

DRAFT Agenda for the IAPWS Working Group Industrial Requirements and Solutions (IRS) Banff, Canada, Sept. 30-Oct. 3, 2019

(Numbering of topics follows TPWS agenda, except where denoted "...-IRS" or "...-IRS/PCAS")

1. Opening Remarks; Adoption of Agenda
2. Appointment of Clerk of Minutes
3. Potential International Collaborative Projects [Monday]
4. Industrial Requirements and Solutions for Steam Property Calculations [joint with WG TPWS]
 - 4.1 Report of the Task Group "Categories of industrial requirements" (N. Okita, A. Nový, I. Weber, R. Span, A. Anderko, M. Rziha)
 - 4.2 Report of the Task Group "Wet steam properties Calculation" (A. Nový, J. Hrubý, K. Orlov, R. Span, K. Meier)
 - 4.3 Report of the Task Group "Wet Steam Data from Operating Turbines" (N. Okita, A. Nový, I. Weber, S. Senoo)
 - 4.4 Requirements to IAPWS IF-97 for applying to CFD calculation (tentative)
5. Heavy Water Properties [joint with WG TPWS]
 - 5.1 Density of heavy water at low temperatures - validation of IAPWS standard against Prague experimental data (A. Blahut, J. Hykl, P. Peukert, V. Vinš, J. Hrubý)
 - 5.2 Report of TG for Heavy Water Transport Properties (J. Sengers, M. Asseal, M. Huber, R. Perkins)
6. Possible Replacement of IAPWS-95
 - 6.1 Report of Task Group (A. Harvey, D. Friend, J. Hrubý, N. Okita, K. Orlov, R. Span)
 - 6.2 A brief review of density and speed of sound data at high temperatures and pressures (J. Hrubý)
 - 6.3 Discussion of proposed ICRN
7. Report of Task Group on Surface Tension of Ordinary Water [joint with WG TPWS and SC SW]
(J. Kalová, V. Vinš, A. Harvey, O. Hellmuth, V. Holten, J. Hrubý, , R. Mareš, J. Pátek, F. Caupin)

- 8-IRS/PCAS. Joint session with WG PCAS [Tuesday morning]
- 8.1 Report of the Task Groups by IRS
 - 8.2 Discussion on collaboration of “Industrial requirements”
9. Report of Task Group on Extension of Range of Formulation for Thermodynamic Properties of Sea Water [joint with WGs TPWS and SC SW]
- 10-IRS. Discussion on “Wet Steam Data from Operating Turbines”
13. Reports on miscellaneous TPWS scientific topics [joint with TPWS and SC SW]
14. Joint session with WG TPWS and PCAS [Thursday morning]
- 14.1 Report and consideration of minor revision of Release on the Ionization Constant of H₂O (A. Harvey)
 - 14.2 Report on progress toward IAPWS Guideline on diffusivity of ordinary water (K. Yoshida, F. Caupin, A. Harvey, R. Hellmann, M. Huber)
 - 14.3 Cross second virial coefficients for industrially and scientifically important mixtures of water vapor and simple gases from ab initio intermolecular potentials (R. Hellmann, K. Meier)
 - 14.4 Nucleation in water vapor: Classical nucleation theory and molecular simulation (T. Němec)
15. IAPWS Certified Research Needs (ICRN) [joint with WG TPWS]
- 15.1 Report of Task Group on ICRN for acid gas dew points (N. Okita, K. Orlov, R. Span)
- 16-IRS. Discussion on “Categories of industrial requirements” and promotion of IRS activities.
- 17-IRS. Other Business
- 18-IRS. Membership
- 19-IRS. Contribution to Press Release
- 20-IRS. Preparation of the Formal Motion to the EC
- 21-IRS. Adjournment

Aug. 9, 2019

N. Okita (Chair)