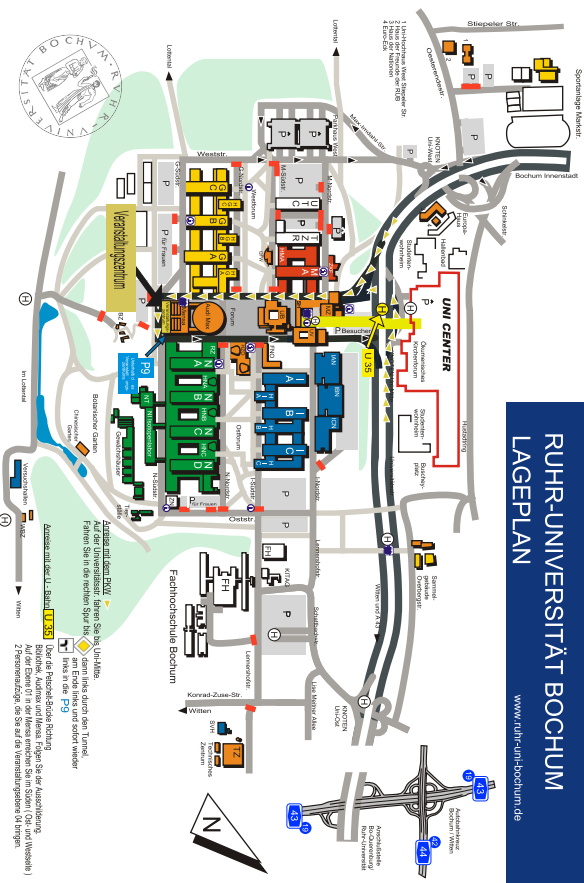


Site plan



further information:
www.rub.de/kontakt/index_en.htm

Contact

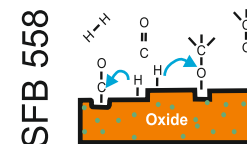
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Although the symposium is free of charge we appreciate donations (e.g. 50 €) to the "Verein zur Förderung der Chemie und Biochemie" (www.rub.de/vfch),
 Konto-Nr. 126 349 400, BLZ 430 601 29, Volksbank Bochum-Witten.

RUHR-UNIVERSITÄT BOCHUM

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„Metal-support interactions:
 How important are they in
 heterogeneous catalysis,
 electro- and photo-catalysis?“
 Bochum, April 16-18, 2012

Closing Symposium of the Collaborative
 Research Centre SFB 558

„Metal-substrate interactions in
 heterogeneous catalysis“: 2000-2012

Location: Conference Hall Ruhr-Universität Bochum

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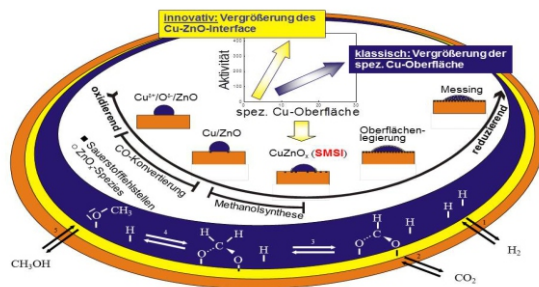
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Integrated Graduate School Meeting 2011



Bunsen Discussion Meeting SFB Hennesee 2008



Scope

Within the SFB 558 a unique team of experts in heterogeneous catalysis, inorganic chemistry, surface science and theory has been focusing for 12 years first on Cu/ZnO catalysts for methanol synthesis and later on Au/TiO₂ catalysts used in selective alcohol oxidation. The aim was to understand all the chemical processes on the atomic level by linking kinetic, spectroscopic, and structural investigations. Both polycrystalline composites and model catalysts were studied comprising single crystals, cluster compounds, colloids and metal nanoparticles deposited within MOFs and porous matrices. The experimental investigations were supported by state-of-the-art ab initio calculations employing both DFT and wave-function based methods.

Fundamental insight was gained in the hydrogenation of CO and CO₂ over Cu and ZnO, the interplay between ZnO and Cu, and the role of the perimeter sites for the activation of the reactants on Au/ZnO and Au/TiO₂. These metal-support interactions are also relevant for electrocatalysis requiring metallic nanoparticles as active sites on conducting supports and for photocatalytic processes such as water splitting on semiconducting oxides needing co-catalysts as hydrogen or oxygen evolution sites.

Speakers

Alexander Birkner, Ruhr-Universität Bochum

Jörg Behler, Ruhr-Universität Bochum

Jürgen Behm, Universität Ulm

Ralf Drautz, Ruhr-Universität Bochum

Roland Fischer, Ruhr-Universität Bochum

Wolfgang Grünert, Ruhr-Universität Bochum

Jan-Dierk Grunwaldt, KIT, Karlsruhe

Christof Hättig, Ruhr-Universität Bochum

Ulrich Köhler, Ruhr-Universität Bochum

Alfred Ludwig, Ruhr-Universität Bochum

Dominik Marx, Ruhr-Universität Bochum

Klaus Merz, Ruhr-Universität Bochum

Bernd Meyer, Universität Erlangen-Nürnberg

Karina Morgenstern, Ruhr-Universität Bochum

Anja-Verena Mudring, Ruhr-Universität Bochum

Martin Muhler, Ruhr-Universität Bochum

Guido Mul, Universität Twente, Netherlands

Philippe Sautet, University of Lyon, France

Ferdi Schüth, MPI für Kohlenforschung, Mülheim

Wolfgang Schuhmann, Ruhr-Universität Bochum

Robert Schlögl, FHI, Berlin

Rochus Schmid, Ruhr-Universität Bochum

Martin Stratmann, MPI für Eisenforschung, Düsseldorf

André van Veen, Technische Universität München

Yue-min Wang, Ruhr-Universität Bochum

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Cu/ZnO catalyst



Die Suche nach dem Stein der Weisen

