

## **EUROPACAT- VIII, scientific program, time schedule**

### **Sunday 26.8**

**17:30 Opening**

**18:00 PL-1, Hall A,** Keynote and Plenary lectures

*Hydrogen: From petrochemical workhorse to clean fuel,* Herman P.C.E. Kuipers, Speaker Herman P.C.E. Kuipers

**19:00 Welcome reception**

### **Monday 27.8**

**09:00 Berzelius Lecture, Hall A,** Keynote and Plenary lectures

*New Ligands and Applications for Olefin Metathesis Catalysts,* R.H. Grubbs, California Institute of Technology, Speaker R.H. Grubbs

**10:00 O4-1, Auditorium 1,** New experimental approaches and characterization under reaction conditions (combinatorial methods included)

*Non-uniform catalytic behaviour of zeolite crystals as revealed by in-situ optical micro-spectroscopy,* Marianne H.F. Kox, Eli Stavitski, Bert M. Weckhuysen, Utrecht University, Speaker Marianne Kox

**10:00 O14-1, Auditorium 2,** Catalysis for pollution control (mobile)

*The Effect of Water on the Adsorbed NO<sub>x</sub> species over BaO/Al<sub>2</sub>O<sub>3</sub> NO<sub>x</sub> Storage Materials: A Combined FTIR and In Situ Time-Resolved XRD study,* János Szanyi, Ja Hun Kwak, Do Heui Kim, Jonathan Hanson, Charles H.F. Peden, Pacific Northwest National Laboratory, Speaker Janos Szanyi

**10:00 O15-1, Auditorium 3,** Catalysis for bulk and specialty chemicals

*Nature and chemical reactivity of Ga species in ZSM-5 zeolite for alkane activation,* N. Rane, R.A. van Santen, E.J.M. Hensen, Eindhoven University of Technology, Speaker N.Rane

**10:00 K9-1, Hall A,** Keynote and Plenary lectures

*Zeolite Catalysts in Oil Refining and Petrochemistry,* Jens Weitkamp, University of Stuttgart, Speaker Jens Weitkamp

**10:00 O5-1, Hall C,** Catalysis for pharma and fine chemistry (homo- and heterogeneous catalysis)

*Methods to Assess Leaching of Active Palladium from Immobilized Molecular Catalysts in Heck and Suzuki Couplings,* J. M. Richardson, C. W. Jones, Georgia Institute of Technology, Speaker Chris Jones

**10:20 O4-2, Auditorium 1,** New experimental approaches and characterization under reaction conditions (combinatorial methods included)

*2D-mapping of supported noble metal catalysts at work,* Jan-Dierk Grunwaldt, Stefan Hannemann, Bertram Kimmerle, Alfons Baiker, Pit Boye, Jens Patommel, Christian G. Schroer, ETH Zurich, Speaker Grunwaldt

**10:20 O14-2, Auditorium 2,** Catalysis for pollution control (mobile)

*Impact of the support on the NO<sub>x</sub> trap properties of Pt/Ba/support catalysts: H<sub>2</sub>O and CO<sub>2</sub> effect, sulfur resistance and regeneration.,* E.C. Corbos, X. Courtois, N. Bion, P. Marecot, D. Duprez, Université de Poitiers, Speaker E.C. Corbos

**10:20 O15-2, Auditorium 3,** Catalysis for bulk and specialty chemicals

*Liquid-phase beckmann rearrangement of cyclododecanone oxime on delaminated material ITQ-2: a sulfuric acid-free process for production of ù-lauractam,* P. Botella, A. Corma, S. Iborra, R. Monton, V. Costa, Instituto de Tecnología Química, Speaker Pablo Botella

**10:20 O5-2, Hall C,** Catalysis for pharma and fine chemistry (homo- and heterogeneous catalysis)

*Very Efficient and Selective Coupling Reactions Catalyzed by Novel Metal-carbene Complexes*, Guillaume Berthon-Gelloz, Itsvan Marko, Guy Bertrand, Celine Lyon-Saunier, Antoine Baceiredo, Gérard Mignani, Rhodia Recherches, Speaker MIGNANI Gérard

**10:40 Coffee break**

**11:10 O4-3, Auditorium 1**, New experimental approaches and characterization under reaction conditions (combinatorial methods included)

*Operando Quantification Of Reaction Intermediates In The Water-Gas Shift Reaction On Au/Ce(La)O<sub>2</sub>: Elimination Of Formates Seen By DRIFT As A Key Intermediate.*, F. C. Meunier, D. Reid, S. Shekhtman, A. Goguet, C. Hardacre, R. Burch, W. Deng, M. Flytzani-Stephanopoulos, Queen's University Belfast, Speaker Dr A. Goguet

**11:10 O14-3, Auditorium 2**, Catalysis for pollution control (mobile)

*Real-time observation of platinum redispersion on ceria-based oxide by in-situ Turbo-XAS*, Toshitaka Tanabe, Yasutaka Nagai, Kazuhiko Dohmae, Nobuyuki Takagi, Yasuo Ikeda, Sakura Pascarelli, Gemma Guilera, Mark Newton, Oji Kuno, Hongying Jiang, Hirofumi Shinjoh, Shin-fichi Matsumoto, Toyota Central R&D Labs., Inc., Speaker Toshitaka Tanabe

**11:10 O15-3, Auditorium 3**, Catalysis for bulk and specialty chemicals

*Selective Oxidation Of Propane Over Cation Exchanged Zeolites: Active Sites And Reaction Mechanism*, Jiang Xu, Barbara L. Mojet, Leon Lefferts, University of Twente, Speaker

**11:10 O9-1, Hall A**, Catalysis in oil refining

*Single event microkinetics of alkane cracking on FAU and MFI zeolites*, Rhona Van Borm, Marie-Françoise Reyniers, Guy B. Marin, Ghent University, Speaker Rhona van Borm

**11:10 K5-1, Hall C**, Keynote and Plenary lectures

*Molecular defined Catalysis – A Key Technology for a Sustainable Development in Chemistry*, Matthias Beller, LIKAT, Speaker Matthias Beller

**11:30 O4-4, Auditorium 1**, New experimental approaches and characterization under reaction conditions (combinatorial methods included)

*Nuclear Magnetic Resonance Imaging As a Method to Study Catalyst Preparation and Reaction Processes*, A.A. Lysova, I.V. Koptyug, J.A. Bergwerff, L. Espinosa Alonso, B.M. Weckhuysen, A.V. Kulikov, V.A. Kirillov, R.Z. Sagdeev, V.N. Parmon, International Tomography Center SB RAS, Speaker Anna Lysova

**11:30 O14-4, Auditorium 2**, Catalysis for pollution control (mobile)

*NO<sub>x</sub> storage on BaO and BaO/Pt: insights from ab initio calculations*, Henrik Grönbeck, Chalmers University of Technology, Speaker Henrik Grönbeck

**11:30 O15-4, Auditorium 3**, Catalysis for bulk and specialty chemicals

*Application of Niobia Compounds Towards the One-Step Synthesis of Methyl Isobutyl Ketone: Kinetics and Catalyst Development*, W.K. O'Keefe, F.T.T. Ng, G.L. Rempel, The University of Waterloo, Speaker William K. O'Keefe

**11:30 O9-2, Hall A**, Catalysis in oil refining

*Cracking of a rapeseed vegetable oil under realistic FCC conditions*, X. Dupain, D. Costa, C.J. Schaverien, M. Makkee, J.A. Moulijn, TU Delft, Speaker J.A. Moulijn

**11:50 K4-1, Auditorium 1**, Keynote and Plenary lectures

*Electron Tomography of Catalysts and Nanoparticles*, Paul Midgley, Edmund Ward, Ana Hungria, John Meurig Thomas, University of Cambridge, Speaker Paul Midgley

**11:50 O14-5, Auditorium 2**, Catalysis for pollution control (mobile)

*One-step flame made 0.5 wt% Pd/LaCoO<sub>3</sub> catalyst for the reduction of NO by H<sub>2</sub> under lean conditions*, G.L. Chiarello, J.D. Grunwaldt, D. Ferri, A. Baiker, L. Forni, Università degli studi di Milano, Speaker G.L. Chiarello

**11:50 K15-1, Auditorium 3**, Keynote and Plenary lectures

*Liquid phase oxidation and reduction reactions on colloidal and heterogeneous catalysts*, Dirk De Vos, Centre for Surface Chemistry and Catalysis, Speaker Dirk De Vos

**11:50 O9-3, Hall A**, Catalysis in oil refining

*Selective Ring Opening of Naphthalene over Mo<sub>2</sub>C/HY Zeolite*, Xuebin Liu, Kevin J. Smith, The University of British Columbia, Speaker Kevin Smith

**11:50 O5-3, Hall C**, Catalysis for pharma and fine chemistry (homo- and heterogeneous catalysis)

*Novel transition-metal-free heterogeneous catalysts for the sustainable epoxidation of alkenes*, Paolo P. Pescarmona, Kris P.F. Janssen, Pierre A. Jacobs, University of Leuven, Speaker Paolo Pescarmona

**12:10 O14-6, Auditorium 2**, Catalysis for pollution control (mobile)

*Characterization of Ag-based materials in diesel soot combustion*, Eleonora Aneggi, Alessandro Trovarelli, Jordi Llorca, Carla de Leitenburg, Giuliano Dolcetti, Università di Udine, Speaker Eleonora Aneggi

**12:10 O9-4, Hall A**, Catalysis in oil refining

*Upgrading of Middle Distillates with Platinum Catalysts*, J. Jakkula, P. Aalto, N. Kumar, M. Lindblad, V. Niemi, M. Tiitta, H. Österholm, Neste Oil, Speaker J. Jakkula

**12:10 O5-4, Hall C**, Catalysis for pharma and fine chemistry (homo- and heterogeneous catalysis)

*Shape-Selective Isopropylation of Biphenyl over MCM-68 Zeolite*, Tomoko Shibata, Sayaka Suzuki, Kenichi Komura, Yoshihiro Kubota, Yoshihiro Sugi, Gifu University, Speaker Y. Sugi

**12:30 O4-5, Auditorium 1**, New experimental approaches and characterization under reaction conditions (combinatorial methods included)

*Pd-C surface phase as an essential parameter of selective alkyne hydrogenation: a high-pressure XPS study*, D. Teschner, E. M. Vass, M. Hävecker, S. Zafeiratos, P. Schnörch, A. Knop-Gericke, J. Borsodi, M. Chamam, A. Wootsch, R. Schlögl, Fritz-Haber-Institut der MPG, Speaker Teschner

