

FIRST ANNOUNCEMENT

**18th International Conference on the
Properties of Water and Steam**



**IAP
WWS**

**June 23 - 28, 2024
University of Colorado, Boulder**

CALL FOR PAPERS

Abstracts of 200-300 words must be received by November 19, 2023.

The abstracts must be submitted through the link on the Conference website at <http://thermosymposium.org>, which will allow abstract submissions beginning mid-2023. Please refer to the website or <http://iapws.org/icpws> for up-to-date information.

Oral, Poster, and Database Demonstration/Exhibition Sessions will be held as part of the 18th International Conference on the Properties of Water and Steam, which is being held in conjunction with the 22nd Symposium on Thermophysical Properties. Prospective authors will be asked to indicate the type of presentation and a preference for session topic assignment. The organizers will attempt to honor requests for each type of presentation, although the logistics of sessions may necessitate changes. Information on this subject will be included in the acceptance letters to be sent in January, 2024. Papers describing all work presented at the Symposium are encouraged, but not required. Information on any journals associated with the conference will be included on the Conference website.



AWARDS PRESENTED AT THE 18TH ICPWS

The 2024 IAPWS Gibbs Award and the 2024 IAPWS Helmholtz Award will be presented at the 18th International Conference on the Properties of Water and Steam.

The Gibbs Award will be conferred upon a distinguished scientist or engineer who has made substantial contributions to the development of knowledge on the properties of water, steam or aqueous solutions, as well as to other areas of underlying science and technology of interest to IAPWS. Nominations are made by IAPWS National Committees and Working Groups: please contact your National Committee or a Working Group chair, if you have a suggestion for a prospective Gibbs Award nominee. See the IAPWS website (<http://iapws.org>) for National Contacts and Working Group contacts, and the Gibbs Award page (<http://iapws.org/awards/Gibbs.html>) for further information.

The Helmholtz Award will recognize a promising early-to-mid career scientist or engineer (at most 15 years from last earned degree) who is making significant contributions to, or defining new directions, in the areas of research of interest to IAPWS; and to encourage them to become active in IAPWS. Nominations may be made by any individual, except that self-nominations are not allowed. Please send your nomination to the IAPWS Executive Secretary (bdooley@iapws.org) or see the Helmholtz Award page for further information: (<http://iapws.org/awards/Helmholtz.html>).

PRELIMINARY LIST OF FOCUS AREAS AT THE 18th ICPWS

Sessions of the 18th ICPWS

- Electrochemistry and Corrosion
- Modeling and Calculations for the Power Industry
- Nuclear Reactor and Fuel Cycle Chemistry
- Ocean and Atmospheric Applications
- Physical Chemistry of Aqueous Systems
- Power Cycle Chemistry

Joint with the 22nd Symposium on Thermophysical Properties

- Correlations, Databases, and Engineering Equations of State
- Molecular Simulation
- Properties of Metastable, Nucleating and Glassy Systems
- Thermophysical Properties of Aqueous Systems
- Wetting, Interfaces, Hydrates and Membranes

Other Symposium Sessions of Interest to ICPWS

- Fluid Property Measurements
 - Instrumentation and Measurement Techniques
 - Non-equilibrium Thermodynamics
 - Properties for Fuels and Energy Systems
 - Properties of Working Fluids including Refrigerants
 - Theory of Thermophysical Properties
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- Exhibits
 - Posters
 - Software Demonstrations

Websites: <http://thermosymposium.org> <http://iapws.org/icpws>

ABOUT THE CONFERENCE

This is the 18th in a series of conferences organized by the International Association for the Properties of Water and Steam (IAPWS), held roughly every five years, which began with the International Steam Table Conference in London, 1929. It is focused on the properties, science, and applications of water, steam and aqueous systems, primarily as needed for the electric power generation community and within climate science. This year's conference is being integrated with the 22nd Symposium on Thermophysical Properties, part of a distinct conference series, held triennially in Boulder, Colorado, U.S.A., with a broader, but overlapping, emphasis.

The current IAPWS areas of interest are aligned with the thermophysical properties of water and steam; industrial requirements and solutions; physical chemistry of aqueous systems; power cycle chemistry; and seawater properties. Presentations concerning new research results in these areas are especially welcome. More generally, discussion of work in any areas of science or engineering systems involving water, ice, steam, including mixtures and multiphase systems, are appropriate, including work involving extreme environments, systems out of equilibrium, and novel applications.

The coordination between the 18th ICPWS and the 22nd Symposium on Thermophysical Properties allows consideration of a more extensive set of topics, with the organizers planning to assign each accepted presentation to the most appropriate session.



GENERAL INFORMATION

The organizers are planning for an in-person conference, with all technical sessions to be held at the University of Colorado, Boulder, Colorado, U.S.A. The 18th ICPWS is being organized by the U.S. National Committee for IAPWS (constituted as the Properties of Steam Subcommittee of the ASME Research & Technology Committee on Water and Steam in Thermal Systems). The 22nd Symposium on Thermophysical Properties is organized by the Joint ASME-AIChE Committee on Thermophysical Properties.

*Conference **sponsorship opportunities** are still available: contact us at icpws@iapws.org for information.*

ICPWS Co-Chairs: Dr. Allan H. Harvey (NIST) and Dr. Daniel G. Friend (NIST, Retired)

Symposium Co-Chairs: Dr. Kenneth G. Kroenlein (Citrine Informatics); Dr. Daniel G. Friend (NIST, Retired);
Dr. Ala Bazyleva (NIST); and Dr. Tara J. Fortin (NIST)

For further information, please access the ICPWS or Symposium websites at

<http://thermosymposium.org>

<http://iapws.org/icpws>

Or contact the organizers at

icpws@iapws.org or info@thermosymposium.org