developments of the FAST Fuel Model</i> <u>Andrew Prudil</u> (CNL, Canada), Paul K. Chan (RMC, Canada), Brent J. Lewis (UOIT, Canada)
9:40 – 10:00	<i>Mitigating the Iodine-induced Stress Corrosion Cracking of Zircaloy-4 Fuel Sheathing using Siloxane Coatings</i> <u>Graham A. Ferrier</u> (RMC, Canada) M. (Kommy) Farahani (RMC, Canada), Paul K. Chan (RMC, Canada)	12:05 – 12:25	Discussion (Chair: M. Piro)
10:00 – 10:20	Discussion (Chair: M. Gharghouri)	12:25 - 13:30	Lunch in the Voyageur Room
10:20 – 10:35	Break	13:30 – 14:30	Breakout sessions / brainstorming
10:35 – 11:05	TBA <u>Robert Montgomery</u> (PNNL, USA), <u>Dion Sunderland</u> (PNNL, USA)	14:30 – 15:15	Session summary
		15:15 – 16:15	Invited Panel Discussion / Path Forward
		16:15	Adjourn

Breakout session / brainstorming: On the afternoon of the second day, specialised teams will be formed for the purpose of brainstorming new ideas and the means to proceed. The results of each team will be presented and discussed by the community. Finally a panel of invited speakers will field directed questions.

Contact information:

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