**12:30 K14-1, Auditorium 2**, Keynote and Plenary lectures

*On-Road and Laboratory Measurements of Nucleation Mode Particles Downstream of Catalyzed Diesel Particulate Filtration Systems*, D. B. Kittelson, W. F. Watts, J. P. Johnson, C. Thorne, C. McCann, M. Payne, S. Goodier, C. Warrens, H. Preston, U. Zink, D. Pickles, C. Goersmann, M. V. Twigg, A. P. Walker, R. Boddy, University of Minnesota, Speaker D. B. Kittelson

**12:30 O15-5, Auditorium 3**, Catalysis for bulk and specialty chemicals

*Mechanistic and reaction engineering aspects of nitrile hydrogenation*, P. Schärringer, T. E. Müller, J. A. Lercher, Technische Universität München, Speaker T. E. Muller

**12:30 O9-5, Hall A**, Catalysis in oil refining

*The Selective Catalytic Oxidation of Hydrogen Sulphide in the presence of Methane*, Carl MAM Mesters, Arnab Chatterjee, Cor de Graaf, Ronald Schoonebeek, Shell Global Solutions, Speaker Arnab Chatterjee

**12:30 O5-5, Hall C**, Catalysis for pharma and fine chemistry (homo- and heterogeneous catalysis)

*Cerium-Catalyzed Oxidative C–C Bond Forming Reactions for the Synthesis of 1,4-Diketones and Heterocyclic Compounds*, Jens Christoffers, Universität Oldenburg, Speaker Jens Christoffers

**12:50 O4-6, Auditorium 1**, New experimental approaches and characterization under reaction conditions (combinatorial methods included)

*The Cr/SiO<sub>2</sub> Phillips catalyst: a Raman study*, A. Damin, F. Bonino, E. Groppo, S. Bordiga, C. Lamberti, A. Zecchina, Università di Torino, Speaker Alessandro Damin

**12:50 O15-6, Auditorium 3**, Catalysis for bulk and specialty chemicals

*Direct epoxidation of propylene to propylene oxide by using hydrogen/oxygen mixed gas and molecular oxygen as oxidants*, Naoki Mimura, Zhaoxia Song, Xiaoming Zhang, Miki Yoshimune, Juan J. Bravo-Suárez, Susumu Tsubota, S. Ted Oyama, Tadahiro Fujitani, National Institute of Advanced Industrial Science and Technology, Speaker Naoki Mimura

**12:50 O9-6, Hall A**, Catalysis in oil refining

*Effect of acidity of support on the properties of sulfided Mo phase of hydrotreating catalysts*, Wenbin Chen, Francoise Mauge, Jacob van Gestel, Jean-Pierre Gilson, Jacques Quillard, Carole Dupuy, Eric Lacroix, Hong Nie, Dadong Li, ENSICAEN, Speaker Francoise Mauge

**12:50 O5-6, Hall C**, Catalysis for pharma and fine chemistry (homo- and heterogeneous catalysis)

*Gold vs Pd Complexes Soluble and Heterogenized on MCM-41 as Effective and versatile Catalysts*, C. González-Arellano, A. Corma, M. Iglesias, F. Sánchez, Instituto de Ciencia de Materiales de Madrid, CSIC, Speaker Marta Iglesias Hernández

**13:10 Lunch**

**14:40 O4-7, Auditorium 1**, New experimental approaches and characterization under reaction conditions (combinatorial methods included)

*Immediate access to active sites in nickel butene isomerization catalysts under industry-like conditions by high-pressure liquid-phase EPR*, A. Brückner, U. Bentrup, H. Zanthoff, D. Maschmeyer, Leibniz Institute for Catalysis, Branch Berlin, Speaker Angela Brückner

**14:40 K14-2, Auditorium 2**, Keynote and Plenary lectures

*Diesel Emissions in Review*, Timothy V. Johnson, Corning Incorporated, Speaker Timothy V. Johnson

**14:40 O15-7, Auditorium 3**, Catalysis for bulk and specialty chemicals

*SNOW: A New Styrene Technology*, Domenico Sanfilippo, Guido Capone, Richard Pierce, Howard Clark, Snamprogetti, Speaker Domenico Sanfilippo

**14:40 K9-2, Hall A**, Keynote and Plenary lectures

*New Atomic-Scale Insights into Cluster-size, Promoter and Support Effects of MoS<sub>2</sub>-based Hydrotreating Model Catalysts*, Flemming Besenbacher, Jakob Kibsgaard, Jeppe V. Lauritsen, University of Aarhus, Speaker Flemming Besenbacher

**14:40 O5-7, Hall C**, Catalysis for pharma and fine chemistry (homo- and heterogeneous catalysis)

*Metal-triflate ionic liquid systems immobilized onto mesoporous MS41 materials as new and efficient catalyst for N-acylation*, S. M. Coman, M. Florea, V. I. Parvulescu, D. De Vos, P. A. Jacobs, G. Poncelet, P. Grange, University of Bucharest, Speaker V.I. Parvulescu

**15:00 O4-8, Auditorium 1**, New experimental approaches and characterization under reaction conditions (combinatorial methods included)

*In situ XAFS study of Cu-promoted Cr-stabilized iron-based water-gas shift catalysts under industrial conditions (380°C, 25bar, 37.5%H<sub>2</sub>O)*, A. Puig-Molina, A.M. Molenbroek, T.V.W. Janssens, E. Törnqvist, B.S. Clausen, Haldor Topsøe A/S, Speaker Ton V. W. Janssens

**15:00 O15-8, Auditorium 3**, Catalysis for bulk and specialty chemicals

*Telomerization of 1,3-butadiene with amines*, Ralf Jackstell, Anne Grotevendt, Maribel Bartolomé, David Nielsen, Matthias Beller, Leibniz-Institut für Katalyse e.V., Speaker Anne Grotevendt

**15:00 O5-8, Hall C**, Catalysis for pharma and fine chemistry (homo- and heterogeneous catalysis)

*Palladium supported materials for C-C coupling reactions: Conventional heating versus Microwave irradiation*, J. H. Clark, M. J. Gronnow, R. Luque, D. J. Macquarrie, R. J. White, The University of York, Speaker Rafael Luque

**15:20 O4-9, Auditorium 1**, New experimental approaches and characterization under reaction conditions (combinatorial methods included)

*Catalytic Performances and Structural Transformation of Re-Cluster/HZSM-5 Catalysts Selective for Direct Phenol Synthesis from C<sub>6</sub>H<sub>6</sub> and O<sub>2</sub>*, M. Tada, R. Bal, Y. Uemura, Y. Iwasawa, The University of Tokyo, Speaker Mizuki Tada

**15:20 O14-7, Auditorium 2**, Catalysis for pollution control (mobile)

*Investigation of the Isocyanic Acid Hydrolysis in the Urea-SCR Process*, O. Kröcher, G. Piazzesi, I. Czekaj, M. Devadas, M. Elsener, A. Wokaun, Paul Scherrer Institute, Speaker Oliver Kröcher

**15:20 O9-7, Hall A**, Catalysis in oil refining

*Genesis of new HDS catalysts through a careful control of the sulfidation of both Co and Mo atoms*, Naïma Frizi, Pascal Blanchard, Pascale Baranek, Edmond Payen, Jean Pierre Dath, Unité de Catalyse et de Chimie du Solide, Speaker

**15:20 K5-2, Hall C**, Keynote and Plenary lectures

*Base and redox catalysis with Layered Double Hydroxides*, Didier Tichit, Institut Charles Gerhardt - UMR 5253, Speaker Didier Tichit

**15:40 O4-10, Auditorium 1**, New experimental approaches and characterization under reaction conditions (combinatorial methods included)

*Characterization of trimetallic Pt-Pd-Au/CeO<sub>2</sub> catalysts combinatorially designed for methane total oxidation*, András Tompos, József L. Margitfalvi, Mihály Hegedűs, Ágnes Szegedi, Jose Luis G. Fierro, Sergio Rojas, Chemical Research Center, Speaker Andras Tompos

**15:40 O14-8, Auditorium 2**, Catalysis for pollution control (mobile)

*Mechanistic Considerations of Propane Activation for HC-SCR using Isotope Labelled Oxygen*, Hanna Härelind Ingelsten, Anders Palmqvist, Magnus Skoglundh, Chalmers University of Technology, Speaker Hanna Ingelsten

**15:40 O9-8, Hall A**, Catalysis in oil refining

*Kinetics of the HDS of 4,6-dimethyldibenzothiophene and its hydrogenated intermediates over Mo/Al<sub>2</sub>O<sub>3</sub> and NiMo/Al<sub>2</sub>O<sub>3</sub>*, Roel Prins, Anjie Wang, Xiang Li, Marina Egorova, ETH Zurich, Speaker Roel Prins

**16:00 Coffee break**

**16:30 K4-2, Auditorium 1**, Keynote and Plenary lectures

*Using X-rays to study catalysts*, Jeroen A. Van Bokhoven, ETH Zurich, Speaker Jeroen A. Van Bokhoven

**16:30 O14-9, Auditorium 2**, Catalysis for pollution control (mobile)

*A combined in situ DRIFTS and fast transient kinetic study of the effect of H<sub>2</sub> on the Selective Catalytic Reduction of NO<sub>x</sub> with octane using isotopically labelled 15NO*, J.P. Breen, R. Burch, S. Chansai, C. Hardacre, C. Hill, F.C. Meunier, C. Rioche, Queens University Belfast, Speaker John P. Breen

**16:30 K10-1, Auditorium 3**, Keynote and Plenary lectures

*Nanostructured Cobalt Fischer Tropsch Catalysts for GTL*, K.P. de Jong, Utrecht University, Speaker K.P. de Jong

**16:30 O9-9, Hall A**, Catalysis in oil refining

*Hydrogenation of tetralin by ASA supported noble metal catalysts in the presence of sulfur and nitrogen compounds*, Benjamin A. Fonfè, Maria F. Williams, Dechao Wang, Andreas Jentys, Rob van Veen, Johannes A. Lercher, Technische Universität München, Speaker Benjamin Fonfè

**16:30 O5-9, Hall C**, Catalysis for pharma and fine chemistry (homo- and heterogeneous catalysis)

*Hydrogenation of aromatic nitriles to amines – catalyst selection, support effects, kinetics and deactivation*, A.G. van der Neut, J.J.W. Bakker, Kapteijn, J.A. Moulijn, M.T. Kreutzer, Delft University of Technology, Speaker F. Kapteijn

**16:50 O14-10, Auditorium 2**, Catalysis for pollution control (mobile)

*Interactions between silver and hydrogen on Ag/mordenite and Ag/g-Al<sub>2</sub>O<sub>3</sub>*, M. Richter, U. Bentrup, E.V. Kondratenko, V. A. Kondratenko, M.J.G. Fait, D. Heidemann, Leibniz Institute for Catalysis, Speaker Manfred Richter

