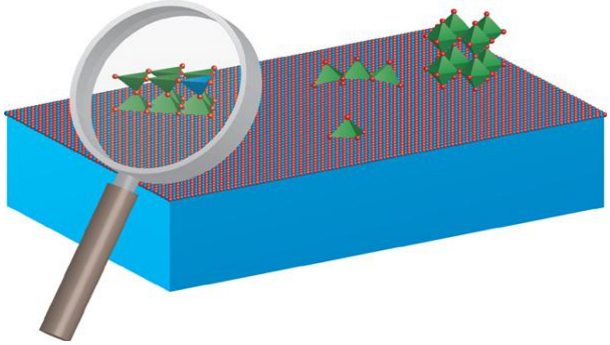
2012 Catalysis Lectures

May 21-24 2012

Bert Weckhuysen

Bert Weckhuysen, who holds the chair of Inorganic Chemistry and Catalysis at Utrecht University, will give a series of catalysis lectures during his sabbatical period at Stanford University and SLAC.



(1) "Characterization of Heterogeneous Catalysts: Possibilities and Limitations of In-situ Spectroscopy" (Part I)
Monday, May 21, 2012, 4.30-6 p.m. Location: SLAC Redwood Conference Room C&D

(2) "Characterization of Heterogeneous Catalysts: Possibilities and Limitations of In-situ Spectroscopy" (Part II)
Tuesday, May 22, 2012, 4.30-6 p.m. Location: SLAC Redwood Conference Room C&D

(3) "New Developments in Green Chemistry: Catalytic Valorization of Biomass"
Wednesday, May 23, 2012, 4.30-6 p.m. Location: SLAC Redwood Conference Room C&D

(4) "Cracking the Crackers: From Large Zeolite Crystals to Real Fluid Catalytic Cracking Particles"
Thursday, May 24, 2012, 4.30-6 p.m. Location: SLAC Redwood Conference Room C&D

Weckhuysen received his master degree in chemical and agricultural engineering from Leuven University (Belgium) in 1991. After obtaining his PhD from Leuven University in 1995 with Professor Schoonheydt he has worked as a postdoc with Professor Wachs at Lehigh University and with Professor Lunsford at Texas A&M University. Weckhuysen is since 2000 full professor Inorganic Chemistry and Catalysis at Utrecht University (The Netherlands). He is also scientific director of the Netherlands Institute of Research in Catalysis (NIOK) and heads a large research program, CatchBio, which aims to develop catalytic conversion technologies for the production of transportation fuels, materials and chemicals from biomass. Professor Weckhuysen has co-authored ~ 300 publications in peer-reviewed scientific journals and serves as chairman of the editorial board of ChemCatChem.

He is an elected member of the Royal Dutch Academy of Sciences and the European Academy of Science. He received several awards for his research, including the 2006 Gold Medal from the Royal Dutch Chemical Society, the 2007 Dechema Award from The Max Buchner Research Foundation, the 2009 Netherlands Catalysis and Chemistry Award, the 2009 Eminent Visitor Award from the South African Catalysis Society, the 2011 Paul H. Emmett Award in Fundamental Catalysis from the North American Catalysis Society, the 2012 Vladimir N. Ipatieff Lectureship from Northwestern University and the 2012 International Catalysis Award from the International Association of Catalysis Societies.

His research interests include the development and use of spatiotemporal characterization methods applied on catalytic solids during catalyst preparation and real operation. Using this characterization approach his group aims to develop structure-activity relationships for catalytic processes producing bulk chemicals and energy carriers. Emphasis is on the catalytic conversion of conventional (i.e., crude oil and methane) and non-conventional feedstock (e.g. biomass and heavy crude oil).