



IAPWS Symposium
**“Chemistry and Mass Transport for Steam Generation
and Injection Processes”**

Wednesday October 2nd, 2019
Banff Centre for Arts and Creativity
Banff, Alberta, Canada

1.0		Symposium Opening	
9:00 – 9:10	1.1	Introductory Remarks	Dr. Jan Hrubý, (Institute of Thermomechanics, Acad. Sci, Czech Rep.) IAPWS President
9:10 – 9:55	1.2	Helmholtz Lecture & Award Presentation: “ Surface Tension of Supercooled Water, Seawater and Aqueous Binaries at Low Temperatures including Metastable Supercooled Region”	Dr. Václav Vinš (Institute of Thermomechanics, Acad. Sci, Czech Rep.)
9:55 – 10:00	1.3	Welcome to IAPWS and the IAPWS Symposium	W. Cook, CNC
2.0		Equations-of State for Water and Aqueous Fluid Mixtures	
10:00 – 10:25	2.1	Progress in Modeling Thermophysical Properties for H ₂ O, D ₂ O, and Aqueous Mixtures	A. Harvey (NIST)
10:25 – 10:50	Coffee break		
10:50 – 11:15	2.2	Development of Equations of State for Seawater	R. Pawlowicz (UoBC)
3.0		Oil and Gas (Steam injection, amine-based gas processing, sour-gas fluids)	
11:15 – 11:40	3.1	Water issues / solutions in O&G – OTSG R&D Overview in Alberta	Basil Perdicakis, (Suncor) Sean Sanders, (U of A)
11:40 – 12:05	3.2	Water content of sour gases	Rob Marriott (U of Calgary)
12:05 – 12:30	3.3	SMRs for oil extraction processes	To be confirmed
12:30 – 13:30	Lunch		
4.0		Modelling hydrothermal fluids for nuclear, thermal and oil & gas applications	
13:30 – 13:55	4.1	Introduction to OLI Thermodynamic Framework	Andre Anderko (OLI)
13:55 – 14:20	4.2	Codes for High Temperature Aqueous Thermodynamic Calculations in Nuclear Cycles	To be confirmed
14:20 – 14:45	4.3	Case Study - OLI Warm Lime Softening Lime and Magox Silicate reactions modelling	Subodh Peramanu, (CNRL)
14:45 – 15:00	Coffee break		
5.0		Film Forming Products for Steam Cycle Applications	
15:00 – 15:25	5.1	Assessment of FFS technology	To be confirmed
15:25 – 15:50	5.2	FFS application for nuclear systems	To be confirmed
15:50 – 16:15	5.3	FFS for steam cycle applications	Ivan Morales, (Integrated Sustainability)
16:15 – 16:30	5.4	Symposium Closing Discussion	
Close of IAPWS Symposium			