**16:50 O9-10, Hall A**, Catalysis in oil refining

*Ultradeep adsorption-desulfurization of gasoline with Ni/ASl-SiO<sub>2</sub> material in presence of ethanol*, M.V. Landau, M. Cohen, M. Herskowitz, R. Agnihotri, J.E. Kegerreis, Ben-Gurion University of the Negev, Speaker M. Landau

**16:50 O5-10, Hall C**, Catalysis for pharma and fine chemistry (homo- and heterogeneous catalysis)

*High temperature activation of noble metal catalysts supported on carbon multi-walled nanotubes for selective hydrogenation of unsaturated aldehydes*, Bruno F Machado, Helder T Gomes, Philippe Serp, Philippe Kalck, José L Figueiredo, Joaquim L Faria, Universidade do Porto, Speaker J. Faria

**17:10-19:00 Poster session I**, Session 4, 5, 9, 14, 15

## Tuesday 28.8

**09:00 PL-2, Hall A**, Keynote and Plenary lectures

*A molecular view of heterogeneous catalysis*, J. K. Nørskov, Technical University of Denmark, Speaker J. K. Nørskov

**10:00 O10-1, Auditorium 1**, Natural gas conversion (GTL, MTO, methanol, etc.)

*Oxidation/Reduction of cobalt catalysts during Fischer-Tropsch synthesis: Theory, model systems, and supported catalysts*, J. van de Loosdrecht, A. Borgna, I.M. Ciobica, A.M. Saib, P.J. van Berge, R.A. van Santen, J.W. Niemantsverdriet, Sasol Technology (Pty) Ltd, Speaker J. van de Loosdrecht

**10:00 O1-1, Auditorium 2**, Catalysis from first principles

*Towards Rational Design of Ruthenium CO<sub>2</sub>-Hydrogenation Catalysts by Ab Initio Metadynamics*, Atsushi Urakawa, Marcella Iannuzzi, Juerg Hutter, and Alfons Baiker, ETH Zurich, Speaker Atsushi Urakawa

**10:00 K19-1, Auditorium 3**, Keynote and Plenary lectures

*Palladium catalysed vapour phase acetoxylation of toluene to benzyl acetate*, V. Narayana Kalevaru, A. Benhmid, J. Radnik, M.-M. Pohl, B. Lücke, A. Martin, Leibniz Institute for Catalysis, Speaker V. Narayana Kalevaru

**10:00 K14-3, Hall A**, Keynote and Plenary lectures

*Reaction Mechanisms and Active Sites in Automotive Emission Control: Chemistry or Alchemy?*, Robbie Burch, Queen's University Belfast, Speaker Robbie Burch

**10:00 K9-3, Hall C**, Keynote and Plenary lectures

*Advanced Catalyst Technologies to Meet Future Refining Challenges*, Ajit Sapre, Jose Santiesteban, ExxonMobil Research & Engineering Co, Speaker Ajit Sapre

**10:20 O10-2, Auditorium 1**, Natural gas conversion (GTL, MTO, methanol, etc.)

*Microkinetic analysis of Fischer-Tropsch synthesis on Fe and Co catalysts*, G. Lozano-Blanco, J.W. Thybaut, K. Surla, P. Galtier, G.B. Marin, Ghent University, Speaker Gisela Lozano

**10:20 O1-2, Auditorium 2**, Catalysis from first principles

*Modeling Fischer Tropsch Catalysis: CXHY Species on Ru{1 0 -1 5}*, Glenn Jones, Martin P. Anderson, Thomas Bligaard, Claus H. Christensen, Jens K. Nørskov, Danish Technical University, Speaker Glenn Jones

**10:40 Coffee break**

**11:10 K10-2, Auditorium 1**, Keynote and Plenary lectures

*Recent Developments in Direct Routes for Natural Gas Conversion*, Anders Holmen, Norwegian University of Science and Technology, Speaker Anders Holmen

**11:10 O1-3, Auditorium 2**, Catalysis from first principles

*The Role of Modifier Structure and Conformation in Heterogeneous Enantioselective Hydrogenation*, V. Nieminen, A. Taskinen, J. Sinkkonen, I. Busygin, E. Toukoniitty, D. Yu. Murzin, Åbo Akademi University, Speaker Ville Nieminen

**11:10 O19-1, Auditorium 3**, Towards 100% Selectivity in Catalytic Oxidation over Nanostructured Metal Oxides

*Mesoporous silica supported ZrO<sub>2</sub> based mixed oxides for oxidative dehydrogenation of ethylbenzene to styrene with CO<sub>2</sub>*, Sang-Eon Park, Sujandi, Abishek Burri, David Raju Burri, Inha University, Speaker Sang-Eon Park

**11:10 O13-1, Hall A**, Catalysis for pollution control (stationary)

*Catalysts based on Ce-Al for the NO<sub>x</sub> reduction in a FCC unit*, A.E.Palomares, A. Uzcategui, A. Corma, Universidad Politecnica Valencia, Speaker A.E. Palomares

**11:10 O6-1, Hall C**, Catalysis by enzymes

*Enzyme Active Site Engineering with Combinatorial Libraries*, Werner Besenmatten, ETH Zurich, Speaker Werner Besenmatten

**11:30 O1-4, Auditorium 2**, Catalysis from first principles

*Role of Lewis Acids in the Tungsten-Imido-Catalysed Dimerisation of alpha-Olefins: A Computational Mechanistic Study*, Sven Tobisch, Sasol Technology (UK) Ltd., Speaker Sven Tobisch

**11:30 O19-2, Auditorium 3**, Towards 100% Selectivity in Catalytic Oxidation over Nanostructured Metal Oxides

*Effect of potassium addition to CrO<sub>x</sub>/oxide support catalysts on their physicochemical and catalytic properties in oxidative dehydrogenation of isobutane*, K. Samson, B. Grzybowska, M. A. Bañares, E. Lozano Díz, J. Słoczyński, A. Kotarba, M. Hermanowska, Institute of Catalysis and Surface Chemistry, Polish Academy of Sciences, Speaker Katarzyna Samson

**11:30 O13-2, Hall A**, Catalysis for pollution control (stationary)

*Low-Temperature H<sub>2</sub>-SCR of NO on a Novel Pt/MgO-CeO<sub>2</sub> Catalyst: A Comprehensive Elucidation of Bifunctional Catalysis*, P.G. Savva, C.N. Costa, A.M. Efsthathiou, University of Cyprus, Speaker Angelos M Efsthathiou

**11:30 O6-2, Hall C**, Catalysis by enzymes

*Screening for industrial biocatalysts in natural biodiversity*, G. Meurer, J. Eck, BRAIN AG, Speaker G. Meurer

**11:50 O10-3, Auditorium 1**, Natural gas conversion (GTL, MTO, methanol, etc.)

*Conversion of methanol to hydrocarbons over medium and large pore acidic zeolites: Steric control of the reaction intermediates determines the ethene/propene selectivity,*  
Morten Bjørgen, Finn Joensen, Karl-Petter Lillerud, Unni Olsbye, Stian Svelle, Haldor Topsøe A/S, Speaker Stian Svelle

**11:50 K1-1, Auditorium 2**, Keynote and Plenary lectures

*DFT calculations and the design of new catalytic materials: unusual properties of Au clusters supported on oxide ultra-thin films*, Gianfranco Pacchioni, Livia Giordano, Università Milano Bicocca, Speaker Gianfranco Pacchioni

**11:50 O19-3, Auditorium 3**, Towards 100% Selectivity in Catalytic Oxidation over Nanostructured Metal Oxides

*Fe<sub>2</sub>O<sub>3</sub>/beta-SiC: a new high efficiency catalyst for the selective oxidation of H<sub>2</sub>S into elemental sulfur. Catalytic and modelisation investigations*, Patrick Nguyen, Jean-Mario Nhut, David Edouard, Charlotte Pham, Marc-Jacques Ledoux, Cuong Pham-Huu, LMSPC, Speaker Jean-Mario Nhut

**11:50 O13-3, Hall A**, Catalysis for pollution control (stationary)

*First Pilot Test Results of a DeNOx Catalytic Filter*, Manfred Nacken, Steffen Heidenreich, David Sanz, Jose Luis Dorronsoro, Jesus Rodriguez-Maroto, Alberto Bahillo, Raquel Ramos, Lourdes Armesto, Pall Filtersystems GmbH and CIEMAT, Speaker M. Nacken

**11:50 O6-3, Hall C**, Catalysis by enzymes

*Protein engineering of industrial relevant enzymes for Biocatalysis*, Allan Svendsen, Michael Skjøt, Jesper Brask, Novozymes A/S, Speaker Allan Svendsen

**12:10 O10-4, Auditorium 1**, Natural gas conversion (GTL, MTO, methanol, etc.)

*A zeolite deactivation study in hybrid Co/SiO<sub>2</sub>-zeolite catalysts during the one-stage conversion of syngas to gasoline*, A. Martínez, J. Rollán, C. López, H.S. Cerqueira, A.F. Costa, E. Falabella S.-Aguiar, Instituto de Tecnología Química, Speaker A. Martinez

**12:10 O19-4, Auditorium 3**, Towards 100% Selectivity in Catalytic Oxidation over Nanostructured Metal Oxides

*Autoxidation Chemistry: Radical Changes, Rational Catalyst Design*, Iwe Hermans, Eric Breynaert, André Maes, Jozef Peeters, Pierre A. Jacobs, KU Leuven, Speaker Iwe Hermans

**12:10 O13-4, Hall A**, Catalysis for pollution control (stationary)

*Methane oxidation by NO and atomic oxygen from reverse spillover on alumina supported palladium catalysts*, Rui Marques, Sandra Capela, Stéphanie Da Costa, Franck Delacroix, Gérald Djéga-Mariadassou, Patrick Da Costa, Université Pierre et Marie Curie, Speaker Patrick Da Costa

**12:10 O6-4, Hall C**, Catalysis by enzymes

*Design of novel biocatalysts by immobilization in mesoporous silica hosts*, Anne Galarneau, Lai Truong Phuoc, Gilbert Renard, François Fajula, Institut Charles Gerhardt Montpellier, Speaker F. Fajula

**12:30 O10-5, Auditorium 1**, Natural gas conversion (GTL, MTO, methanol, etc.)

*Conversion of Methanol to Hydrocarbons: spectroscopic characterization of carbonaceous species formed over H-ZSM-5.*, Francesca Bonino, Luisa Palumbo, Chiara Bertolino, Morten Bjørgen, Pablo Beato, Stian Svelle, Silvia Bordiga, Adriano Zecchina, Università di Torino, Speaker Stian Svelle

