



## 2<sup>nd</sup> Mini Symposium on Solid Oxide Fuel Cells

27<sup>th</sup> June 2008

Institute for Chemical Technology and Polymer Chemistry  
Universität Karlsruhe (TH), Germany

### Scope

After the very fruitful discussions we had two years ago at our first Mini Symposium on Solid Oxide Fuel Cells on June 30, 2006, we would like to invite you to attend the informal one-day symposium at the University of Karlsruhe, taking place again just the Friday before the Lucerne Fuel Cell Forum. This year, the major topics will be

- Modeling of elementary electrochemistry
- Modeling of stacks and systems

Everyone is invited to give a presentation as basis for an open discussion.

**Registration:** e-mail to Olaf Deutschmann (olaf.deutschmann@kit.edu) or Robert J. Kee (rjkee@mines.edu) until June 20, 2008, no participation fee

**Location:** Engesserstr. 20 (Campus Bldg. 11.21), 76131 Karlsruhe, Room 104

**Weekend excursions:** On the weekend (June 28/29), excursions to local places of interest are planned; please let us know if you are interested. Travel to Lucerne on Monday (June 30).

For any assistance and further information please contact:

Prof. Dr. Olaf Deutschmann, olaf.deutschmann@kit.edu, Tel.: +49 (0) 721 608-3064

## Detailed Program (June 27, 2008)

09:00	Welcome (O. Deutschmann)  R.J. Kee (Colorado School of Mines) Introductory remarks on SOFC modeling
09:15 – 11:15	Session on <b>Elementary Electrochemistry</b> with short introductory presentations (15 min max) by  W. Bessler (DLR, Stuttgart): Hydrocarbon direct oxidation or internal reforming? A critical discussion from an elementary kinetic viewpoint  M. Vogler (University of Heidelberg): Elementary kinetics of hydrogen oxidation at patterned anodes  F. Ciucci (Caltech): Modeling of mixed conductors  V. Thoams (Caltech): Particle based modeling of cermet electrodes  B. R�ger (IWE, University of Karlsruhe): Modeling the microstructure of electrodes  V. Janardhanan (ITCP, University of Karlsruhe): SOFC simulations using detailed chemistry models
11:45 – 13:15	Session on <b>Modeling of stacks and systems</b> with short introductory presentations (15 min max) by  B. Haberman (Imperial Collage) Stack modeling  F. Leucht (DLR, Stuttgart) Cell and Stack Modeling in the Hybrid Power Plant Project  A. Colclasure (Colorado School of Mines) Model based control  A. Weber (IWE, University of Karlsruhe) Modeling and experimental validation of stacks and flow fields
13:15 – 14:15 hr	Lunch (Sandwiches will be served)
14:15 – 15:45 hr	A. Gubner (Enerday GmbH) SOFC Modeling from System Perspective
15:45	Open Discussion
18:00	Dinner