

## **Agenda for the IAPWS Working Group Thermophysical Properties of Water and Steam (TPWS) Bristol, United Kingdom, June 28 – July 3, 2026**

(numbering of items to be improved later)

1. Opening Remarks; Adoption of Agenda [Monday morning]
2. Appointment of Clerk of Minutes
3. 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)
  - 6.3 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, extended to September 2029.
  - 6.5 Discussion of possible new ICRNs
7. Industrial Requirements and Solutions for Property Calculations (joint with WG IRS) [Tuesday afternoon]
  - 7.1
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)
9. Report of Task Group on Melting Pressure Curves of Ice Phases (B. Journaux, A. Harvey, J. Hrubý, M. Brown). The TG should propose a revision of Release R14-08(2011) on the melting pressure curves of the ice phases. In a second step, it will develop releases for the equations of state of the crystalline phases and the pressure solid-solid-equilibria.
10. Joint session with WG PCAS [Tuesday morning]
  - 10.1 Decluttering isotherms: Reconceptualizing solvation, sorption, and surface tension via statistical thermodynamic fluctuation theory (S. Shimizu)
  - 10.1 Surface tension of binary aqueous mixtures with salts at low temperatures (M. Součková, M. Čenský, A. Blahut, O. Prokopová, J. Hrubý, V. Vinš)
  - 10.2 Update: IAPWS G5-01(2026) Guideline on the Use of Fundamental Physical Constants, and Basic Constants of Water (A. Harvey)

- 10.3 Calculation of Enhancement Factors Using Virial Coefficients (A. Harvey, G. Garberoglio, R. Hellmann) (?).
- 10.4 Van der Waals loop for water: General considerations and results with new cubic and non-cubic equations of state (J. Hrubý)
- 11. Reports on seawater-related topics (joint with SC SW and PCAS)
  - 11.1.
- 12. Other Business
  - 12.1 Report on International Collaborative Projects
- 13. Membership
- 15. Contribution to Press Release
- 16. Preparation of the Formal Motion to the EC

*March 31, 2026*

*Jan Hrubý (Chair), A. Albo, A. Jäger, (Vice-Chairs)*