



International Association of Chemical Thermodynamics **IACT**

Minutes of the IACT Business Meeting

Conference Hall "Agat", Hotel Gromada, Warsaw

Tuesday August 5th, 2008, 19.00-20.00

Ballot papers were given out on entry.

1. *Election of Directors*

While the Chairman, Professor Jean-Pierre Grolier, went to direct some members to the venue for this meeting, the Secretary, Dr. John Dymond, showed a slide in the PowerPoint presentation, which had been prepared, with the names of the present elected members of the Board of Directors. He explained that there were a further 5 members of the Board who were Counsellors, and showed the next slide, with their names. These Counsellors are appointed by the elected Directors, so as to ensure that as far as possible, there was representation from all the main geographical areas of the world and with expertise in all the different areas of thermodynamics.

Elected Directors serve 4-year terms, and 4 of them stand down at this time : Professor Ron Weir who is Past-Chair, Professor Tooru Atake (who has served just one term), Professor Ulrich Deiters and Professor Manuel Ribeiro da Silva. The Secretary asked members to join him in expressing sincere thanks to Ron, Manuel and Ulrich for all their work, advice and support during these first years of IACT. He noted that Professor Atake offered himself for re-election.

As per the Constitution, a Nominating Committee had been set up. It produced a list of 5 nominees who were listed on the next slide shown. No additional names were submitted by members. Members were asked to complete the ballot papers, by placing an "X" in 4 boxes. Those elected will serve from 2008-2012. The papers were collected by the tellers, and taken outside for counting.

2. *Preliminary Matters*

The Chairman welcomed the 47 members and referred to the next slide, with the IACT logo and its aim of "promoting the advancement of chemical thermodynamics world-wide through measurement, evaluation and theory". He said that IACT had been set up in 2002 to extend the role of the former IUPAC Commission on Thermodynamics. In 2003, the IUPAC Council had granted Associated Organisation status to IACT.

The main objectives of IACT are to arrange the biennial IUPAC Conferences on Chemical Thermodynamics, to select the Rossini Lecturer, to encourage young thermodynamicists by making Junior Awards, to sponsor other conferences, and to encourage collaboration between thermodynamicists through various projects.

3. *Apologies.*

Apologies had been received from Professors Mary Anne White and Bill Wakeham..

4. *Minutes of the Business Meeting held in Boulder, 2006.*

Copies of the Minutes of the Boulder Meeting in 2006 had been sent out to Members with the notification of this meeting. The Minutes were approved and signed.

5. *Matters Arising*

The chairman said that any matters arising would be covered in the following agenda items.

6. *Report on ICCTs (slide).*

Professor Grolier expressed thanks to the Organisers of the present Conference, and reported that the total number of participants was about 325 from 39 countries.

He announced that the 21st ICCT would be held in Tsukuba, Japan from 1 to 6 August in 2010, organised by Professor Atake. The venue for the following Conference, in 2012, will be discussed by the Board of Directors at their next meeting, on Friday. There were bids from Alberta, Canada and Buzios, Brazil.

Professor Grolier invited proposals to host the Conference in 2014. As is shown by the list, the aim is to hold Conferences in different parts of the world, to encourage the development of thermodynamics in different regions. Proposals were particularly welcome from Europe, or any country which has not previously hosted an ICCT. Further information could be obtained from himself or the Secretary.

7. *Report on IACT Awards*
The Rossini Lectureship Award (slide)

Professor Grolier explained that the Rossini Lectureship Award was made by the IACT in recognition of a significant contribution to the field of thermodynamics. It is presented every two years at the Biennial ICCT, when the recipient delivered the Rossini Lecture. Nominations were accepted from any member of the IACT during the three-month period following a Biennial Conference for the award to be made at the following Biennial Conference. The Award recipients are selected by the vote of the Board of Directors, as set out in the Bylaws of the Constitution, ARTICLE XI, Sections 3 and 4.

He invited nominations for the 2010 Award and announced that details would be posted on the Association website, www.iactweb.org and emailed to Members, within the next few weeks.

Report on IACT Junior Awards (slide)

Professor Grolier pointed out that the Junior Awards were based on research work in thermodynamics. Applicants, who must be under 30 years of age on the date of the start of the ICCT, should submit an abstract of their paper by the deadline for receipt of papers for the ICCT. Further details will be given on the IACT web site for the 2010 Awards. The selection of prize-winners will be made by a small committee under the past-Chair, set up by him, and with the approval of the Board of Directors.

