

Announcement

FIFTEENTH SYMPOSIUM ON THERMOPHYSICAL PROPERTIES

**National Institute of Standards and Technology
Boulder, Colorado, U.S.A.**

June 22–27, 2003

This is the Fifteenth Symposium of the well-established series of conferences on thermophysical properties. The Symposium is concerned with theoretical, experimental, simulation, and applied aspects of the thermophysical properties of gases, liquids, and solids, including biological systems. Appropriate topics are:

- (1) **Thermodynamic Properties**, including equation of state, phase equilibria, p - v - T behavior, heat capacity, enthalpy, thermal expansion, sound speed, and critical phenomena.
- (2) **Transport Properties**, including thermal and electrical conductivity, viscosity, mass diffusion, thermal diffusion, non-Newtonian behavior, and thermal, thermoacoustic, and other diffusion waves.
- (3) **Optical and Thermal Radiative Properties**, including dielectric constant, refractive index, emissivity, reflectivity, and absorptivity.
- (4) **Interfacial Properties**, including solid–solid interfaces, surface tension, interfacial profiles, interfacial transport, and wetting.
- (5) **Data Correlation**, including data evaluation and prediction, standard reference data, databases, and storage and retrieval of thermophysical-property data.

In addition to more general sessions on *Fluid Property Measurements*, *Theory and Modeling of Thermophysical Properties*, and *Properties of Solids*, SPECIAL FOCUS AREAS related to properties to be emphasized at the Symposium are:

- Biothermophotonic Diagnostics and Imaging
- Databases and Data Correlation
- Inverse Problems in Thermophysics
- Ionic Liquids and Other Solvents
- Molecular Simulation
- Non-Destructive Evaluation with Thermophysics
- Novel Instrumentation and Measurement Techniques
- Optical and Thermal Radiative Properties of Materials
- Phase Transitions/Metastable Fluids/Critical Phenomena
- Phenomena at Ultrashort Time/Length Scales
- Photothermal and Photoacoustic Techniques for Property Measurements
- Properties for Chemical Process Design
- Properties for Environmental Applications
- Properties for Metallurgical Process Design
- Properties of Aqueous Systems
- Properties of Fuels, including Natural Gas Systems
- Properties of Polymers and Mesoscopic Systems
- Properties of Working Fluids, including Refrigerants
- Subsecond Thermophysics
- Thermophysical Properties of Biomaterials
- Thin Film Properties
- Wetting and Interfaces

The deadline for submissions to the Symposium has already past. The program for the Symposium will be posted on the web page at <http://symp15.nist.gov> when it is available. Abstracts of the presentations or preliminary manuscripts will also be posted at a later date.

Registration is mandatory for those wishing to attend presentations at the Symposium. Information for those interested in participating will be available on the Symposium web site.

Manuscripts describing all work presented at the Symposium are encouraged, but not required. Manuscripts must be received by **April 18, 2003**; electronic submission of manuscripts will be mandatory. A preprint volume on CD-ROM will be available at the Symposium. The papers will be reviewed, and those accepted will be published in special proceedings issues of the *International Journal of Thermophysics* and other journals.

For further information, please visit the Symposium web site:

<http://symp15.nist.gov>

or contact the organizers at symp15@boulder.nist.gov

All technical sessions will be held at the University of Colorado, Boulder, Colorado, U.S.A. The Symposium is organized by the National Institute of Standards and Technology and the Committee on Thermophysical Properties of the Heat Transfer Division, American Society of Mechanical Engineers. The co-chairs of the Symposium are:

Daniel G. Friend

Physical and Chemical Properties Division, 838.08

National Institute of Standards and Technology

325 Broadway

Boulder, Colorado 80305-3328, U.S.A.

Fax: (1) 303-497-5224

Andreas Mandelis

Department of Mechanical and Industrial Engineering

University of Toronto

5 King's College Road

Toronto, Ontario M5S 3G8, Canada