

- **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

- **Books Published (as STP/IUPAC)**

1. *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).
2. *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).

## 2nd

### Meeting of the International Association for Transport Properties

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



31 August - 1 September, 2002

Room 2.07, Department of Chemical Engineering  
Imperial College, London, U.K.

## *Programme*

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

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

**Scientific Session A.**

09:30 Thermophysical Properties of High Viscosity Fluids  
F. Caetano, R.M.M. Castelhana, J.M.N.A. Fareleira, A. Fernandes, C.M.B.P. Oliveira (Portugal)

10:00 Cyclopentane High Pressure Viscosity Measurements  
K.R. Harris, P.J. Newitt, L.A. Woolf (Australia)

10:30 Viscosity of Molten KNO<sub>3</sub> as Standard Data of Molten Salts.  
Y. Sato, A. Potapov, T. Yamamura (Japan)

11:00 Coffee.

11:30 Association and Viscosity of Acetic Acid Vapour  
E. Vogel, E. Bich (Germany)

12:00 Thermophysical Properties of Binary Mixtures of R125+R143a from Dynamic Light Scattering (DLS) in Comparison with Simple Prediction Method  
A. Leipertz, A. Froeba (Germany)

12:30 Development of Laser Induced Capillary Wave Technique for Viscosity Measurement Using Pulsed CO<sub>2</sub> Laser  
Y. Nagasaka (Japan)

13:00 Lunch.

**Scientific Session B.**

14:30 Micromachined Viscometers  
A. Goodwin (UK)

15:00 Viscosity and Density of Molten Fe, Ni and Co  
Y. Sato, T. Yamamura (Japan)

15:30 Thermophysical Properties of Several Lots of Pyroceram Produced over two Decades  
D. E. Stroe, M. A. Thermitus (USA)

16:00 Measurement of Advanced Materials Using the Flash Method  
L. Vozar, W. Hohenauer (Slovakia)

16:30 Application of the Transient Hot-wire Technique to the Accurate Measurement of the Thermal Conductivity of Solids up to 590 K  
M.J. Assael, K. Gialou (Greece)

17:00 Coffee

**Business Session A.**

17:30 Discussion of developments in IATP

**Business Session B.**

09:30 Announcements.

- Concluded Collaborative Projects
  1. 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)
- Progress Reports on Existing Collaborative Projects
  2. Transport Properties of Methane + Ethane  
S. Will, A. Leipertz, E. Vogel (Germany), V. Vesovic, W.A. Wakeham (UK)
  3. Thermal Conductivity of *n*-Butane  
R. Perkins, J.V. Sengers (USA), C.A. Nieto de Castro (Portugal)
  4. Viscosity of Alkali Chlorides  
H. Oye (Norway), C.A. Nieto de Castro (Portugal)
  5. Viscosity and Thermal Conductivity of Water & Steam  
M.J. Assael (Greece), J. Millat (Germany), A. Nagashima (Japan), D. Friend, J.V. Sengers (USA)
  6. Viscosity of *n*-Pentane  
A. Laesecke (USA), E. Vogel (Germany), M.J. Assael (Greece)
  7. Viscosity of Cyclopentane  
N. Dalaouti, M.J. Assael (Greece), J.M.N.A. Fareleira (Portugal), H. Bauer (Germany), K. Harris (Australia)
  8. 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)
  9. Feasibility Study for a Book on the Properties of Water, Air and Sea Water  
A. Nagashima (Japan), M.J. Assael (Greece), J. Millat (Germany).
  10. Thermal Conductivity of Iso-Butane  
R. Perkins (USA), K. Marsh (New Zealand), C.A. Nieto de Castro (Portugal)
  11. Correlation of the Thermal Conductivity of R134a.  
R. Perkins, A. Laesecke, J.V. Sengers (USA)
  12. Feasibility Study on Properties of Ionic Fluids  
E. Vogel (Germany), K. Marsh (New Zealand), A. Padua (France), J.M.N.A. Fareleira (Portugal)
- Future Collaborative Projects: Proposals.
- Membership.
- Future Meetings.

13:00 Lunch.