



**21<sup>st</sup> International Symposium on Transport Phenomena  
November 2 – 5, 2010, Kaohsiung City, Taiwan**

[www.istp-21.org](http://www.istp-21.org)

**Call for Paper**

**Invited Session on Interface transport phenomena: From droplets and  
sprays to fuel cells**

**Session Organizer: Profs. Signe Kjelstrup and Sergei Sazhin**

We are organizing an invited session on **Interface transport phenomena: From droplets and sprays to fuel cells** for ISTP-21, which will be held in **Kaohsiung City, Taiwan on November 2-5, 2010**. This session deals with transport phenomena at interfaces, relevant for modeling and understanding of energy efficient separation (like in evaporation/ condensation/ adsorption /desorption) or of energy conversion (like in catalysis or electrocatalysis, as in fuel cells). Interfaces of interest are liquid-vapor, solid-vapor, solid-liquid, and membrane interfaces. Topics of interest include, but are not limited to:

1. Theories of transport across interfaces, i.e. non-equilibrium thermodynamics, kinetic theory etc.
2. Experiments on phase separation that highlight the role of the interface in heat and mass transfer.
3. Computer simulations of interface transport processes. Use of MD, Monte Carlo and NEMD simulations to obtain physical understanding of coupled transport of heat and mass
4. The role of the interface, i.e. its structure, geometry or composition, for enhanced heat and mass transfer
5. Modelling of droplet heating and evaporation
6. Experimental studies of droplet heating and evaporation
7. Modelling and experimental studies of heating and evaporation of sprays in internal combustion engines
8. Applications of the kinetic models to the analysis of droplet heating and evaporation

**Submissions:**

Papers are invited from prospective authors with interest on the related areas. Each paper should follow the ISTP-21 format with title, author's names, affiliation, email addresses, an up to 400-words abstract, and a two-column body with 8 single-spaced pages and with font size at 10 pts. All papers must be submitted electronically in PDF format only and be mailed to: Prof. Signe Kjelstrup or Prof. Sergei Sazhin (see contact details below)

**Important Dates:**

Deadline for paper submission: **July 1<sup>st</sup>, 2010**

Notification of acceptance: **August 1<sup>st</sup>, 2010**

Deadline for camera-ready manuscript submission: **September 1<sup>st</sup>, 2010**

**For more information please contact:**

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