

Catalysis Research Center

The Catalysis Research Center (CRC) is a central scientific institution of TU München where the expertise of different faculties in the field of catalysis are bundled to promote an interdisciplinary problem-oriented approach to research.

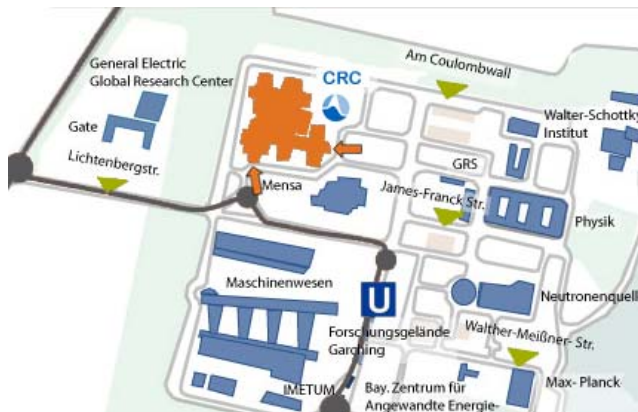
With the foundation of CRC in 2008 as an umbrella organization for over 200 scientists, TU München established a platform for the cooperation of currently 15 principle investigators and their teams who address a wide range of problems, covering all significant aspects of catalysis, from the theoretical basis to technology applications.

On the Garching Campus of TU München, a new research building for CRC is in the process of being constructed. This building will enhance the working conditions and will support scientific collaborations beyond traditional department boundaries, among the members of CRC and beyond.



CRC members:

T. Bach, J. V. Barth, U. Heiz, W. A. Herrmann, K. O. Hinrichsen, S. F. Kirsch, K. Köhler, K. Krischer, F. E. Kühn, J. A. Lercher, K. Reuter, B. Rieger, N. Rösch, U. Stimming, M. Stutzmann.



Venue

Lecture Hall 26411
Technische Universität München
Catalysis Research Center
Department of Chemistry
Lichtenbergstrasse 4
85748 Garching, Germany

Contact

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More information about CRC and the symposium at www.crc.tum.de

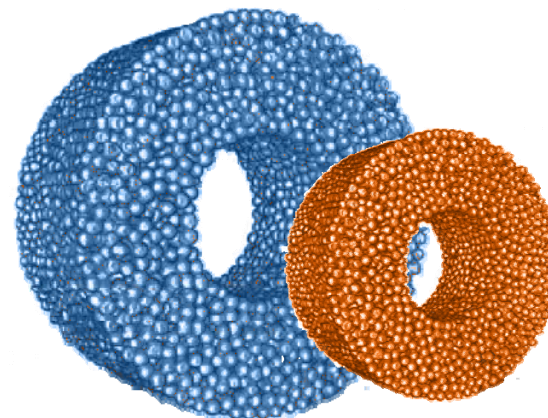


3rd International Symposium of the Catalysis Research Center

Frontiers in Heterogeneous Catalysis

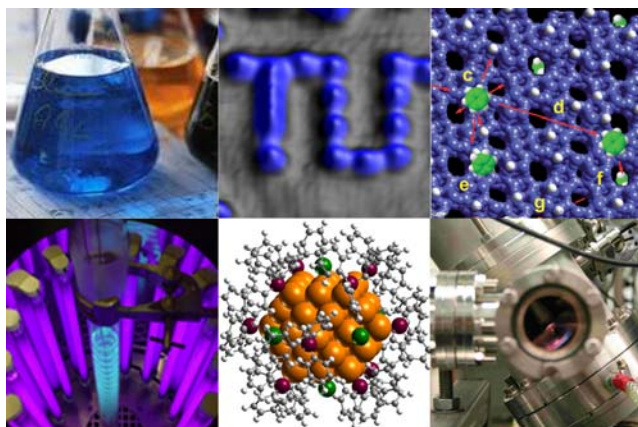
22-23 October 2010

Lecture Hall 26411
Technische Universität München
Department of Chemistry
Lichtenbergstr. 4
85748 Garching, Germany



Scope

The Symposium "Frontiers in Heterogeneous Catalysis" is the third in a series of international symposia organized by CRC. The series started in 2009 with the "International Kick-Off Workshop on Computation in Catalysis" and was continued with the 2nd CRC Symposium on "Frontiers in Transition Metal Catalysis". These meetings highlight timely aspects of the fast developing, interdisciplinary field of catalysis research and provide ample time for exchange among the participants.



Registration

The lectures are open (free of charge) to the scientific community interested in catalysis research. To facilitate the logistics, interested persons are requested to fill out the registration form at <http://xlurl.de/crc> and send it by email (crc@tum.de) or fax (+49.89.289.13468) before **September 1, 2010**.

Participation in the symposium is recognized as research training program for members of the TUM Graduate School, IGSSE etc.; written confirmation will be provided to registered graduate students.

A registration fee of 250 € will be charged for the participation in coffee and lunch breaks as well as the conference dinner. This fee also includes the booklet of abstracts. An invoice with details of payment will be sent after registration.

For more information visit the web site www.crc.tum.de

Program

Friday, 22 October 2010

8:00 Registration

Session 1: Modelling in Reactor Engineering

09:00 Elias Klemm (Universität Stuttgart, Germany)
Heterogeneously catalysed selective oxidations inside the explosion regime using micro reactors

10:00 Joris Thybaut (Ghent University, Belgium)
Catalytic Reaction Engineering - Single-Event MicroKinetics (SEMK)

11:00 Coffee Break

Session 2: Catalyst Characterization

11:30 Jeffrey T. Miller (Argonne National Laboratory, USA)
X-Ray Spectroscopy in Catalysis Research: Application to Au Catalysts

12:30 Lunch Break

Session 3: Biomass Conversion

14:00 Franck Dumeignil (Université Lille 1, France)
Next Generation Biorefineries & Catalysis

15:00 Regina Palkovits (MPI Kohlenforschung, Germany)
Catalyst development for the efficient utilization of conventional and renewable feedstocks

16:00 Coffee Break

Session 4: From Mechanistic Understanding to Catalyst Design

16:30 Friederike Jentoft (University of Oklahoma, USA)
Acid and bifunctional catalysts for hydrocarbon activation and conversion

17:30 Emiel J.M. Hensen (TU Eindhoven, The Netherlands)
From mechanistic insight towards rational design of heterogeneous catalysts

19:30 Conference Dinner

Saturday, 23 October 2010

Session 5: Photochemistry and Novel catalytic systems

9:00 Valérie Keller-Spitzer (Université Louis Pasteur Strasbourg, France)
Photocatalysis as a clean process for environment and energy: advantages and limitations

10:00 Hermenegildo García (Universidad Politécnica de Valencia, Spain)
Metal Organic Frameworks as Heterogeneous Catalysts for Organic Reactions

11:00 Coffee Break

Session 6: Novel catalytic systems

11:30 Christopher W. Jones (Georgia Institute of Technology, USA)
Heterogenized M-Salen Catalysts for Enantioselective Reactions: Catalyst Design, Structure-Reactivity Trends, and Deactivation Pathways

12:30 Javier Pérez-Ramírez (ETH Zürich, Switzerland)
Catalyst development for Cl₂ production via HCl oxidation: from fundamentals to implementation

13:30 Lunch Break

Session 7: Catalyst Design

14:30 Laura Prati (Università degli Studi di Milano, Italy)
Gold based catalysts for liquid phase oxidation

15:30 Ive Hermans (ETH Zürich, Switzerland)
Catalytic Activation of Peroxides

16:30 End