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NACS Newsletter

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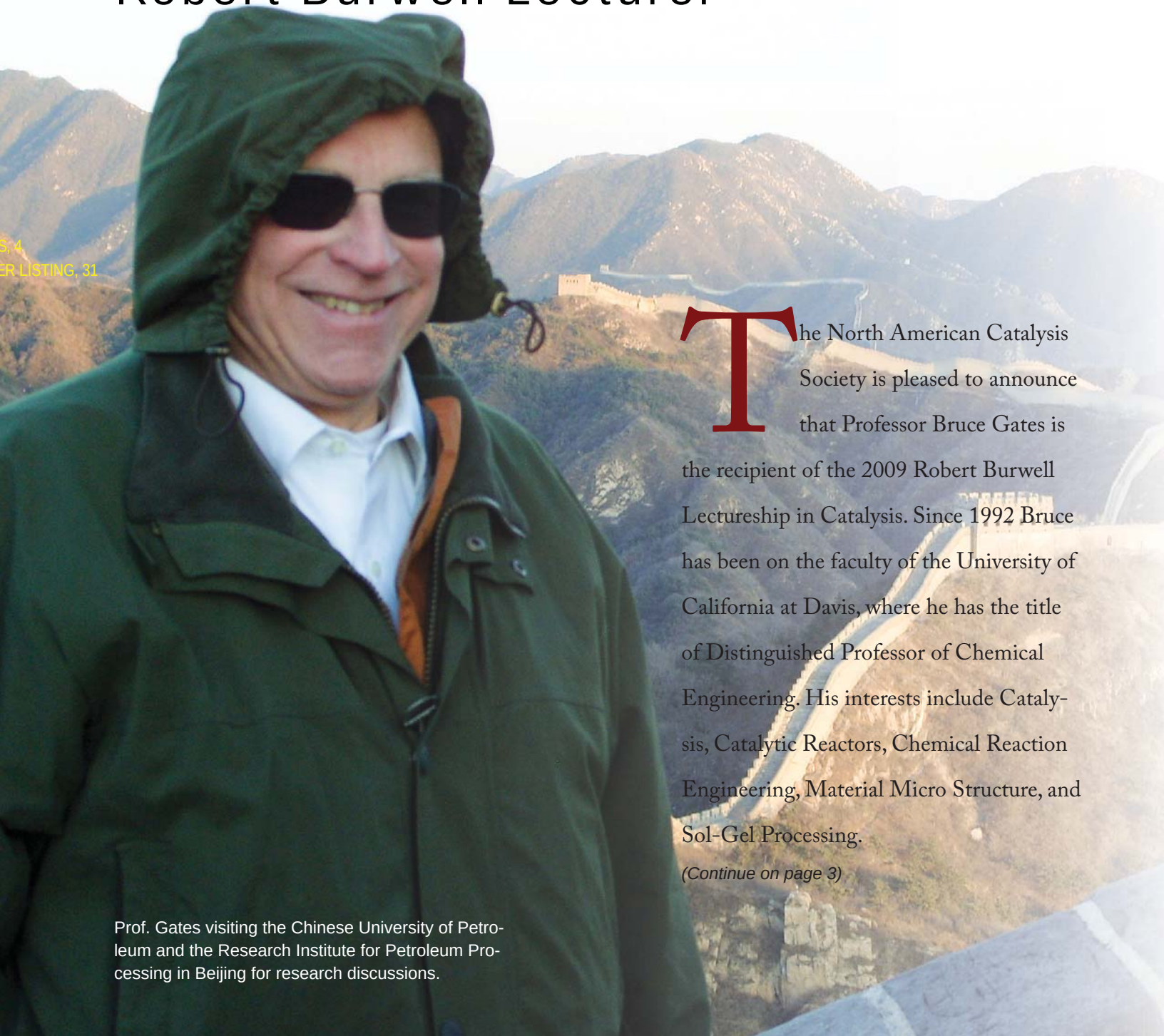
Bruce C. Gates is the 2009 Robert Burwell Lecturer



The North American Catalysis Society is pleased to announce that Professor Bruce Gates is the recipient of the 2009 Robert Burwell Lectureship in Catalysis. Since 1992 Bruce has been on the faculty of the University of California at Davis, where he has the title of Distinguished Professor of Chemical Engineering. His interests include Catalysis, Catalytic Reactors, Chemical Reaction Engineering, Material Micro Structure, and Sol-Gel Processing.

(Continue on page 3)

Prof. Gates visiting the Chinese University of Petroleum and the Research Institute for Petroleum Processing in Beijing for research discussions.

Results from the 2009 Directors-at-Large Elections

The election for Directors-at-Large for the NACS was concluded on February 27th, 2009. Four members from North America are elected every 4 years by the membership residing in North America to serve as national representatives to the Board of Directors. The 4 persons receiving the most votes for Directors-at-Large will begin serving immediately. The new Directors-at-Large are:

Jingguang Chen, University of Delaware
Robert Davis, University of Virginia
Bruce Gates, University Of California at Davis
Stuart Soled, Exxon Mobil Research and Engineering Co.