**12:30 O1-5, Auditorium 2**, Catalysis from first principles

*Description of Brønsted basic sites of MgO by microcalorimetry, spectroscopy and DFT calculations of water and methanol adsorption.*, H. Petitjean, C. Chizallet, K. Tarasov, G. Costentin, H. Lauron-Pernot, M. Che, M.C. Paganini, E. Giannello, B. Moulin, P. Bazin, F. Maugé, F. Delbecq, P. Sautet., Université Pierre et Marie Curie Paris VI, Speaker Petitjean

**12:30 K19-2, Auditorium 3**, Keynote and Plenary lectures

*How to reach 100% selectivity in H<sub>2</sub>O<sub>2</sub>-based oxidation of 2,3,6-trimethylphenol to trimethyl-p-benzoquinone over Ti,Si-catalysts*, Oxana Kholdeeva, Irina Ivanchikova, Matteo Guidotti, Nicoletta Ravasio, Maila Sgobba, Marina Barmatova, Boreskov Institute of Catalysis, Speaker Oxana Kholdeeva

**12:30 O13-5, Hall A**, Catalysis for pollution control (stationary)

*Cu-ZSM-5 based additives for the simultaneous decrease of NO and CO formed during regeneration of spent Fluid Catalytic Cracking catalysts*, V.G. Komvokis , I.A. Vasalos, K.S. Triantafyllidis, Aristotle University of Thessaloniki, Speaker Kostas Triantafyllidis

**12:30 K6-1, Hall C**, Keynote and Plenary lectures

*Enzymes in Organic Synthesis – From Commercial Enzymes to Tailor-Designed Biocatalysts*, Uwe. T. Bornscheuer, Greifswald University, Speaker Uwe. T. Bornscheuer

**12:50 O10-6, Auditorium 1**, Natural gas conversion (GTL, MTO, methanol, etc.)

*Tantalum Hydride Complexes Supported on MCM-41 Mesoporous Silica: Stoichiometric and Catalytic Properties towards Activation of Methane*, S. Soignier, M. Taoufik, S. Norsic, F. Lefebvre, A. de Mallmann, J. Thivolle-Cazat, J.M. Basset, B. Maunders, G.J. Sunley, , Speaker J. Thivolle-Cazat

**12:50 O1-6, Auditorium 2**, Catalysis from first principles

*The Role of V<sub>2</sub>O<sub>5</sub> Low-indices Surfaces in SCR Mechanism- Cluster DFT Study of Ammonia Adsorption*, P. Hejduk, M. Witko, Institute of Catalysis and Surface Chemistry, PAS, Speaker Paweł Hejduk

**12:50 O13-6, Hall A**, Catalysis for pollution control (stationary)

*Iron-based zeolite catalysts with improved activity and hydrothermal stability in N<sub>2</sub>O decomposition : from lab-scale to pilot-plant*, J.A.Z. Pieterse, G. D. Pirngruber, J.A van Bokhoven, G.D. Elzinga, R.W. van den Brink, S. Booneveld, Energy Research Centre of the Netherlands, Speaker Jean Pierre Pieterse

**13:10 Lunch**

**14:40 O10-7, Auditorium 1**, Natural gas conversion (GTL, MTO, methanol, etc.)

*Selective Methane Bromination over Sulfated Zirconia in SBA-15 Structures*, Volkan Degirmenci,Aysen Yilmaz, Deniz Uner, Middle East Technical University, Speaker Volkan Degirmenci

**14:40 O1-7, Auditorium 2**, Catalysis from first principles

*Selective oxidation of hydrocarbons over alkali-earth faujasites*, Evgeny A. Pidko, Rutger A. van Santen, Eindhoven University of Technology, Speaker Evgeny Pidko

**14:40 O19-5, Auditorium 3**, Towards 100% Selectivity in Catalytic Oxidation over Nanostructured Metal Oxides

*Study of Heteropolycompound based Catalysts for Isobutane Oxidation to Methacrylic Acid and Methacrolein: Effect of Counter-cations and Reaction Mechanism.*, Q. Huynh, J.M.M. Millet, S. Loridant, Y. Shuurman, CNRS France, Speaker J-M. Millet

**14:40 K13-1, Hall A**, Keynote and Plenary lectures

*Catalytic processes for air pollution abatement trends and perspectives*, A. Renken, Ch. Subrahmanyam, L. Kiwi-Minsker, Ecole Polytechnique Fédérale de Lausanne, Speaker A. Renken

**14:40 O5-11, Hall C**, Catalysis for pharma and fine chemistry (homo- and heterogeneous catalysis)

*New insights into the palladium induced enantioselective decarboxylation*, Pavel Kukula, Václav Matoušek, Tamas Mallat, Alfons Baiker, ETH Zürich, Speaker Pavel Kukula

**15:00 O10-8, Auditorium 1**, Natural gas conversion (GTL, MTO, methanol, etc.)

*Investigation of mechanistic details of partial oxidation of methane by in situ molecular beam mass spectrometry*, K. Pelzer, M. Geske, R. Horn, A. Taha, F.C. Jentoft, R. Schlögl, Fritz Haber Institute, Max Planck Society, Speaker Friederike Jentoft

**15:00 O1-8, Auditorium 2**, Catalysis from first principles

*Proton exchange between small hydrocarbons and acidic chabazite: Ab-initio study.*, Tomas Bucko, Lubomir Benco, Jürgen Hafner, Janos G. Angyan, University of Vienna, Austria, Speaker Tomas Bucko

**15:00 O19-6, Auditorium 3**, Towards 100% Selectivity in Catalytic Oxidation over Nanostructured Metal Oxides

*Selective oxidation of propane over Mo-V-Sb-O based catalysts. Influence of the addition of alkali metals*, F. Ivars, B. Solsona, P. Botella, P. Concepción, J.M. López Nieto, Instituto de Tecnología Química, Speaker Jose M Lopez Nieto

**15:00 O5-12, Hall C**, Catalysis for pharma and fine chemistry (homo- and heterogeneous catalysis)

*Bifunctional Zr-Zeolite Beta-Supported Rhodium Catalysts for the Stereoselective Cascade Hydrogenation of 4-tert-Butylphenol*, Yuntong Nie, Stephan Jaenicke, Herman van Bekkum, Gaik-Khuan Chuah, National University of Singapore, Speaker Chuah Gaik Khuan

**15:20 O10-9, Auditorium 1**, Natural gas conversion (GTL, MTO, methanol, etc.)

*ZSM-5/beta-SiC foam as an active and stable catalyst for dimethylether (DME) synthesis*, Svetlana Ivanova, Estelle Vanhaecke, Suzanne Libs, Benoit Louis, Marc-Jacques Ledoux, Cuong Pham-Huu, LMSPC CNRS, Speaker Svetlana Ivanova

**15:20 K1-2, Auditorium 2**, Keynote and Plenary lectures

*Description of periodic trends in heterogeneous catalysis from first principles: an update*, H. Toulhoat, Institut Français du Pétrole, Speaker H. Toulhoat

**15:20 O19-7, Auditorium 3**, Towards 100% Selectivity in Catalytic Oxidation over Nanostructured Metal Oxides

*MoV-based catalysts in ethane oxidation to acetic acid: Influence of additives on surface chemistry*, M. Roussel, S. Barama, A. Löfberg, S. Al-Sayari, K. Karim, E. Bordes-Richard, USTL Lille, Speaker Bordes-Richard

**15:20 O13-7, Hall A**, Catalysis for pollution control (stationary)

*High catalytic activity and stability of Pd doped hexaaluminate catalysts for the CH<sub>4</sub> catalytic combustion.*, A. Baylet, S. Royer, P. Marecot, J.-M. Tatibouet, D. Duprez, Laboratory of Catalysis in Organic Chemistry, Speaker Alexandre BAYLET

**15:20 O5-13, Hall C**, Catalysis for pharma and fine chemistry (homo- and heterogeneous catalysis)

*Scope of the Cinchona Alkaloids-Modified Palladium Catalysts in Enantioselective Hydrogenations of Unsaturated Carboxylic Acids*, György Szöllősi, Kornél Szőri, Beáta Hermán, Szabolcs Cserényi, Károly Felföldi, Ferenc Fülöp, Mihály Bartók, Stereochemistry Research Group of HAS, Speaker Szöllősi György

**15:40 O10-10, Auditorium 1**, Natural gas conversion (GTL, MTO, methanol, etc.)

*Catalytic combustion of methane over Pd based catalysts: role of the support on PdO stability and resistance to sulphur poisoning*, M. Taralunga, A. Kaddouri, E. Garbowski, P. Gelin, Institut de recherches sur la catalyse et environnement de Lyon, Speaker Patrick Gelin

**15:40 O19-8, Auditorium 3**, Towards 100% Selectivity in Catalytic Oxidation over Nanostructured Metal Oxides

*Specific role of SiC in the generation of catalytic active species in supported vanadia catalysts*, M.L. Kaliya, N. Froumin, A. Erenburg, N. Frage, M. Landau, M. Herskowitz, Ben-Gurion University of the Negev, Speaker M. Landau

**15:40 O13-8, Hall A**, Catalysis for pollution control (stationary)

*Rare-earth modified CeO<sub>2</sub> catalysts for soot oxidation*, A. Bueno-López, K. Krishna, J. A. Moulijn, M. Makkee, TU Delft, Speaker A. Bueno-López

**15:40 O5-14, Hall C**, Catalysis for pharma and fine chemistry (homo- and heterogeneous catalysis)

*Chiral Synthesis on Catalysts Confined in Nanopores of Mesoporous Materials*, Hengquan Yang, Can Li, Dalian Institute of Chemical Physics, Speaker Can Li

**16:00 Coffee break**

**16:30 K10-3, Auditorium 1**, Keynote and Plenary lectures

*Gas To Liquids technologies for natural gas reserves valorization*, C. Perego, R. Zennaro, ENI SPA REFINING & MARKETING DIVISION, Speaker C. Perego

**16:30 O1-9, Auditorium 2**, Catalysis from first principles

*Basicity of zeolites*, P. Mignon, P. Geerlings, R.A. Schoonheydt, K.U.Leuven, Speaker Robert Schoonheydt

**16:30 O19-9, Auditorium 3**, Towards 100% Selectivity in Catalytic Oxidation over Nanostructured Metal Oxides

*Gold supported on Mg, Al and Cu containing mixed oxides: Structural Properties and behavior in catalytic aerobic alcohol oxidation*, Peter Haider, Jan-Dierk Grunwaldt, Alfons Baiker, ETH Zürich, Speaker Peter Haider

**16:30 O13-9, Hall A**, Catalysis for pollution control (stationary)

*Factors Affecting Activity of Gold on Hopcalite and Other Supports*, Jason McPherson, Diandree Padayachee, David Thompson, Elma van der Lingen, ProjectAuTEK and Wold Gold Council, Speaker Jason McPherson

