# The International Association for Transport Properties



#### The Aims

The International Association for Transport Properties (IATP) is a non-profit grouping of scientists devoted to the advancement of the transport properties of materials. In particular, the association is engaged in the preparation of representations of the transport properties that are of value to engineering process design, and to the description of natural processes in the environment where international collaboration and agreement is specially significant. These developments will be carried out in the context of the underlying science and with the intention of improving understanding.

IATP was formerly known as the Subcommittee on Transport Properties of the International Union of Pure and Applied Chemistry (1981 - 2001).

Further info at: http://transp.eng.auth.gr

2001 - 2002 Chairman: Professor W.A. Wakeham

### List of Scientific Meetings

1. 2001 Chalkidiki, Greece

2. 2002 Imperial College, London, U.K.

### Books Published (as STP/IUPAC)

- Experimental Thermodynamics. Vol. III. Measurement of the Transport Properties of Fluids.
   Eds. A. Nagashima, J.V. Sengers and W.A. Wakeham.
   Blackwell Scientific Publications (1991).
- Transport Properties of Fluids. Their Correlation, Prediction and Estimation.
   Eds. J.H. Dymond, J. Millat and C.A. Nieto de Castro.
   Cambridge University Press (1996).

## 3rd

## Meeting of the International Association for Transport Properties

(former Subcommittee on Transport Properties of IUPAC Commission I.2: Thermodynamics)



21 - 22 June, 2003

Engineering Center (Room ECCR 265) University of Colorado, Boulder, USA

### Programme

 All presentations are informal and are followed by a discussion period.

### Saturday, 21st June 2003

09:20 Opening Remarks. W.A. Wakeham (UK).

### Scientific Session A.

- 09:30 Viscosity and Surface Tension of Diisodecylphthalate A.P. Froeba, A. Leipertz (Germany)
- 10:00 Measurement and Correlation of the Viscosity of Steam at Low Densities

  E. Vogel, V. Teske (Germany)
- 10:30 A Vibrating Wire Viscometer M. Kandil, K N Marsh (Australia)
- 11:00 Coffee
- 11:30 Simultaneous Measurement of Viscosity and Density with an Oscillating-disk Instrument A.H. Krall, J.V. Sengers (USA)
- 12:00 Viscosities of Some Molten Metals Including Fe and Al. Y. Sato (Japan)
- 12:30 Uncertainty Analyses According to the Guide to the Expression of Uncertainty in Measurement L. Vozar, W. Hohenauer (Slovakia)
- 13:00 Lunch.

### **Business Session A.**

15:00 Announcements.

- Concluded Collaborative Projects
  - Viscosity of Toluene at Atmospheric Pressure in Wide Ranges of Temperatures (started 96, approved 98) F.J.V. Santos, C.A. Nieto de Castro (Portugal), J.H. Dymond (UK), N. Dalaouti, M.J. Assael (Greece), A. Nagashima (Japan) A first draft was circulated by C.A. Nieto de Castro at the Possidi Meeting. The final paper is still pending.
  - Viscosity of Cyclopentane
     M.J. Assael, N.K. Dalaouti (Greece), H. Bauer (Germany), K. Harris (Australia)
     Final paper is circulating for approval.
- Continuing Collaborative Projects
  - 3. Viscosity of Alkali Chlorides H. Oye (Norway), C.A. Nieto de Castro (Portugal)
  - Viscosity and Thermal Conductivity of Water & Steam M.J. Assael (Greece), J. Millat (Germany), A. Nagashima (Japan), D. Friend, J.V. Sengers (USA)

- Viscosity of n-Pentane
   A. Laesecke (USA), E. Vogel (Germany), M.J. Assael (Greece)
- Investigation of a New High-Viscosity Standard J.M.N.A. Fareleira, C.M.B.P. Oliveira (Portugal), M.J. Assael (Greece), A. Leipertz, H. Bauer (Germany), A. Nagashima (Japan)
- On the Book on the Properties of Water, Air and Sea Water
   A. Nagashima (Japan), M.J. Assael (Greece), J. Millat (Germany).
- 8. Correlation of the Thermal Conductivity of R134a. R. Perkins, A. Laesecke, J.V. Sengers (USA)
- Feasibility Study on Properties of Ionic Fluids
   Vogel (Germany), K. Marsh (New Zealand), A. Padua (France), J.M.N.A. Fareleira (Portugal)
- Future Collaborative Projects: Proposals.
- Membership.
- Future Meetings.

### Sunday, 22nd June 2003

Meeting will take place in Room ECCR 200, Engineering Center.

16:00 Viscosity and Density of Molten Fe and Al M.J. Assael (Greece), W.A. Wakeham, J. Redgrove, P. Quested, K. Mills (U.K.), I. Egry (Germany), A. Nagashima, Y. Sato (Japan), M. Banish, T. Overfelt (U.S.A.)
Project start (IUPAC funding approved).

17:30 Adjourn.