This Newsletter is a quarterly publication of **The North American Catalysis Society**

Bruce C. Gates is the 2009 Robert Burwell Lecturer

(From page 1)

This award is sponsored by Johnson Matthey Catalysts Company and administered by the Society. The award consists of a plaque and an honorarium as well as a travel award to provide the recipient with funds for visiting (until funds run out) any of the 14 local clubs comprising the Society. The award is given in recognition of substantial contributions to one or more areas in the field of catalysis with emphasis on discovery and understanding of catalytic phenomena, catalytic reaction mechanisms, and identification and description of catalytic sites and species.

For almost 40 years he has made significant contributions in three areas: the preparation and characterization of surface organometallic complexes, catalysis by strong solid acids, and the kinetics and reaction pathways of hydroprocessing catalysis. In the catalysis by strong solid acids, Bruce both expanded the applications and furthered understanding of underlying mechanisms. More recently, in a series of papers beginning in 1998, Bruce (with Bob Grasselli and Helmut Knözinger) explained the surface chemistry of tungstated zirconias with and without Pt, highlighting the role of surface reduction to W5+ and –OH in generating the active sites for alkane isomerization. Bruce's contributions to hydroprocessing catalysis are equally notable. His two review articles greatly assisted those requiring introduction to the field; each has been cited in excess of 375 times. The scientific contribution was his recognition (with James Katzer and George Schuit) that complex hydrodesulfurization and hydrogenation networks could be understood in terms of a small number of reactions whose rates could be quantified using model substrates. One supporter remarked that Bruce's work in metal clusters revolutionized the field of surface organometallic catalysis. Here also he has authored widely read reviews, and several influential, extensively cited papers. Much of this recent work has targeted catalysis by gold clusters or nanocrystals, work characterized by multi-technique correlation of catalytic activity to surface structure, careful interpretation of EXAFS data characterizing surface coordination, and proper consideration of how the catalysis alters the as-synthesized materials. Bruce was an early user and proponent of EXAFS and XANES in catalyst characterization. Many "nanoscience" papers in the literature today follow along paths he pioneered years ago.

Finally it should be noted that Bruce has educated two generations of catalytic scientists and industrial practitioners, through his widely used teaching texts ("Chemistry of Catalytic Processes" is a worldwide best seller), the many short courses he helped develop and teach (the one based on this book was taught for over 30 years at the University of Delaware, and at many industrial research centers) and not least through his mentoring of over 130 graduate students, postdocs and visiting scientists. Bruce has been a tireless cheerleader for the field of catalysis and in all his lectures strives for understanding, arousing curiosity, and getting down to the essentials of a problem. He has also been a very active member of the Board of the North American Catalysis Society.

Local clubs should contact Professor Gates [bcgates@ucdavis.edu] directly about speaking engagements over the next two years. More information on this award, the awards process, and previous awardees can be found inside the Awards folder on the NACS home page: www.nacatsoc.org

New Report

The final report on the "International Assessment of Research and Development in Catalysis by Nano-structured Materials" is available at http://www.wtec.org. The report was written by a panel of eight U.S. experts: Robert J. Davis (University of Virginia) - Chair, Vadim V. Guliants (University of Cincinnati), George W. Huber (University of Massachusetts-Amherst), Raul F. Lobo (University of Delaware), Jeffrey T. Miller (Argone National Laboratory), Matthew Neurock (University of Virginia), Renu Sharma (Arizona State University) and Levi T. Thompson (University of Michigan).

Board Meeting

The NACS annual Board of Directors meeting is scheduled for Sunday, June 7, 2009 at 11:30 AM to 4:00 PM in the San Francisco Hyatt conference hotel, Garden A meeting room. Space is limited to members of the Board of Directors and invited guests.

Clubs & Societies News

Catalysis Club of Chicago

Prof. Tobin Marks is the Winner of the 2009 Herman Pines Award

The Herman Pines Award Selection Committee is pleased to announce that the recipient of the 2009 Award is Professor Tobin Marks (of the Department of Chemistry at The Northwestern University. The Award is given in recognition of Tobin's outstanding contributions in the areas of both homogenous and heterogeneous catalysis. Tobin's work has had major impact on contemporary catalytic science with pioneering studies of olefin polymerization, supported organometallic catalysts, metal-ligand bonding energetics, and f-element catalysis.

Tobin has served on numerous scientific committees, governmental and industrial advisory boards and review panels, has mentored over 100 PhD students and nearly as many postdoctoral fellows, with more than 90 alumni holding academic positions worldwide. Tobin has over 900 publications and 88 patents. His current h-index is 102.