**16:30 K7-1, Hall C**, Keynote and Plenary lectures

*Towards the Computational Design of Industrial Polymerization Catalysts*, Tom Ziegler, University of Calgary, Speaker Tom Ziegler

**16:50 O1-10, Auditorium 2**, Catalysis from first principles

*Edge wetting Effects of g-Al<sub>2</sub>O<sub>3</sub> and Anatase-TiO<sub>2</sub> Supports by MoS<sub>2</sub> and CoMoS Active Phases: a DFT study*, P. Raybaud, D. Costa, C. Arrouvel, M. Breysse, H. Toulhoat, IFP, Speaker Pascal Raybaud

**16:50 O19-10, Auditorium 3**, Towards 100% Selectivity in Catalytic Oxidation over Nanostructured Metal Oxides

*Oxidative dehydrogenation of propane over vanadia catalysts supported on non-porous, microporous and mesoporous silicate supports*, S.A. Karakoula, K.S. Triantafyllidis, G.Tsilomelekis, S. Boghosian, A.A. Lemonidou, Aristotle University Thessaloniki, Speaker S.A. Karakoula

**16:50 O13-10, Hall A**, Catalysis for pollution control (stationary)

*Catalytic ozonation of benzene over alumina-supported silver catalysts*, Hisahiro Einaga, Atsushi Ogata, Yasutake Teraoka, Kyushu University, Speaker Hisahiro Einaga

**17:10-19:00 Poster session II**, Session 1, 6, 7, 8, 10, 13, 18, 19, Refreshments partially sponsored by



**21:00 Concert in Turku cathedral**

## Wednesday 29.8

**09:00 PL-3, Hall A**, Keynote and Plenary lectures

*From materials discovery via high throughput experimentation to catalyst materials by design*, Ferdi Schüth, Max-Planck-Institut für Kohlenforschung, Speaker Ferdi Schüth

**10:00 O18-1, Auditorium 2**, Catalyst deactivation, regeneration and recycling

*Catalyst deactivation and regeneration in alkane dehydrogenation: “can’t see the wood for the trees”?*., S. David Jackson, Sreekala Rugmini, University of Glasgow, Speaker David Jackson

**10:00 O8-1, Auditorium 3**, Electro-catalysis and catalysis related to fuel cells

*Electrochemical Promotion by potassium of Pt impregnated catalyst for low temperature propene deep oxidation*, Antonio de Lucas-Consuegra, Fernando Dorado, José Luis Valverde, Reda Karoum, Philippe Vernoux, Universidad de Castilla-La Mancha, Speaker Antonio de Lucas-Consuegra

**10:00 EU-1, Hall A , Special contribution, European Commission**

*Opportunities for Catalysis Research within the 7th Framework Programme of the European Commission*, Dr. Søren Bøwadt

**10:00 O7-1, Auditorium 1**, Polymerization

*Selfsupported Olefin Polymerization Catalysts Based on Emulsion Technology*, Peter Denifl, Borealis Polymers Oy, Speaker Peter Denifl

**10:00 K6-2, Hall C**, Keynote and Plenary lectures

*The Protein Scaffold Of Candida AntarcticaLipase B As A Template For New Enzyme Activities*, K.Hult, KTH, Stockholm, Speaker K.Hult

**10:20 O18-2, Auditorium 2**, Catalyst deactivation, regeneration and recycling

*Mechanism of Deactivation in CO Oxidation over Gold Supported Catalysts*, P. Konova, A. Naydenov, T. Tabakova, D. Mehandjiev, D. Andreeva, Institute of General and Inorganic Chemistry, Speaker Konova

**10:20 O8-2, Auditorium 3**, Electro-catalysis and catalysis related to fuel cells

*Development of novel Pt/WC catalyst for methanol electro-oxidation*, Min Ku Jeon, Jung Yeon Won, Ki Rak Lee, Seong Ihl Woo, Korea Advanced Institute of Science and Technology, Speaker Ihl Woo

**10:20 O7-2, Auditorium 1**, Polymerization

*Cyclopolymerization-Derived Conjugated Polymers*, C. Schmidt, D. Wang, S. Kumar, O. Nuyken, M. R. Buchmeiser, Leibniz-Institute of Surface Modification, Speaker Buchmeiser

**10:40 Coffee break**

**11:10 K7-2, Auditorium 1**, Keynote and Plenary lectures

*Site transfer and site transformation – new routes to advanced polyolefin materials*, Rolf Mülhaupt, Albert-Ludwigs-University Freiburg, Speaker Rolf Mülhaupt

**11:10 O18-3, Auditorium 2**, Catalyst deactivation, regeneration and recycling

*Deactivation of High-Temperature Shift Catalysts by Silicon Species*, B.S. Hammershøi, Haldor Topsøe A/S, Speaker B.S. Hammershøi

**11:10 O8-3, Auditorium 3**, Electro-catalysis and catalysis related to fuel cells

*Highly CO tolerant PtRuMo/C electrocatalysts for PEM and DMFC applications*, N. Tsiovaras, M.V. Martínez-Huerta, M. A. Peña, E. Pastor, J.L.G. Fierro, Universidad de La Laguna, Speaker Nikolaus Tsiovaras

**11:10 O13-11, Hall A**, Catalysis for pollution control (stationary)

*A comparison between wet catalytic oxidation with O<sub>2</sub> from air and H<sub>2</sub>O<sub>2</sub> in the conversion of model compounds and real wastewater from agro-food production*, S. Perathoner, S. Caudo, C. Genovese, G. Centi, M. Besson, P. Gallezot, D. Pham Minh, S. Sayadi, S. Azabou, University of Messina, Speaker S. Perathoner

**11:10 O6-5, Hall C**, Catalysis by enzymes

*Supported Enzyme Catalysis: Understanding the Interaction between support and enzyme*, Sreedevi Narayanaswamy, Duncan J Macquarrie, James H Clark, University of York, Speaker Sreedevi Narayanaswamy

**11:30 O6-6, Hall C**, Catalysis by enzymes

*Kinetic Modeling of Ester Hydrolysis Catalyzed by Free and Immobilized Lipases and Monitored by In Situ Diode Array Spectrophotometry*, L. Costa, V. Brissos, F. Lemos, F. Ramôa Ribeiro, J. Cabral, Instituto Superior Técnico, Speaker Luís Costa

**11:30 O18-4, Auditorium 2**, Catalyst deactivation, regeneration and recycling

*Modeling Catalyst Deactivation in a Fluid Catalytic Cracking Process*, Joana L. Fernandes, Carla I. C. Pinheiro, Nuno M.C. Oliveira, Ana I. Neto, Fernando Ramôa Ribeiro, IBB - Institute for Biotechnology and Bioengineering, Speaker Joana Fernandes

**11:30 O8-4, Auditorium 3**, Electro-catalysis and catalysis related to fuel cells

*Methanol reformate treatment in a PEM fuel cell-reactor*, F.M.Sapountzi,M.N.Tsampas, C.G.Vayenas, University of Patras, Speaker Foteini Sapountzi

**11:30 O13-12, Hall A**, Catalysis for pollution control (stationary)

*Iron-based perovskites as new and performant catalysts for the wet peroxide oxidation of organic pollutants in ambient conditions*, J. Faye, S. Valange, S. Royer, F. Dumeignil, J.M. Tatibouët, LACCO-ESIP, Speaker J. Faye

**11:50 K18-1, Auditorium 2**, Keynote and Plenary lectures

*Guidelines for preventing the deactivation by coking of zeolite catalysts and for optimising their regeneration*, M. Guisnet, UTL, Lisbonne, Speaker M. Guisnet

**11:50 O8-5, Auditorium 3**, Electro-catalysis and catalysis related to fuel cells

*Water-gas shift reaction kinetics over nanostructured copper-ceria catalysts*, Stanko Hocevar, Henrik Kusar, Janez Levec, National Institute of Chemistry, Speaker Stanko Hocevar

**11:50 O13-13, Hall A**, Catalysis for pollution control (stationary)

*Oxidative degradation of aromatic pollutant in presence of manganese salen complexes*, J. Poltowicz,K. Pamin, P. Staszyński, J. Haber, J. Noworól, W. Bukowski, Institute of Catalysis and Surface Chemistry, PAS, Speaker Jan Poltowicz

**11:50 O6-7, Hall C**, Catalysis by enzymes

*Development of a Monolithic Bioreactor: Design and Application*, K.M. de Lathouder, F. Kapteijn, J.A. Moulijn, Delft University of Technology, Speaker Karen de Lathouder

**11:50 O7-3, Auditorium 1**, Polymerization

*Activation of Titanocene and post-Titanocene Olefin Polymerization Catalysts with MAO: the Intermediates*, K. P. Bryliakov, E. P. Talsi, N. V. Semikolenova, V. A. Zakharov, H. H. Bräntzinger, M. Bochmann, Boreskov Institute of Catalysis, Speaker Dr. Konstantin P. Bryliakov

**12:10 O8-6, Auditorium 3**, Electro-catalysis and catalysis related to fuel cells

*Reaction Dynamics of Fuel-Cell Pt/C Cathode Studied by In-Situ Time-Resolved XAFS Under Operating Conditions*, M. Tada, S. Murata, T. Asaoka, K. Hiroshima, K. Okumura, H. Taniad, T. Uruga, H. Nakanishi, S. Matsumoto, Y. Inada, M. Nomura, Y. Iwasawa, The University of Tokyo, Speaker Mizuki Tada

**12:10 O13-14, Hall A**, Catalysis for pollution control (stationary)

*Adsorption-catalytic VOC removal: traditional vs. microwave-assisted processes*, A.V. Kucherov, I.M. Sinev, S. Ojala, R. Keiski, L.M. Kustov, Zelinsky Institute of Organic Chemistry, Speaker Alexei Kucherov

**12:10 O6-8, Hall C**, Catalysis by enzymes

*Enzymatic Preparation of Sterically Congested Enantiopure Cyanohydrins*, Ulf Hanefeld, Technische Universiteit Delft, Speaker Ulf Hanefeld

**12:10 O7-4, Auditorium 1**, Polymerization

*Theoretical studies on hafnocene-catalyzed ethene polymerization: the influence of the ligand structure*, Virve Karttunen, Mikko Linnolahti, Tapani Pakkanen, Janne Maaranen, John Severn, Päivi Pitkänen, University of Joensuu, Speaker Virve Karttunen

**12:30 O18-5, Auditorium 2**, Catalyst deactivation, regeneration and recycling

*Chemical Deactivation of Commercial SCR Catalysts for NO<sub>x</sub> Abatement in Mobile Sources*, P. Kern, M. Klimczak, M. Lucas, P. Claus, Darmstadt University of Technology, Speaker Paul Kern

