

Newsletter - March 2006

ECTP NEWS

*To the members of the IOC
of the ECTP*

Dear Colleagues,

Welcome to the yearly issue of the ECTP Newsletter, that brings you details and information on what has happened in recent months.

The main topic of this issue is a presentation of the activities that took place during ECTP 2005. The Organizers summarize the scientific content of the event and provide details about attendance and related matters.

In relation to the discussion held during the recent IOC meeting and the desire of the IOC regarding some modifications to the Young Scientist Award, contacts were made with Netzsch and came to a positive conclusion. Full details are reported in the second article.

The section on Information brings to your attention some recent details on matters of interest in the thermophysics community.

Following the trend of other countries, Italy has restructured its metrology sector, merging the two laboratories that were dealing with mechanical and thermal quantities (IMGC) and electrical quantities (IEN). Consequently the former laboratory with which I was associated (IMGC) has ceased to exist from Jan 1. We are now part of a new Italian metrology institution (acronym INRIM):

Istituto Nazionale Ricerca Metrologica
Strada delle Cacce 73-91
10135 Torino, Italy

For the moment being the previous telephone, fax and email are still working, but they are likely to change in future months. You may want to update my email address to f.righini@inrim.it that is already operational.

Comments, suggestions and contributions to improve this Newsletter are welcome.

Francesco Righini

17th ECTP

The 17th European Conference on Thermophysical Properties (ECTP) was held in Bratislava on September 4-8, 2005. The organizers were the University of Pau, France, Constantine the Philosopher University of Nitra (Slovakia) and the Institute of Physics, Slovak Academy of Sciences (Bratislava, Slovakia). The firm GUARANT International provided logistic support. The conference was held at the Faculty of Electrical Engineering and Information Technology, Slovak Technical University, Bratislava.

The conference program consisted of three plenary lectures, two award lectures, six invited contributions, fifty-seven oral and thirty-four poster presentations, three workshops and the commercial exhibition. The event took place in a main hall for plenary lectures and several other rooms for parallel sessions and scientific meetings. All the space was kindly provided by the hosting university.

The conference covered the thermophysical properties of solids, of liquids and measurement techniques. The plenary lectures highlighted some important problems of thermophysics related to:

- *Vacuum insulation panels - exciting thermal properties and convincing applications* (presented by Joachim Fricke)
- *Molecular simulation of the thermophysical properties of fluids: from understanding toward quantitative prediction* (presented by Philippe Ungerer)
- *Applications of micro and nano-scale thermophysical properties sensing for novel fluids and solids* (presented by Yuji Nagasaka).

The ECTP Award for Lifetime Achievements was presented to Ronald P. Tye (United Kingdom). His award lecture was titled "**From Armco Iron to Pyroceram 9606 and Back**".

Maria José Vitoriano Lourenço (Portugal) received the NETZSCH Young Scientist Thermophysical Properties Award. Her award lecture "**A bridge between**

thermophysics and material sciences" was presented by an audiovisual technique.

The oral presentations were grouped in sessions as per the following subdivisions:

Solids

- Processes
- Applications
- Radiation
- High Temperatures
- Advanced Materials

Fluids

- Modeling
- Refrigerants
- Viscosity
- Thermal Conductivity / Phase Equilibria
- Petroleum
- Volumetric Properties and Acoustic Properties

Measurement Techniques

- Testing techniques
- Flash Technique
- Transient techniques
- Advanced techniques
- Fast techniques
- New techniques

The poster presentations were grouped in three sessions dealing with solids, fluids and measurement techniques.

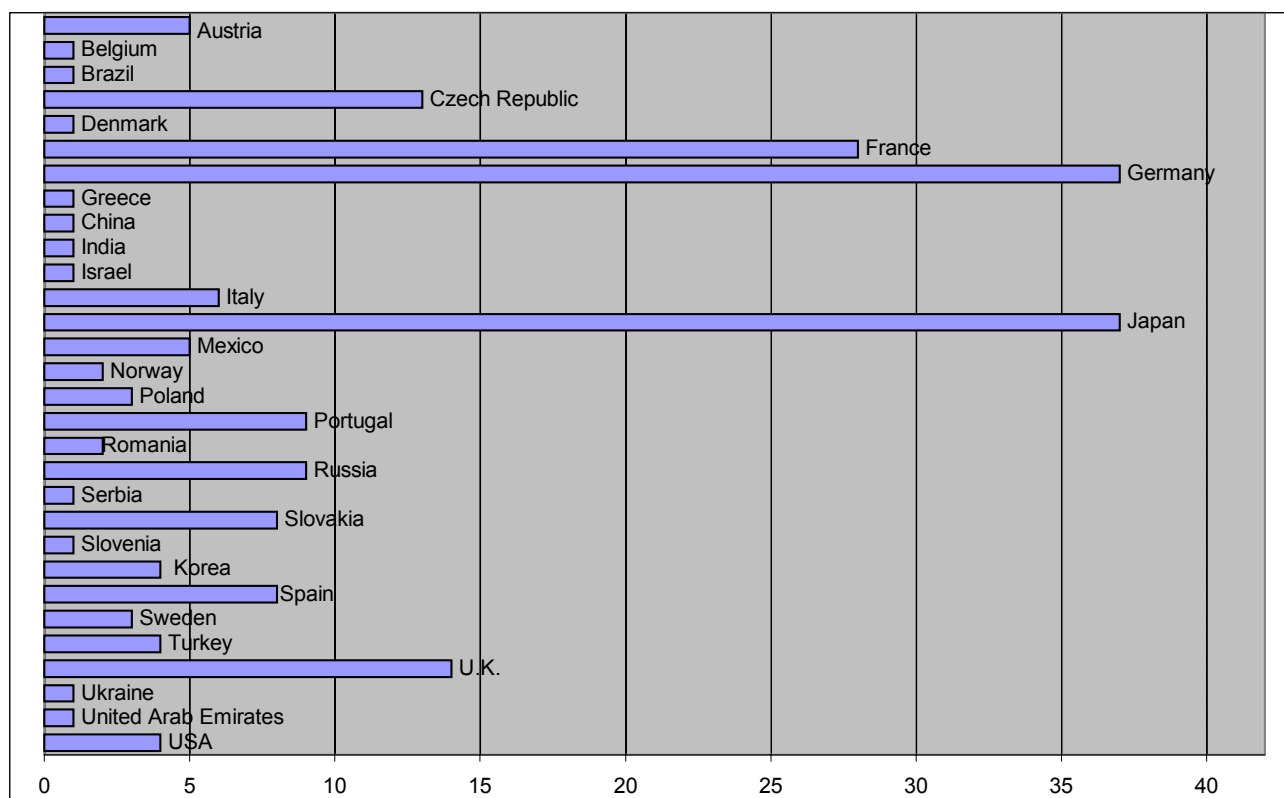
Three different workshop provided opportunities to discuss in depth important topics:

- **Properties of novel fluids: bio-, nano- and beyond**, *Workshop Leaders M. Assael (Greece) and B. Wakeham (U.K.)*
- **Photothermal and related measurement techniques**, *Workshop Leader C. Glorieux (Belgium)*
- **The industrial requirements for thermophysical properties - are we responding to industry needs?**, *Workshop Leader P. Queded (U.K.)*

Some of the oral scientific sessions were opened by invited presentations.

In connection with the conference, several scientific meetings were held, namely:

- Steering Group meeting of the EVITHERM project on Thermal Metrology (chaired by John Redgrove),
- Work Package 4 meeting of the EVITHERM project on Thermal Metrology (chaired by Guenther Neuer),
- IOC meeting (chaired by Ludovit Kubicar) dealing with the future of ECTP conferences,
- Consultative Committee on Thermometry Working Group 9 meeting (chaired by Tetsua Baba),
- EECC meeting devoted to the metrology of fluids (chaired by Bill Wakeham).



Histogram of the number of participants to the 17th ECTP from each country

ECTP attendees came from 25 countries from Europe, Asia, America and Africa. The distribution of participants from each country is presented in the figure above. The total number of participants was 210 with delegates from academia, research institutes and industry.

The organizing committee would like to express its heartfelt thanks to the IOC for its help with respect to the scientific program, to Guarant International for the logistic support

and to all the participants for their valuable scientific contributions. The success of the 17th ECTP is a result of the good cooperation of all members of the scientific as well as organizing committees. We wish to our French colleagues in Pau the best success for their work in organizing the 18th ECTP in 2008.

E. Kubičár, J. L. Daridon, L. Vozár

ECTP - Netzsch Young Scientist Award

Following the discussion held during the last IOC meeting, contacts were established with the firm Netzsch to reconsider some of the terms of the Young Scientist Award. As you probably recall, the IOC had expressed a desire for the following changes (see details in the minutes of the Bratislava IOC meeting):

- a) citation to be modified to “ECTP-Netzsch Young Scientist Award”
- b) the format of the award certificate to be jointly agreed
- c) the certificate to be signed both by the current IOC Chairman and by a Netzsch representative

Two IOC members (Joachim Fricke and Wolfgang Neumann) provided much help in the matter by informal contacts with Dr Blumm of Netzsch, that paved the way for a successful conclusion.

A formal letter was written on September 20, 2005 to Netzsch presenting the desires of the IOC. The text is available in the attached file “*To_blumm_050920.pdf*”.

In a message to the IOC Secretariat on December 21, 2005, Netzsch agreed to the IOC proposals and forwarded a new draft of the Young Scientist Award that basically agrees with the requests made by the IOC. For specific details, please consult the attached files “*From Netzsch 051221.pdf*” and “*ECTP-Netzsch Certificate Dec 05.pdf*”. The new draft of the certificate seems to be acceptable, except for minor linguistic problems that have been pointed out to Netzsch. Your comments and suggestions on this matter are welcome.

INFORMATION

The following items are of potential interest to all the IOC members and are likely to have some impact on the future of the thermophysics community:

High Temperatures High Pressures. The website of the journal has an official notice indicating that the journal intends to cease publications with the year 2006. Details are available at www.hthpweb.com

EVITHERM. This European project, that many of you are aware of and that has been managed by John Redgrove (NPL), will be concluded by the end of May 2006. A new entity, the ***Evitherm Society***, will continue the activity. More details on this Virtual Institute of Thermal Metrology are available at the related web site www.evitherm.org

IOC News

Transfer of IOC Chairmanship. Contacts have been established between Ludovit Kubicar (current IOC Chairman) and Jean-Luc Daridon (future IOC Chairman) regarding a formal transfer of the IOC Chairmanship, that will take place by common agreement in the near future.

Address list. Un updated list containing the addresses and email of current and previous IOC members is attached (please consult the file “*IOC list 0603.doc*”).

Comments. Comments and suggestions to all the items of the Newsletter are welcome. Please send all the material via email to f.righini@inrim.it