

## Ilya Prigogine Prize in Thermodynamics

The Ilya Prigogine Prize is endowed with an amount of 2000 € in addition to a diploma. The prize honors Ph.D. dissertations/theses or equivalent work defended or published between January 2009 and January 2011. All aspects and branches of thermodynamics are considered, from applied and experimental to the most theoretical.

### Historical

This prize, organized by the European Center for Advanced Studies in Thermodynamics, was patronized by the Nobel Prize laureate Ilya Prigogine personally while he was alive. Every two years, it is bestowed on a promising young researcher in thermodynamics. Its calendar is linked to that of the Joint European Thermodynamics Conference.

### Selection

The applications will be examined by a selection committee of about ten scientists from different European countries.

### Conferral of the 2011 Prize

The prize will be conferred solemnly during the JETC 11 meeting. The recipient will on this occasion give an oral presentation of his/her work. The candidates will be informed of the results by the end of April 2011.

*Deadline:* February 14, 2011

For further details, see the full announcement at  
[www.tu-chemnitz.de/physik/CPHYS/Con/jetc11](http://www.tu-chemnitz.de/physik/CPHYS/Con/jetc11)

### Scientific committee

- Bjarne Andresen, *NBI, U Copenhagen, Denmark*
- Viorel Badescu, *Polytechnic U of Bucharest, Romania*
- Dick Bedeaux, *NTNU Trondheim, Norway*
- Gian Paolo Beretta, *Università di Brescia, Italy*
- Christian van den Broeck, *U Hasselt, Belgium*
- Vito Antonio Cimmelli, *U of Basilicata, Italy*
- Chris Essex, *The University of Western Ontario, Canada*
- Yalçın Göğüş, *METU and ICAT, Turkey*
- Bernard Guy, *EMSE, France*
- Karl Heinz Hoffmann, *TU Chemnitz, Germany*
- David Jou, *Universitat Autònoma de Barcelona, Spain*
- Jürgen U. Keller, *University of Siegen, Germany*
- Signe Kjelstrup, *NTNU Trondheim, Norway*
- Wolfgang Muschik, *TU Berlin, Germany*
- Theo Nieuwenhuizen, *U Amsterdam, Netherlands*
- Bernd Noack, *Institut P', Poitiers, France*
- Liliana Restuccia, *University of Messina, Italy*
- Miguel Rubí, *University of Barcelona, Spain*
- Peter Salamon, *San Diego State University, CA, USA*
- Christian Schön, *MPI for Solid State Research, Germany*
- Stanislaw Sieniutycz, *Warsaw University of Technology, Poland*
- Daniel Tondeur, *ENSIC, Nancy Université, France*
- Péter Ván, *RMKI, KFKI, Hungary*

### Conference Location

Günnewig Hotel Chemnitzer Hof  
Theaterplatz 4  
09111 Chemnitz  
Germany



**JETC 11**

## 11<sup>th</sup> Joint European Thermodynamics Conference

27 June – 1 July 2011

Chemnitz, Germany

$$\begin{aligned} &= \rho_{\text{sc}}^2 \frac{3n_{\text{Ar}}}{n_{\text{Ar}}(3s - \sigma_{\text{Ar}})} \frac{\langle A_p^0 \rangle + P_H}{\langle A_{\text{Ar}} \rangle + \sigma_{\text{Ar}} \langle A_p^0 \rangle} \\ &= \rho_{\text{sc}} \cdot P_H \cdot A_p^0 / (1 + \sigma_{\text{Ar}}) \cdot \frac{\langle A_p^0 \rangle / (\sigma_{\text{Ar}} A_p^0) - 1}{1 + \sigma_{\text{Ar}}} = \frac{1}{1 + \sigma_{\text{Ar}}} \end{aligned}$$

# Welcome to Chemnitz

On behalf of the JETC 11 organization, I would like to welcome you to Chemnitz, Germany, for the 11th Joint European Thermodynamics Conference in June 2011.

The aim of the conference is to provide a meeting ground for thermodynamicists from all of Europe and surroundings and to enlighten various aspects of modern thermodynamics. In topical sessions emphasis will be on the connection of thermodynamics to diverse fields of science, possibly such as climate research, biology, chemical reaction theory, and optimization. Additionally, there will be invited talks giving a broad overview of selected topics.

A poster exhibition will offer space for all kinds of thermodynamics at the conference.

The Ilya Prigogine Prize in Thermodynamics will be bestowed on a promising young researcher in thermodynamics for his/her Ph.D. dissertation for the sixth time during this conference.

If this entices you and you would like further information about the conference, please have a look at the JETC11 website

[www.tu-chemnitz.de/physik/CPHYS/Con/jetc11](http://www.tu-chemnitz.de/physik/CPHYS/Con/jetc11)

and sign up.

*Karl Heinz Hoffmann*

## Focus areas

### *Biothermodynamics*

The description of biological systems with the help of thermodynamic quantities under theoretical as well as experimental aspects will be one of the focus areas. Apart from general aspects, biocalorimetry and thermodynamics of microbial solutions will be addressed in presentations.

### *Thermodynamics at Small Scales*

Thermodynamics in the range of single molecules up to mesoscopic systems will be discussed here. Mesoscopic, non-equilibrium systems show a different behavior than macroscopic or equilibrium systems. Statistical methods are often used to investigate the properties of systems at small scales.

### *Radiation Thermodynamics*

Transport of energy via radiation, for instance in the atmosphere, is of great importance in a detailed description of non-equilibrium thermodynamic processes. Theoretical descriptions, including entropy production and temperature distribution, as well as the necessary experimental measurements will be addressed with a special focus on atmospheric processes.

### *Optimizing Thermodynamic Processes*

The knowledge and the ability to control thermodynamic systems allows to optimize processes. Applications in various fields are possible, reaching from technical to biological systems. There are different non-equilibrium descriptions, which can be used for optimization, such as finite-time and endo reversible thermodynamics that will be discussed.

## Calendar

Date	Event
14. February 2011	Application for Prigogine Prize
1. April 2011	Poster registration
	Application "Up and Coming Scientists"
	Early registration fee
1. May 2011	Hotel reservation
	Final registration deadline
27. June 2011	JETC 11

## Up and Coming Scientists

In one session "up and coming" scientist, e.g. Ph.D. students, will be given the chance to present their work to the participants of JETC11. The speakers have to apply by 1 April and will be chosen by a scientific committee. For application details check the conference website.

## Local organizing committee

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