**12:30 K8-1, Auditorium 3**, Keynote and Plenary lectures

*Challenges and Directions in Electrocatalyst Research for PEMFCs*, Rainer Bußar and Ulrich Stimming, Technische Universität Muenchen, Speaker U. Stimming

**12:30 K13-2, Hall A**, Keynote and Plenary lectures

*Catalytic oxidative and reductive technologies for treatment and recycling of wastewater from industry*, Michèle Besson, Institut de recherches sur la catalyse et l'environnement de Lyon, Speaker Michèle Besson

**12:30 O6-9, Hall C**, Catalysis by enzymes

*A biocatalytic cascade for safe and selective alkene epoxidation with percarboxylic acid in novel media.*, Aleksandra J. Kotlewska, Isabel W.C.E Arends, Roger A Sheldon, TU Delft, Speaker Aleksandra Kotlewska

**12:30 O7-5, Auditorium 1**, Polymerization

*Synthesis and Properties of Maleated Ethylene-Diene Copolymers*, Ana I. Vicente, João Campos, João M. Bordado, M. Rosário Ribeiro, Instituto Superior Técnico, Speaker M. Rosário Ribeiro

**12:50 O18-6, Auditorium 2**, Catalyst deactivation, regeneration and recycling

*Activity of Palladium Catalysts in the Heck Reaction during its Recovery by Reverse Flow Adsorption Technology*, T. Djekic, S.J. Bos, A. G. J. van der Ham, A. B. de Haan, Eindhoven University of Technology, Speaker Tanja Dekic

**12:50 O6-10, Hall C**, Catalysis by enzymes

*Raney Ni and Co as heterogeneous racemization catalysts and their application in the dynamic kinetic resolution of chiral amines*, Andrei N. Parvulescu, Pierre A. Jacobs, Dirk E. De Vos, K.U. Leuven, Speaker Andrei Parvulescu

**12:50 O7-6, Auditorium 1**, Polymerization

*Design and development of fulvene-gamma-(di)ketonato/ketiminato zirconium olefin polymerization catalysts*, B. Enk, H. Kopacka, K. Wurst, B. Bildstein, J. Maaranen, University of Innsbruck, Speaker Barbara Enk

**13:10 Lunch**

**14:40 Excursion to Archipelago**

## Thursday 30.8

**09:00 PL-4, Hall A**, Keynote and Plenary lectures

*Molecular aspects of alkanes activation over acidic and bifunctional catalysts: insights from in situ NMR*, Irina I.Ivanova, Moscow State University, Speaker Irina I.Ivanova

**10:00 O3-1, Auditorium 1**, Surface science in catalysis

*Metal-Support Interaction in Surface Reactions: Partial Oxidation and Catalytic Activity of Pd/Fe<sub>3</sub>O<sub>4</sub> Model Catalyst.*, S. Schauermann, B. Brandt, T. Schalow, J.-H. Fischer, J. Libuda, H.-J. Freund, Fritz-Haber-Institut der Max-Planck-Gesellschaft, Speaker Swetlana Schauermann

**10:00 O12-1, Auditorium 2**, Catalysis in the conversion of renewable resources (biofuels, catalysis for sustainable developments)

*Glycerol Conversion into Lower Hydrocarbons over Modified H-ZSM-5 Catalysts*, Kazuhisa Murata, Megumu Inaba, Isao Takahara, , Speaker Murata

**10:00 K18-2, Auditorium 3**, Keynote and Plenary lectures

*New Approached to Studying Coke Formation*, L. Gladden, University of Cambridge, Speaker L. Gladden

**10:00 K16-1, Hall A**, Keynote and Plenary lectures

*Engineering Aspects of Catalytic Reactions in Ionic Liquids*, C. Hardacre, P. Nancarrow, D.W. Rooney, J.M. Thompson, Queen's University, Belfast, Speaker C. Hardacre

**10:00 O2-1, Hall C**, Nanotechnology in catalysis, novel catalytic materials

*Synthesis of N-containing carbon nanotubes*, R. Arrigo, U. Wild, M. Lerch, R. Schlögl, D. S. Su, Fritz-Haber institute der Max-Planck-Gesellschaft society, Speaker Rosa Arrigo

**10:20 O3-2, Auditorium 1**, Surface science in catalysis

*Enhanced Bonding of Gold Nanoparticles on Oxidized TiO<sub>2</sub>(110)*, S. Wendt, D. Matthey, J. G. Wang, J. Matthiesen, R. Schaub, E. Lægsgaard, B. Hammer, F. Besenbacher, University of Aarhus, Speaker Stefan Wendt

**10:20 O12-2, Auditorium 2**, Catalysis in the conversion of renewable resources (biofuels, catalysis for sustainable developments)

*Study of the deactivation of a Ni based catalyst for the reforming of a product gas from biomass gasification*, S. Albertazzi, F. Basile, J. Brandin, J. Einvall, G. Fornasari, C. Hulteberg, M. Sanati, F. Trifirò, A. Vaccari, University of Bologna, Speaker Simone Albertazzi

**10:20 O2-2, Hall C**, Nanotechnology in catalysis, novel catalytic materials

*Controlled Synthesis of Carbon Nanostructures by Growth Temperature*, Tiejun Zhao, Jun Zhu, Ingvar Kvande, De Chen, Xinggui Zhou, Weikang Yuan, Norwegian University of Science and Technology, Speaker Tiejun Zhao

**10:40 Coffee break**

**11:10 O3-3, Auditorium 1**, Surface science in catalysis

*Methanol oxidation on Ru catalysts: reaction pathways and catalytically active states*, R. Blume, M. Hävecker, S. Zafeiratos, D. Teschner, E. Vass, P. Schnörch, A. Knop-Gericke, R. Schlögl, S. Lizzit, P. Dudin, A. Barinov, M. Kiskinova, Fritz-Haber-Institut der MPG, Speaker Hävecker

**11:10 O12-3, Auditorium 2**, Catalysis in the conversion of renewable resources (biofuels, catalysis for sustainable developments)

*Catalytic conversion of vegetable oils into transportation fuels*, David Kubicka, J. Chudoba, Pavel Simacek, VUAnCH, Speaker David Kubicka

**11:10 K8-2, Auditorium 3**, Keynote and Plenary lectures

*Alternative Catalysts for Polymer Electrolyte Fuel Cells*, Piotr Zelenay, Los Alamos National Laboratory, Speaker Piotr Zelenay

**11:10 O16-1, Hall A**, Catalytic reaction engineering (novel reactor systems and novel reaction media included)

*Supported Ionic Liquid Phase (SILP) Technology – From Immobilized Catalysts to Advanced Materials*, A. Riisager, R. Fehrmann, M. Haumann, P. Wasserscheid, Universität Erlangen-Nürnberg, Speaker Marco Haumann

**11:10 K2-1, Hall C**, Keynote and Plenary lectures

*The total gas-phase synthesis of hierarchical carbon nanotube composite*, Martin Muhler, Ruhr-University Bochum, Speaker Martin Muhler

**11:30 O3-4, Auditorium 1**, Surface science in catalysis

*States and reactivity of oxygen species on the Pt-group metal surfaces*, A.V. Matveev, C.J. Weststrate, A.A. Sametova, V.V. Gorodetskii, B.E. Nieuwenhuys, Boreskov Institute of Catalysis, Speaker A.V. Matveev

**11:30 O12-4, Auditorium 2**, Catalysis in the conversion of renewable resources (biofuels, catalysis for sustainable developments)

*Production of biodiesel from sunflower oil using heterogeneous catalysts*, Lourdes Rodríguez, Ángel Pérez, Rubí Romero, María Jesús Ramos, Abraham Casas, Carmen María Fernández, University of Castilla-La Mancha, Speaker Abraham Casas

**11:30 O16-2, Hall A**, Catalytic reaction engineering (novel reactor systems and novel reaction media included)

*Mathematical modeling of formic acid oxidation in a catalytic three-phase membrane contactor*, Albin Pintar, Matevž Vospernik, Gorazd Berčič, Janez Levec, National Institute of Chemistry, Speaker Albin Pintar

**11:50 K3-1, Auditorium 1**, Keynote and Plenary lectures

*Understanding Reaction Pathways on Model Catalyst Surfaces*, Feng Gao, Yilin Wang, Florencia Calaza, Dario Stacchiola, Wilfred T. Tysoe, UW-Milwaukee, Speaker T. Tysoe

**11:50 O12-5, Auditorium 2**, Catalysis in the conversion of renewable resources (biofuels, catalysis for sustainable developments)

*Biodiesel Synthesis from Soybean Oil using Calcined Li-Al Layered Double Hydroxide Catalysts*, J. Link Shumaker, Czarena Crofcheck, S. Adam Tackett, Eduardo Santillan-Jimenez, Mark Crocker, University of Kentucky, Speaker Mark Crocker

**11:50 O16-3, Hall A**, Catalytic reaction engineering (novel reactor systems and novel reaction media included)

*Direct Synthesis of Hydrogen Peroxide in a Catalytic Membrane Contactor*, Aneta Pashkova, Karel Svajda, Roland Dittmeyer, Karl-Winnacker-Institut, Speaker Aneta Pashkova

**11:50 O2-3, Hall C**, Nanotechnology in catalysis, novel catalytic materials

*High catalytic oxidation performance of crystalline Mo<sub>3</sub>VO<sub>x</sub> oxides with orthorhombic and trigonal structures*, Wataru Ueda, Tomokazu Kato, Nobufumi Watanabe, Takao Kuranishi, Katsunori Kodato, Takumi Fujisawa, Feng Wang, Masahiro Sadakane, Hokkaido University, Speaker Wataru Ueda

**12:10 O12-6, Auditorium 2**, Catalysis in the conversion of renewable resources (biofuels, catalysis for sustainable developments)

*Novel chitosan-based Lewis acid catalysts for transesterification of triglycerides*, Natalia V. Kramareva, Alexei V. Kucherov, Olga P. Tkachenko, Leonid M. Kustov, Zelinsky Institute of Organic Chemistry, Speaker Natalia Kramareva

**12:10 O16-4, Hall A**, Catalytic reaction engineering (novel reactor systems and novel reaction media included)

*Pilot-plant study on membrane reactors for catalytic oxidation of hydrocarbons*, F. Klose, T. Wolff, C. Hamel, A. Tota, D. Ahchieva, S. Heinrich, A. Seidel-Morgenstern, Otto-von-Guericke-University Magdeburg, Speaker Liisa Rihko-Struckmann

**12:10 O2-4, Hall C**, Nanotechnology in catalysis, novel catalytic materials

*Nanocrystalline cerium oxide produced by supercritical antisolvent precipitation as a support for high activity gold catalysts*, Zi-Rong Tang, Jennifer K. Edwards, Jonathan K. Bartley, Stuart H. Taylor, Albert F. Carley, Andrew A. Herzing, Christopher J. Kiely, Graham J. Hutchings, Cardiff University, Speaker Graham J. Hutchings