On the first occasion on which these Awards were offered, in 2004, there were 5 applications. This year there were 28 applications, many of high quality, which was extremely encouraging. Five

awards were made. He hoped that the number and standard of the applications will be as good, if not better, next time.

8. *Report on Current IACT Projects (slides)*

Professor Grolier drew members' attention to the projects, which have been completed since ICCT-2006. These were listed on three slides and illustrated the variety of the projects being undertaken. He commented briefly on these as follows:

- New Global Communication Process in Thermodynamics: Impact on Quality of Published Experimental Data. M.Frenkel, et al. This described the use of guided data capture software to deliver data from producers (thermodynamicists in laboratories) to users (chemical engineers), and demonstrated its current use in checking data prior to publication.
- Vapour-Liquid Critical Properties of Elements and Compounds. 10. Organic Compounds containing Halogens. This was the latest part in the series to produce recommended critically-evaluated critical properties by Ken Marsh, Douglas Ambrose, Costa Tsonopoulos and Colin Young as the main task group members. It was of importance in data reduction and estimation of thermodynamic properties.
- *Developments and Applications in Solubility*, Edited by Trevor Letcher. This brings together all the important aspects of solubility.
- ILThermo: A Free-Access Web Database for Thermodynamic Properties of Ionic Liquids, Q. Dong, C. Muzny, Andrei Kazakov, Vladimir Diky, Joseph Magee, Jason Widegren, Rob Chirico, Kenneth Marsh, Michael Frenkel. This is an important depository of critically evaluated thermodynamic property data for ionic liquids.
- *Thermodynamics, Solubility and Environmental Issues*, Edited by Trevor Letcher. Another very relevant volume with chapters written by different experts.
- Ionic liquids database. This IUPAC Database, ILThermo, is a free web research tool that allows users worldwide to access an up-to-date data collection from publications on experimental investigations of thermodynamic, and transport properties of ionic liquids as well as binary and ternary mixtures containing ionic liquids.
- Papers based on plenary lectures at the last IUPAC Conference on Chemical Thermodynamics.

He said that there was a very healthy list of current projects (slide, with names of the task group leaders):

- Electrolyte Solution Data (J. Barthel). On-going.
- Thermochemistry of Chemical Reactions (M.A.V. Ribeiro da Silva) This project will be completed soon with the publication of two papers in Pure and Applied Chemistry.
- Vapour Liquid Critical Properties of Elements and Compounds (K.N. Marsh) A further paper has just been submitted for publication.
- Ionic Liquids (K.N. Marsh). This project will be completed soon with the publication of two papers in Pure and Applied Chemistry
- Heat capacity of liquids: critical review and recommended values for liquids with data published between 2000 and 2004 (V. Ruzicka). This project will be completed soon.
- Guidelines for temperature modulated DSC (J.-P. E. Grolier)
- Guidelines for Reporting of Phase Equilibria Measurements (T.W. de Loos)
- Future Energy: Improved, Sustainable and Clean Options for our Planet (T.M. Letcher)
- Experimental Thermodynamics: Applied Thermodynamics of Fluids (J.V. Sengers, A.R.H. Goodwin and C. Peters)
- Heat Capacities of Liquids and Vapours (T.M. Letcher and E. Wilhelm)
- Extension of ThermoML – the IUPAC Standard for Thermodynamic Data Communications (M. Frenkel). This will be extended to biothermodynamics and speciation issues.

9. *Proposals for New Projects.* (slide)

Suggestions for new projects were warmly welcomed at any time. Members should contact any Board member.

10. *Treasurer's Report* (slide)

The Treasurer, Professor Theo de Loos, presented the accounts with reference to two slides which showed respectively the Income and Expenditure for the two-year period to 28th April, 2008. As at that date there was £5165.49 in the Association's Abbey bank account and USD 734.09 held as cash.

The accounts were moved by Prof. M. Frenkel, seconded by Dr. R. Chirico, and unanimously adopted.

Thanks were expressed to the Treasurer.

11. *Any Other Business.*

On behalf of the Tellers, the Secretary announced that the following Directors had been elected: Prof. Tooru Atake, Prof. Juliana (Julie) Boerio-Goates, Prof. Alexey Victorov and Professor W.A. (Bill) Wakeham. Prof. Martin Trusler was appointed as Counsellor.

12. *Date of next meeting*

The next meeting will be held during ICCT-2010 in Tokyo, Japan at a time and venue to be arranged.