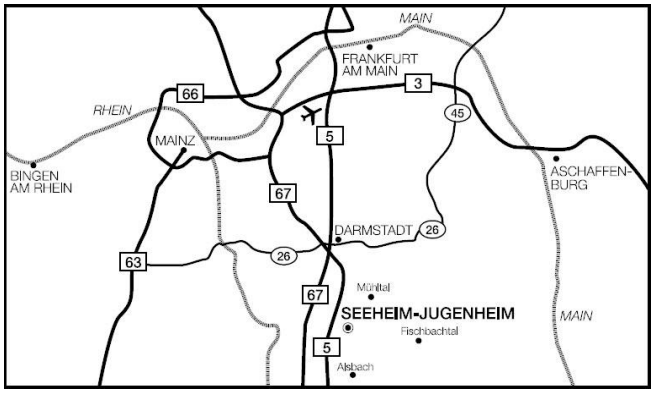
VENUE AND ACCOMMODATION

Lufthansa Training & Conference Center Seeheim

A route plan to the Lufthansa Training & Conference Center can be down loaded from www.lufthansa-seeheim.de. There is a regular bus shuttle from Frankfurt Airport to the Lufthansa Training & Conference Center. Its schedule and all necessary information about the venue can be found on the website.



A contingent of 70 rooms has been reserved at Lufthansa Training & Conference Center for the discussion meeting from Nov. 3–5 (two nights) at € 113.71 per night and person including breakfast. The allocation is handled on a first come first serve basis. There are numerous other hotels in the vicinity.

Accommodation will be managed by the organizers on the basis of the information given by the participants in the registration form.

GENERAL INFORMATION

Schedule

The meeting begins with an informal get together in the evening of Nov. 3rd. The technical sessions and discussions will commence at 9.00 am on Nov. 4th and the end of the meeting is planned for Nov. 5th 3.00 pm.

The focus on Nov. 4th is on work related to SFB 606, on Nov. 5th the main focus is on PAK 116.

Deadlines

Registration for participation: Oct. 20th, 2010.

Submission of abstracts for contributed posters: Oct. 10th, 2010. A one-page abstract of each poster should be mailed to sfb_606@vbt.uni-karlsruhe.de

Registration

The registration form can be downloaded from www.sfb606.uni-karlsruhe.de. The registration fee is € 150 and includes conference material, lunches, coffee-break refreshments and participation in the evening event on November 4th.

Organization

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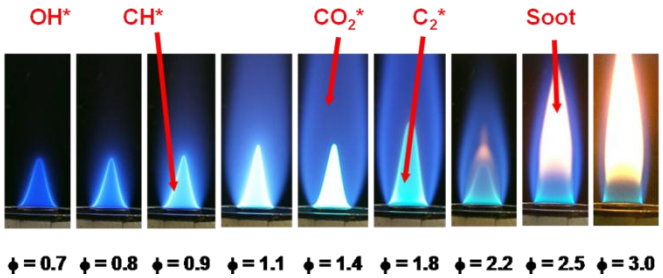
Karlsruhe Institute of Technology

UNIVERSITÄT DUISBURG ESSEN

INTERNATIONAL DISCUSSION MEETING

Combustion Diagnostics– Key to Understanding Fundamental Flame Processes



November 4–5, 2010
Lufthansa Training & Conference Center Seeheim

Collaborative Research Center SFB 606
Non-Stationary Combustion

Research Group PAK 116
Chemiluminescence and Heat Release

Collaborative Research Center 606

Non-Stationary Combustion:
Transport Phenomena, Chemical Reactions, Technical Systems

The Collaborative Research Center (Sonderforschungsbereich, SFB) “Non-Stationary Combustion: Transport Phenomena, Chemical Reactions, Technical Systems” has been established in 2002 by the Deutsche Forschungsgemeinschaft (DFG). The SFB is a research project at the Karlsruhe Institute of Technology (former University of Karlsruhe) including research groups from the faculties of Process Engineering, Mechanical Engineering, Chemistry and Biosciences, and Civil Engineering. Adjoined to the CRC are also research groups from the German Aerospace Center (DLR) Stuttgart.

Research topics of the SFB are phenomena linked to unsteady and transient combustion such as:

- Chemical reactions and transport in highly transient temperature and pressure fields
- Coupling of turbulence and chemical reactions in ignition and transient combustion
- Interactions of chemical reactions, mass and heat transfer in transient multi-phase flows
- Combustion-driven instabilities
- Combustion in direct injection internal combustion engines and gas turbines
- Modeling and numerical simulation

Research Group PAK 116

Chemiluminescence and Heat Release

The Research Group PAK 116 (Paketantrag) "Chemiluminescence and Heat Release" has been established in 2007 by the DFG. It incorporates research groups from the Universities of Bielefeld, Darmstadt, Duisburg-Essen, the Karlsruhe Institute of Technology, the Technical University Munich, and the DLR Stuttgart. It is coordinated by the University Duisburg-Essen. The main goal of this research group is establishing relations between heat release and flame emission due to chemiluminescence in flames to investigate and control combustion instabilities by means of model-based diagnostics.

The research topics of the PAK 116 are:

- Cavity-ringdown-absorption spectroscopy and heat-release-rate imaging in counter flow and turbulent flames
- Kinetics modeling of the chemiluminescence of CH*, C_2*, OH*, and CO_2
- Investigation of the kinetics of key reactions of chemiluminescence in shock tubes
- Spectroscopic characterization and simulation of the chemiluminescence in combustion processes
- Simulation of chemiluminescence in practical combustion systems with non-stationary methods
- Chemiluminescence and und quantitative OH imaging in stationary turbulent flames
- Chemiluminescence and heat release in periodically excited turbulent flames

The two-day **International Discussion Meeting on Combustion Diagnostics–Key to Understanding Fundamental Flame Processes** provides an opportunity for open discussions about the most recent developments in understanding fundamental flame processes with the help of diagnostic methods by highlighting several aspects by researchers from the CRC 606 and PAK 116 as well as invited international speakers. Ample discussion of modern developments will be provided in an open poster session. Contributions to the poster session are solicited. Submissions are encouraged preferably for the following topics:

- Elementary chemical reactions leading to excited species
- Complex mechanisms
- Chemiluminescence and other molecular emission processes at high temperatures
- Model-based diagnostic techniques for laminar and turbulent flames

The final program will be distributed by Oct. 15th.

Deutsche Forschungsgemeinschaft DFG