**12:30 O3-5, Auditorium 1**, Surface science in catalysis

*CO, O<sub>2</sub> and CO+O<sub>2</sub> adsorption on PdAu(110) studied by in situ complimentary techniques (STM, PM-IRRAS, XPS, SXRD)*, M.A. Languille, F.J. Cadete Santos Aires, B.S. Mun, M.C. Saint-Lager, Y. Jugnet, O. Robach, P. Dolle, S. Garaudée, J.C. Bertolini, Institut de Recherches sur la Catalyse et l'Environnement de Lyon, Speaker F.J. Cadete Santos Aires

**12:30 K12-1, Auditorium 2**, Keynote and Plenary lectures

*Biobased Materials, Biorefinery and Superacid Catalysts*, Mark DuPont, DuPont Central Research, Speaker Mark DuPont

**12:30 O16-5, Hall A**, Catalytic reaction engineering (novel reactor systems and novel reaction media included)

*Microreaction engineering in the reduction of biofuel emissions*, J. R. Hernández Carucci, J. Sosa Pieroni, S. Bartova, K. Eränen, M. Marek, T. Salmi, D. Yu. Murzin, Åbo Akademi University, Speaker J.R. Hernandez

**12:30 O2-5, Hall C**, Nanotechnology in catalysis, novel catalytic materials

*Au(III) on nanocrystalline CeO<sub>2</sub> catalyses the isomerization of alkynylfurans to phenols*, Silvio Carrettin, M. Carmen Blanco, Patricia Concepción, Avelino Corma, A. Stephen K. Hashmi, Universidad Politécnica de Valencia, Speaker Silvio Carrettin

**12:50 O3-6, Auditorium 1**, Surface science in catalysis

*NO-H<sub>2</sub> reaction over Pd and Pt crystallites : studies on the nanometer scale by Field Ion Microscopy and Pulsed Field Desorption Mass Spectrometry*, T. Visart de Bocarmé, T.D. Chau, Y. De Decker, P. Gaspard, N. Kruse, Université libre de Bruxelles, Speaker Thierry Visart de Bocarmé

**12:50 O16-6, Hall A**, Catalytic reaction engineering (novel reactor systems and novel reaction media included)

*On the use of a priming washcoat to improve diffusion-reaction characteristics in structured catalysts*, Nakul Thakar, Michiel T. Kreutzer, Brahim Daouairi, Freek Kapteijn, Jacob A. Moulijn, Delft University of Technology, Speaker Guido Mul

**12:50 O2-6, Hall C**, Nanotechnology in catalysis, novel catalytic materials

*Novel nanocatalysts based on coordination polymers and transition metal substituted polyoxometalates for liquid phase selective oxidations*, N.V. Maksimchuk, M.N. Timofeeva, O.A. Kholdeeva, Yu.A. Chesalov, D.N. Dybtsev, V.P. Fedin, Boreskov Institute of Catalysis, Speaker Nataliya V. Maksimchuk

**13:10 Lunch**

**14:40 O3-7, Auditorium 1**, Surface science in catalysis

*Hydrogen splitting on transition metals at 1 bar*, M. Johansson, O. Lytken, I. Chorkendorff, Technical University of Denmark, Speaker Martin Johansson

**14:40 O17-1, Auditorium 2**, Photocatalysis

*(12)n encapsulation inside nanovoid-structured TiO<sub>2</sub>: a way to tune the photoactivity in the visible region*, S. Usseglio, A. Damin, D. Scarano, S. Bordiga, C. Lamberti, A. Zecchina, University of Turin, Speaker Carlo Lamberti

**14:40 K16-2, Auditorium 3**, Keynote and Plenary lectures

*Hierarchically Architected Zeolites: The Engineering Starts in the Pore*, Javier Pérez-Ramírez, ICREA and Institute of Chemical Research of Catalonia, Speaker Javier Pérez-Ramírez

**14:40 K11-1, Hall A**, Keynote and Plenary lectures

*Microstructured Reactors for Hydrogen Production*, Volker Hessel, M. de Croon, G. Kolb, H. Löwe, E. Rebrov, J. Schouten, Eindhoven University of Technology, Speaker V. Hessel

**14:40 O2-7, Hall C**, Nanotechnology in catalysis, novel catalytic materials

*Novel high-temperature-stable catalysts by encapsulating Au- and Pt-nanoparticles in MeOx hollow spheres*, Michael Paul, Massimiliano Comotti, Pablo Arnal, Ferdi Schüth, Max-Planck-Institute for Coal research, Speaker Michael Paul

**15:00 O3-8, Auditorium 1**, Surface science in catalysis

*Environmental High Resolution Electron Microscopy With a Closed Ecell: Application to Gold Catalysts*, S. Giorgio, M. Cabié, G. Sitja, C.R. Henry, CNRS, Speaker Suzanne Giorgio

**15:00 O17-2, Auditorium 2**, Photocatalysis

*Development of photocatalysts for water splitting under visible light irradiation*, Akihiko Kudo, Hideki Kato, Yasuyoshi Sasaki, Nana Shirakura, Tokyo University of Science, Speaker Prof. Akihiko Kudo

**15:00 O2-8, Hall C**, Nanotechnology in catalysis, novel catalytic materials

*Trends in Catalytic CO oxidation on Different Metal Nanoparticles*, Hanne Falsig, Britt H. Larsen, Iben S. Kristensen, Thomas Bligaard, Claus Hviid Christensen, Jens K. Nørskov, DTU, Speaker Hanne Falsig

**15:20 O3-9, Auditorium 1**, Surface science in catalysis

*NO<sub>2</sub> Chemistry on BaO/ $\gamma$ -Al<sub>2</sub>O<sub>3</sub>/NiAl(110) Model NO<sub>x</sub> Storage Materials*, Cheol-Woo Yi, Charles H.F. Peden, Janos Szanyi, Pacific Northwest National Laboratory, Speaker Janos Szanyi

**15:20 O17-3, Auditorium 2**, Photocatalysis

*New synthesis of excellent visible-light TiO<sub>2-x</sub>N<sub>x</sub> photocatalyst by a simple method*, Hanjie Huang, Danzhen Li, Xu Chen, Xianzhi Fu, Fuzhou University, Speaker Danzhen Li

**15:20 O11-1, Hall A**, The Hydrogen Society (hydrogen production and storage)

*Molybdenum carbide coatings prepared by electrochemical synthesis in molten salts for application in microstructured fuel processors*, E.V. Rebrov S.A. Kuznetsov, A.R. Dubrovskiy, M.H.J.M. de Croon, J.C. Schouten, Eindhoven University of Technology, Speaker E.V. Rebrov

**15:20 K2-2, Hall C**, Keynote and Plenary lectures

*Nanostructure Processing of Advanced Catalytic Materials*, J. Y. Ying, Institute of Bioengineering and Nanotechnology, Singapore, Speaker J. Y. Ying

**15:40 O3-10, Auditorium 1**, Surface science in catalysis

*Surface-Mediated Visible-Light Photo-Oxidation on a TiO<sub>2</sub>(001) Surface*, H. Ariga, T. Taniike, M. Tada, K. Watanabe, Y. Matsumoto, S. Ikeda, K. Saiki, Y. Iwasawa, The University of Tokyo, Speaker Yasuhiro Iwasawa

**15:40 O17-4, Auditorium 2, Photocatalysis**

*Separate Evolution of H<sub>2</sub> and O<sub>2</sub> from H<sub>2</sub>O Using a Visible Light-Responsive TiO<sub>2</sub> Thin Film Photocatalyst under Sunlight Irradiation*, Masakazu Anpo, Masaaki Kitano, Masaya Matsuoka, Masato Takeuchi, Michio Ueshima, Osaka Prefecture University, Speaker Masakazu Anpo

**15:40 O11-2, Hall A, The Hydrogen Society (hydrogen production and storage)**

*New Electrocatalysts for the Hydrogen Evolution Reaction, Surface alloys and Metal sulfides.*, Jacob Bonde, Thomas F. Jaramillo, Jeff Greeley, Kristina P. Jørgensen, Jane H. Nielsen, Sebastian Horch, Jens K. Nørskov, Ib Chorkendorff, Technical University of Denmark, Speaker Jacob Bonde

**16:00 Coffee break**

**16:30 K3-2, Auditorium 1, Keynote and Plenary lectures**

*Olefin Polymerization on Flat Model Catalyst*, Peter C. Thüne, Eindhoven University of Technology, Speaker Peter C. Thüne

**16:30 O17-5, Auditorium 2, Photocatalysis**

*New photoactive mesostructured inorganic-organic hybrids based on siliceous materials and trytil cations*, María J. Sabater, Avelino Corma, M<sup>a</sup> Teresa Navarro, Fernando Rey, Violeta Rodríguez, Universidad Politécnica de Valencia, Speaker Maria J. Sabater

**16:30 K12-2, Auditorium 3, Keynote and Plenary lectures**

*Utilizing Ionic Liquids for Access to and Modification of Bio-renewable Polymers*, Robin D. Rogers, Mustafizur Rahman, Ning Sun, Mirela L. Maxim, Guillermo Moyna, Patrick Moyna, The University of Alabama, Speaker R. Rogers

**16:30 O11-3, Hall A, The Hydrogen Society (hydrogen production and storage)**

*Effect of impurities present in raw bioethanol on the performances of a Rh/MgAl<sub>2</sub>O<sub>4</sub> catalyst for hydrogen production*, Anthony Le Valant, Anthony Garron, Nicolas Bion, Florence Epron, Daniel Duprez, Laboratoire de Catalyse en Chimie Organique, Speaker Nicholas Bion

**16:30 O2-9, Hall C, Nanotechnology in catalysis, novel catalytic materials**

*Spatially resolved UV-Vis micro-spectroscopy: A physicochemical study on the preparation of metal-ion supported catalysts*, Leticia Espinosa Alonso, Krijn P. de Jong, Bert M. Weckhuysen, Utrecht University, Speaker Leticia Espinosa Alonso

**16:50 O17-6, Auditorium 2, Photocatalysis**

*Preparation of Titanium Oxide from Sludge Produced by Flocculation of Wastewater*, H.K. Shon, J.B. Kim, G.J. Kim, G.-S. Lee, D.L. Cho, J.-H. Kim, Chonnam National University, Speaker Dr. Jong-Ho Kim

**16:50 O11-4, Hall A, The Hydrogen Society (hydrogen production and storage)**

*Hydrogen Production form Ethanol over Ir/CeO<sub>2</sub> catalysts: Reaction Pathway and Stability*, Weijie Cai, Baocai Zhang, Qiying Liu, Yide Xu, Wenjie She, Dalian Institute of Chemical Phycsis, Speaker Wenjie Shen

