DRAFT Agenda for the IAPWS Working Group Thermophysical Properties of Water and Steam (TPWS) Helsinki, Finland, June 22 – 27, 2025

1. Opening Remarks; Adoption of Agenda [Monday morning]
2. Appointment of Clerk of Minutes
3. Minute's silence for deceased members and colleagues (H.-J. Kretzschmar)
4. Potential International Collaborative Projects
5. State of Development of a New Formulation for the Thermodynamic Properties of Ordinary Water (Replacement of IAPWS-95)
   - 5.1 Report of Task Group (A. Harvey, A. Giuliano Albo, F. Caupin, D. Friend, J. Hrubý, Y. Kayukawa, S. Lago, N. Okita, R. Span)
6. IAPWS Certified Research Needs (ICRNs)
   - 6.1 ICRN 16: Thermophysical Properties of Seawater (R. Pawlowicz), expired 2019, concluding statement (?).
   - 6.2 ICRN 28: Thermophysical Properties of Metastable Steam and Homogeneous Nucleation (J. Hrubý), expired 2019, concluding statement.
   - 6.3 ICRN 30: Thermophysical Properties of Supercooled Water (O. Hellmuth), concluding statement (?).
   - 6.4 ICRN 31: New Thermodynamic Data for Ordinary Water (A. Harvey and J. Hrubý), expired October 2024, an update prepared by A. Harvey and J. Hrubý.
7. Industrial Requirements and Solutions for Property Calculations (joint with WG IRS) [Monday afternoon]
   - 7.1 Report of the Task Group "Categories of industrial requirements" (N. Okita, chairs or representatives of other WG)
   - 7.2 Report of the Task Group "Wet steam properties calculation" (A. Nový, J. Hrubý, R. Span, K. Meier, F. di Mare, S. Senoo, M. Kunick)
   - 7.4 Translation of IF-97 Fortran routines into other programming languages (A. Nový).
   - 7.5 A new industrial formulation for the properties of water and steam in form of the SBTL method (biquadratic spline polynomials) (M. Kunick, F. di Mare)
8. Heavy Water Properties (joint with WG IRS)
   - 8.1 Progress on a Formulation for the Static Dielectric Constant of Heavy Water (J. Cox, J. Young, A. Harvey, and P. Tremaine)
9. 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, R. Mareš, F. Caupin)
10. Joint session with WG PCAS [Tuesday morning]
    - 10.1 Surface tension of aqueous mixtures at low temperatures (A. Blahut, M. Čenský, J. Hrubý, O. Prokopová, M. Součková, V. Vinš).
    - 10.2 Calculation of Enhancement Factors Using Virial Coefficients (A. Harvey, G. Garberoglio, R. Hellmann)

10.3 Higher virial coefficients determined from IAPWS-95 in comparison with virial coefficients determined from reference formulations of other fluids. (J. Hrubý)

10.4. A (very preliminary) quintic equation of state. (A. Albo)

11. Reports on seawater-related topics (joint with SC SW and PCAS)

11.1 A preliminary equation of state for NaOH(aq) aqueous solution for designing supercritical electrolysers (A. Albo)

12. TPWS/IRS/PCAS/PCC joint session [Tuesday afternoon]

12.1 ....

13. Other Business

13.1 Report on International Collaborative Projects

14. Membership

15. Election of Vice-Chair

16. Contribution to Press Release

17. Preparation of the Formal Motion to the EC

May 10, 2025

Jan Hrubý (Chair), K. Meier, A. Jäger, (Vice-Chairs)