

Workshop on
**“Next Generation Catalysis: Innovation in Cross-Coupling,
C–H Functionalization and High-Pressure Reactions“**

February 26-27, 2015

Ellington Hotel, Room “SENATOR”, Nuernberger Str. 50-55, 10789 Berlin, Germany

Thursday, Feb. 26th, 2015

2:30 p.m. **Dr. Helmut Haning**

Head of Medicinal Chemistry Wuppertal, Bayer HealthCare

Welcome address

2:40 p.m. **Prof. Matthias Beller**

Leibniz-Institut für Katalyse e.V., Rostock, Germany

Welcome address from the organizers

Session I Innovative Catalysts and Reagents for Novel Reactions

Chair: **Dr. Tobias Thaler** (Chemical Development Wuppertal)

2:50 p.m. **Prof. Bernhard Breit**

Albert-Ludwigs-Universität Freiburg, Freiburg im Breisgau, Germany

“Rhodium-Catalyzed Addition of Pronucleophiles to Alkynes and Allenes”

3:30 p.m. **Dr. Manuel Alcarazo**

Max-Planck-Institut für Kohlenforschung, Mülheim an der Ruhr, Germany

“Cationic Phosphines: Synthesis and Applications”

4:20 p.m. Coffee break

4:40 p.m. **Prof. Paul Knochel**

Ludwig-Maximilians-Universität München, Munich, Germany

“Cross-Couplings with Polyfunctional Organometallics”

5:30 p.m. Wrap-up Day One / int. scient. organizer

5:40 p.m. End of Day One

5.50 p.m. Get-together (incl. dinner buffet)

Friday, Feb. 27th, 2015

Session II Catalysis in Industry

Chair: **Dr. Donald Bierer** (Medicinal Chemistry Wuppertal)

9:00 a.m. **Dr. Fred Hancock**

Johnson Matthey, Catalysis and Chiral Technologies, Cambridge, UK

“Moving Hydrogen with Homogeneous Catalysts Designed by Man and Nature”

9:50 a.m. **Dr. Felix Spindler**

Solvias AG, Kaiseraugst, Switzerland

“Modular Ligands – A Key Success Factor in Asymmetric Catalysis”

10:40 a.m. Coffee break

11:00 a.m. **Dr. Matthew Tudge**

Merck Research Laboratories, Rahway, NJ, USA

“Catalysis at Merck: Development and Application of Catalytic Reactions in Support of Drug Discovery and Development”

11:50 a.m. Lunch

Session III C-O Bond Activation through Catalysis

Chair: **Dr. Nuria Ortega Hernández** (Medicinal Chemistry Wuppertal)

2:10 p.m. **Prof. Matthias Beller**

Leibniz-Institut für Katalyse e.V., Rostock, Germany

"General Catalysts for Cross Coupling Reactions of (Hetero)Arenes and Olefins: Carbonylations and Related Processes"

3:00 p.m. **Prof. Rubén Martín**

Institute of Chemical Research of Catalonia (ICIQ), Tarragona, Spain

"Metal-catalyzed Activation of C-O Bonds and Carbon Dioxide"

3:50 p.m. Coffee break

Session IV C-H Functionalization Strategies

Chair: **Dr. Kersten Gericke** (Medicinal Chemistry Wuppertal)

4:10 p.m. **Prof. Olivier Baudoin**

Université Claude Bernard Lyon 1, Villeurbanne, France

"Two Different Strategies for the Functionalization of Unactivated C(sp³)-H Bonds"

5.00 p.m. **Prof. Jin-Quan Yu**

The Scripps Research Institute, La Jolla, CA, USA

"Ligand-Accelerated C-H Activation Reactions: Near and Far"

Wrap up & final discussion

5:50 p.m. Final discussion and concluding remarks by **Prof. Matthias Beller & Dr. Bernd Riedl** (Department Head, Bayer HealthCare AG)

6:00 p.m. End of workshop

6:15 p.m. Departure for Speakers' dinner (speakers and invited guests only)

6:30 p.m. Speakers' dinner

Scientific Organizing Committee

Prof. Matthias Beller (Leibniz-Institut für Katalyse e.V., Rostock)

Dr. Bernd Riedl (Bayer HealthCare AG, Medicinal Chemistry)

Dr. Donald Bierer (Bayer HealthCare AG, Medicinal Chemistry)

Dr. Kersten Matthias Gericke (Bayer HealthCare AG, Medicinal Chemistry)

Dr. Nuria Ortega Hernández (Bayer HealthCare AG, Medicinal Chemistry)

Dr. Robert Webster (Bayer HealthCare AG, Medicinal Chemistry)

Dr. Tobias Thaler (Bayer HealthCare AG, Chemical Development)

Administration

Ines Stöhr

Global External Innovation & Alliances

Bayer HealthCare Pharmaceuticals

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Further information can be obtained from

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