**16:50 O2-10, Hall C, Nanotechnology in catalysis, novel catalytic materials**

*Size and Shape Control of AlOOH Boehmite Nanoparticles, Toward Enhanced gamma-Alumina Catalyst Supports*, David Chicke

**17:10-19:00 Poster session III**, Session 2, 3, 11, 12, 17, 16, Refreshments partially sponsored by



**21:00 Banquet**, Partially sponsored by



**Young Scientist Party**

## Friday 31.8

**09:00 PL-5, Hall A,** Keynote and Plenary lectures

*Catalytic Production of Fuels and Chemicals from Biomass-derived Oxygenated Hydrocarbons*, James A. Dumesic, University of Wisconsin, Speaker James A. Dumesic

**10:00 O2-11, Auditorium 1,** Nanotechnology in catalysis, novel catalytic materials

*Structure and reactivity of chromocene confined into nanovoids with a different polarity: a spectroscopic and theoretical investigation*, Elena Gropo, Jane Estephane, Alessandro Damin, Jenny G. Vitillo, Carlo Lamberti, Silvia Bordiga, Adriano Zecchina, University of Turin, Speaker Elena Gropo

**10:00 O17-7, Auditorium 2,** Photocatalysis

*Present Challenges for Photocatalysis in Green and Environmental Chemistry*, J.M Herrmann, E. Puzenat, C.Guillard, IRCELYON - Université de Lyon, Speaker J.M. Herrmann

**10:00 O12-7, Auditorium 3,** Catalysis in the conversion of renewable resources (biofuels, catalysis for sustainable developments)

*Oxygenates from bioethanol and glycerol as diesel fuel additives*, S. Pariente, N. Tanchoux, S.Perathoner, G. Centi, F. Fajula, Messina University, Speaker Siglinda Perathoner

**10:00 K11-2, Hall A,** Keynote and Plenary lectures

*Catalytic Autothermal Reforming of Renewable Fuels at Millisecond Times*, L. Schmidt, University of Minnesota, Speaker L. Schmidt

**10:20 O2-12, Auditorium 1,** Nanotechnology in catalysis, novel catalytic materials

*Catalysts with ionic liquid mediated metal nano-particles*, R. T. Knapp, T. E. Müller, J. A. Lercher, Technische Universität München, Speaker Thomas E. Müller

**10:20 O17-8, Auditorium 2,** Photocatalysis

*UV-A photocatalytic oxidation as a global process for air decontamination. Bactericidal, sporicidal and virucidal properties*, Sébastien Josset, Jérôme Taranto, Marie-Claire Lett, Nicolas Keller, Valérie Keller, Louis Pasteur University, Speaker Valérie Keller

**10:20 O12-8, Auditorium 3,** Catalysis in the conversion of renewable resources (biofuels, catalysis for sustainable developments)

*Highly Selective Conversion of Ethanol into Lower Olefins over Nickel Ion-Loaded Mesoporous Silica MCM-41*, Kouji Kasai, Teruki Haishi, Masakazu Iwamoto, Tokyo Institute of Technology, Speaker Kouji Kasai

**10:40 Coffee break**

**11:10 K2-3, Auditorium 1,**

*Gold Nanoparticles for Catalysis*, Catherine Louis, Université Pierre et Marie Curie, Speaker Catherine Louis

**11:10 O17-9, Auditorium 2,** Photocatalysis

*Production of Hydrogen by Photo-Induced Reforming of Organic Pollutants at Room Temperature*, A. Patsoura, D.I. Kondarides, X.E. Verykios, University of Patras, Speaker Dimitris Kondarides

**11:10 O12-9, Auditorium 3,** Catalysis in the conversion of renewable resources (biofuels, catalysis for sustainable developments)

*Conversion of H<sub>2</sub>-deficient syngas to methanol and dimethyl ether on Cu-ZnO-Al<sub>2</sub>O<sub>3</sub> : Effects of aging time in catalyst preparation*, Jong-Wook Bae, Suk-Hwan Kang, H. S. Potdar and Ki-Won Jun\*, Korea Research Institute of Chemical Technology, Speaker Ki-Won Jun

**11:10 O11-5, Hall A,** The Hydrogen Society (hydrogen production and storage)

*H<sub>2</sub> Production Over A Pt/CeO<sub>2</sub> Water-Gas Shift Catalyst: Evidence That The Formates Seen By DRIFT Are Not Key Reaction Intermediates*, F. C. Meunier, S. Shekhtman, A. Goguet, C. Hardacre, R. Burch, Queen's University Belfast, Speaker Frederic Meunier

**11:30 O17-10, Auditorium 2,** Photocatalysis

*New strategies for the preparation of supported photocatalysts for air purification*, Silvia Suárez, Juan M. Coronado, Raquel Portela, Juan C. Martín, Pedro Avila, Benigno Sánchez, CIEMAT, Madrid, Speaker Silvia Suarez

**11:30 O12-10, Auditorium 3,** Catalysis in the conversion of renewable resources (biofuels, catalysis for sustainable developments)

*Development of zirconia catalysts for hot gas cleanup*, A. Solla, P. Simell, I. Hiltunen, M. Reinikainen, H. Rönkkönen, O. Krause, H. Bradshaw, H. Stephenson, G. Monks, Helsinki University of Technology, Speaker Anu Solla

**11:30 O11-6, Hall A**, The Hydrogen Society (hydrogen production and storage)

*Operando DRIFTS-Mass Spectroscopy Studies of the Water-Gas Shift Reaction over Alumina-supported Noble Metal Catalysts*, C.M. Kalamaras, G.G. Olympiou, C.D. Zeinalipour-Yazdi, A.M. Efsthathiou, University of Cyprus, Speaker Angelos M Efsthathiou

**11:50 O2-13, Auditorium 1**, Nanotechnology in catalysis, novel catalytic materials

*Enhanced Cooperative, Catalytic Behavior of Organic Functional Groups by Immobilization*, Véronique Dufaud, Ryan K. Zeidan, Mark E. Davis, CNRS, Speaker Véronique Dufaud

**11:50 K17-1, Auditorium 2**, Keynote and Plenary lectures

*Photocatalytic Surface Coatings: Mechanistic Aspects and Activity Measurements*, Detlef Bahnemann, Leibniz Universitaet Hannover, Speaker Detlef Bahnemann

**11:50 O12-11, Auditorium 3**, Catalysis in the conversion of renewable resources (biofuels, catalysis for sustainable developments)

*Steam reforming of acetic acid in the presence of highly active Rh catalysts supported on CeO<sub>2</sub>-ZrO<sub>2</sub>*, Ekaterini Ch. Vagia, Angeliki A. Lemonidou, Aristotle University of Thessaloniki, Speaker Ekaterini Ch. Vagia

**11:50 O11-7, Hall A**, The Hydrogen Society (hydrogen production and storage)

*Low temperature hydrogen production from methane on cerium and nickel based oxyhydrides*, Louise Jalowiecki-Duhamel, Hanan Zarrou, Alain D'Huysser, Unité de Catalyse et de Chimie du Solide, Speaker Louise Duhamel

**12:10 O2-14, Auditorium 1**, Nanotechnology in catalysis, novel catalytic materials

*ECS-Materials: Synthesis and Characterization of a New Class of Crystalline Organic-Inorganic Hybrid Alumino-Silicates*, G. Bellussi, A. Carati, U. Díaz, R. Millini, W.O. Parker, Jr., C. Rizzo, S. Zanardi, Eni S.p.A. Refining & Marketing Division, Speaker Giuseppe BELLUSSI

**12:10 O12-12, Auditorium 3**, Catalysis in the conversion of renewable resources (biofuels, catalysis for sustainable developments)

*Production of Olefins from Ethanol by Iron-Supported Zeolite Catalysts*, Megumu Inaba, Kazuhisa Murata, Masahiro Saito, Isao Takahara, National Institute of Advanced Industrial Science and Technology (AIST), Speaker K. Murata

**12:10 O11-8, Hall A**, The Hydrogen Society (hydrogen production and storage)

*RhPt catalyst performance in autothermal reforming of hydrocarbon mixtures and commercial diesel in the presence of sulfur compounds*, R.K. Kaila, A. Gutierrez, A.O.I. Krause, Helsinki University of Technology, Speaker Reetta Kaila

**12:30 O2-15, Auditorium 1**, Nanotechnology in catalysis, novel catalytic materials

*The inconsistency in measured and expected adsorption properties of metal organic frameworks, exemplified by MOF-5*, Jasmina Hafizovic, Morten Bjørgen, Unni Olsbye, Pascal D. C. Dietzel, Silvia Bordiga, Carmelo Prestipino, Carlo Lamberti, Karl Petter Lillerud, University of Oslo, Speaker Jasmina Hafizovic

**12:30 K17-2, Auditorium 2**, Keynote and Plenary lectures

*Photocatalytic Reactors for Air Purification: Development and Application*, D. Kozlov, A. Vorontsov, V. Parmon, Boreskov Institute of Catalysis, Speaker D. Kozlov

**12:30 K12-3, Auditorium 3**, Keynote and Plenary lectures

*Converting Lignocellulose to fuels and chemicals*, Jean-Paul Lange, Shell Global Solutions, Speaker Jean-Paul Lange

**12:30 O11-9, Hall A**, The Hydrogen Society (hydrogen production and storage)

*Hydrogen production via steam reforming of methanol over novel CuCeZrY – based catalysts*, P. Yaseneva, S. Pavlova, V. Sadykov, V. Rogov, S. Badmaev, S. Belochapkin, J.R.H. Ross, Boreskov Institute of Catalysis, Speaker S.N. Pavlova

**12:50 O2-16, Auditorium 1**, Nanotechnology in catalysis, novel catalytic materials

*A surfactant-assisted preparation of well-dispersed rhodium nanoparticles within the pore of Al-SBA-15 : characterisation and use in catalysis*, Maya Boutros, Audrey Nowicki, Alain Roucoux, Franck Launay, Antoine Gédéon, Université Paris VI, Speaker Franck Launay

**12:50 O11-10, Hall A**, The Hydrogen Society (hydrogen production and storage)

*State-of-the-art Indirect Hydrogen Storage in Metal Ammines*, Claus H. Christensen, Rasmus Z. Sørensen, Asbjørn Klerke, Ulrich Quaade, Jens K. Nørskov, Technical

University of Denmark, Speaker Claus Hviid Christensen

**13:10 Lunch**

**14:00 Boudart lecture, Hall A,** Keynote and Plenary lectures

*Probing Catalyst Structure-Performance Relationships through Studies of Reaction Mechanism and Kinetics*, Alexis T. Bell, University of California, Berkeley, Speaker  
Alexis T. Bell

**Closing ceremony, Hall A,**