

**(DRAFT) Preliminary Agenda for the IAPWS Working Group
Thermophysical Properties of Water and Steam (TPWS)
Dresden, Germany, September 12-15, 2016**

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 IRS (Monday)
 - 4.1 Report of the Task Group “Industrial Advisory Note” (M. Hiegemann, B. Rukes, A. Singh, A. Harvey)
 - 4.2 Large eddy simulation of condensing steam in a turbine cascade (F. di Mare)
5. Editorial Changes for IAPWS Industrial Documents (joint with WG IRS and SC SW) (Monday)
 - 5.1 Report on proposed Editorial Changes on the Revised Supplementary Release on Backward Equations for Specific Volume as a Function of Pressure and Temperature $v(p,T)$ for Region 3 of the IAPWS Industrial Formulation 1997 (M. Kunick, H.-J. Kretzschmar, W. Wagner, A. H. Harvey)
 - 5.2 Formal consideration of the Editorial changes to the Supplementary Release
 - 5.3 Report of proposed editorial changes to Advisory Note 5: Industrial Calculation of the Thermodynamic Properties of Seawater (S. Herrmann, H.-J. Kretzschmar, K. Orlov)
 - 5.4 Formal consideration of the Editorial changes to the Advisory Note
6. Heavy Water Properties (joint with WG IRS)
 - 6.1 Report of Task Group on Heavy Water Thermodynamic Properties (R. Span, A. Harvey, S. Herrig)
 - 6.2 Appointment of Evaluation Task Group for Heavy Water Formulation
 - 6.3 Report of TG for Heavy Water Transport Properties (J. Sengers, M. Assael, M. Huber, R. Perkins)
 - 6.4 Measurements of the Viscosity of Supercooled D_2O (Pierre Ragueneau, Amine Dehaoui, Bruno Issenmann, Frédéric Caupin)
7. Proposed Improvements of IAPWS-95 Release
 - 7.1 Report of Task Group on Uncertainty Estimates of IAPWS-95 in Isobaric Heat Capacity (W. Wagner, M. Thol, A. Harvey)
 - 7.2 Report on improvement of description of extrapolation for metastable subcooled liquid (A. Harvey, V. Holten, W. Wagner)
 - 7.3 Formal consideration of the Revised Release
8. Report of Task Group on Surface Tension of Ordinary Water (joint with WG IRS and SC SW) (V. Vinš, A. Harvey, O. Hellmuth, V. Holten, J. Hrubý, J. Kalova, R. Mareš, J. Patek)

9. Humid Air Fugacity and Enhancement Factor, joint with SC SW (O. Hellmuth)
10. Metastable Water (joint with SC SW) (Tuesday)
 - 10.1 Experimental densities of water in stable and metastable states up to 400 MPa and comparison with dedicated equations of state (Raffaella Romeo, Simona Lago, P. Alberto Giuliano Albo, Salvatore Loreface)
 - 10.2 Measurement of viscosity in supercooled water and representation with a two-state model (F. Caupin)
 - 10.3 Report of Task Group on Superheated liquid water, joint with WG IRS and SCSW (J. Hrubý, R. Feistel)
 - 10.4 Report on Task Group on ICRN for Interfacial Properties of Supercooled Water (O. Hellmuth, J. Hrubý, J. Sengers)
 - 10.5 Report of Task Group on possible revision of IAPWS formulations for melting curves (V. Holten, A. Harvey, H.-J. Kretzschmar)
11. Report of Task Group on Extension of Range of Formulation for Thermodynamic Properties of Sea Water (joint with WGs IRS and SC SW) (R. Feistel) (Tuesday)
12. Cooperation with other international bodies (joint with SC SW) (Tuesday)
 - 12.1 IAPWS/IAPSO/SCOR Joint Committee on Seawater, including updates to TEOS-10 (R. Pawlowicz)
 - 12.2 Metrologia articles on BIPM/IAPWS interaction (R. Feistel)
13. Reports on seawater-related topics (joint with SCSW) (Tuesday)
 - 13.1 A standard for seawater sample handling (G. Budeus)
 - 13.2 Thermophysical Properties of Natural Seawater samples (J. Safarov, A. Mirzalyiev, E. Hassel)
 - 13.3 CO₂ Solubility in Seawater at wide range of salinities. (J. Safarov, S. Berndt, F.J. Millero, R. Feistel, A. Heintz, E. Hassel)
 - 13.4 Update of the EMPIR project (S. Seitz and D. Stoica)
 - 13.5 Absolute salinity and density using a hydrostatic weighting apparatus and using in-situ sound velocity sensors (H. Uchida)
 - 13.6 Chinese Standard Seawater (Y. Li)
 - 13.7 Salinity anomalies – Arctic Rivers and hydrothermal vents (R. Pawlowicz, H. Uchida, R. Woosley, F. Millero)
 - 13.8 Salinity anomalies – a decade in the Baltic (S. Weinreben)
14. Proposed new IAPWS seawater-related documents (joint with SCSW)
 - 14.1 Report on Guideline for Electrical Conductivity of Seawater (R. Pawlowicz)
 - 14.2 Report of Task Group on Supplementary Release for a simplified density equation for oceanographic use (R. Pawlowicz, T. McDougall, P. Barker)
 - 14.3 Report of Task Group on Advisory Note on IAPWS documents contributing to TEOS-10 (R. Feistel, A. Harvey, R. Pawlowicz)

15. Reports on miscellaneous TPWS scientific topics (joint with WG IRS and SC SW)
 - 15.1 Report of Task Group on Covariance in IAPWS work (R. Feistel, J. Hruby, S. Seitz, J. Lovell-Smith, D. Friend)
 - 15.2 IAPWS live formulations on MapleNet (V. Ochkov, S. Khan)
16. Joint session with WG PCAS [Thursday morning]
 - 16.1 Progress toward improved ideal-gas properties of ordinary and heavy water (J. Hrubý)
 - 16.2 Report of Task Group on Isotopic Fractionation (R. Feistel, D. Friend, A. Harvey, J. Hrubý, K. Meier)
 - 16.3 Progress in modeling gas hydrates relevant for CCS using reference equations of state and extension of the model for mixed hydrates (S. Hielscher, A. Jäger, V. Vinš, R. Span, J. Hrubý, C. Bretkopf)
 - 16.4 Carbon today and hydrogen in the future for chemical energy (M. Nakahara)
17. IAPWS Certified Research Needs (ICRNs)
 - 17.1 ICRN 27: Thermophysical Properties of Humid Gases and CO₂-Rich Mixtures (closing statement needed) (R. Span, A. Harvey)
18. Reports on other TPWS activities
 - 18.1 Guideline on Fundamental Constants (A. Harvey)
 - 18.2 Advisory Note 2 (J. Cooper, A. Harvey)
19. Other Business
 - 19.1 Report on International Collaborative Projects
20. Membership
21. Contribution to Press Release
22. Preparation of the Formal Motion to the EC
23. Adjournment

August 22, 2016

A.H. Harvey (Chair), J. Hrubý (Vice-Chair)