Prof. Marks will receive the Award during the Catalysis Club of Chicago Spring Symposium to be held on May 18, 2009 at the BP Research Center in Naperville. Prof. Marks will deliver the keynote address.

Catalysis Club of Philadelphia

2009 Spring Symposium

The Catalysis Club of Philadelphia Spring Symposium will be held on Thursday, May 21st at the John M. Clayton Hall, University of Delaware. Invited speakers are:

- **Robert Schlögl**, Fritz Haber Institute - Max Planck Society
- **Allan Burton**, Chevron
- **Stu Soled**, Exxon-Mobil Research
- **Chris Keily**, Lehigh University
- **Danielle Hansgen**, winner 2009 Poster Competition, University of Delaware
- **Mike Ward**, New York University
- **Suljo Linic**, University of Michigan
- **Gary Haller**, Yale University
- **Jochen Lauterbach**, University of Delaware

The deadline for advance registration is Thursday, May 7 and the mail-in registration is available at http://catalysisclubphilly.org/.

Clubs & Societies News

Catalysis Society of Metropolitan New York

Jeffrey Miller has won the 2009 Award for Excellence in Catalysis

Miller is being recognized for his strong contributions to the field of catalysis. In particular, his work on important petrochemical processes contributed to the fundamental understanding of metal catalysts and enabled the upgrading and conversion of former waste streams to valuable chemicals. In his more recent work he promoted the use of X-ray absorption spectroscopies to understand the correlation of preparation to structure and function of heterogeneous catalysts. He hold 48 patents and authored more than 100 peer reviewed publication in the field of catalysis.

Miller graduated with a Ph.D. in Inorganic Chemistry from Oregon State University in 1980. He joined Amoco Oil Company (now BP Chemicals) in 1980 where he progressed through various leadership positions in the research organization. In June 2008, he joined Argonne National Laboratory where currently holds the position of Group Leader of the Heterogeneous Catalysis program.

The Excellence in Catalysis Award lecture will take place on May 20th where Miller will also receive a plaque and cash award. For more details, visit www.nycsweb.org.

2009 Spring Symposium

The 2009 Spring Symposium organized by The Catalysis Society of Metropolitan New York on March 18th at Princeton University was a big success. The symposium had drawn around 90 attendees from Industry and academia. Ten outstanding oral presentations were given by academic and industrial presenters. The list of speakers included among others Matthew Neurock (Univ. of Virginia, keynote), Dion Vlachos (Univ. of Delaware; invited lecture) and Israel Wachs (Lehigh Univ.). Two industrial talks were given by Gerald Koermer (BASF Catalysts, invited lecture) and Karl Strohmaier (ExxonMobil).

The oral presentations were complimented by an equally outstanding poster session with 28 poster presenters. Congratulations to Jyoti Tibrewala (Princeton Univ.), Kevin Doura (Lehigh Univ.), Eseoghene Jerero (U. Penn.) and Quantong Shen (Rutgers Univ.) who won this year's awards for best poster presentations.

The New York section extends its thanks to attendees, participants, organizers, and corporate sponsors (ExxonMobil, BASF, Lummus Technology) and the North American Catalysis Society for collectively making the event a success.

Mexican Catalysis Club (Academia de Catálisis)

Academia de Catálisis, A.C. from Mexico is organizing the up-coming X Mexican Congress on Catalysis, organized jointly by our Academia and Centro de Nanociencias y Nanotecnología (UNAM). This congress will take place June 2-5, 2009. The venue is the city of Ensenada, Baja California located in the northwestern part of Mexico and we are estimating an attendance of nearly 100 scientists and students working in different fields of catalysis and related topics. The congress will include plenary lectures, keynote lectures, oral and poster presentations.

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Michigan Catalysis Society

After a strong series of invited lecture was completed in the fall of 2008, the Michigan Catalysis Society continued its 2008-2009 season with three additional dinner meetings in early 2009. All of these seminars incorporated a common focus on the use of surface chemistry to provide understanding of catalytic materials. After a break for the holidays, the 2008-2009 season resumed on February 3rd with a presentation from Dr. John Yates of the University of Virginia. Professor Yates presented some of his current work on atomic resolution studies of unusual effects in surface chemistry on gold. The MCS was visited on March 3rd by Dr. Peter Crozier of Arizona State University. Professor Crozier presented his work on the in situ preparation and

Clubs & Societies News

evolution of catalytically active nanomaterials. The MCS closed its dinner meeting season on April 7th with a presentation from Dr. Jingguang Chen of the University of Delaware. Professor Chen gave a presentation on his research on the rational design of bimetallic catalysts for both hydrogenation and reforming reactions.

The final event of the 2008-2009 season will take place on May 12th at the 31st Annual Spring Symposium of the Michigan Catalysis Society. This year's Symposium will be held at the University of Michigan and will feature keynote lectures from Professor William Epling of the University of Waterloo, as well as from Professor Mark Barteau, University of Delaware. Professor Barteau was selected as the winner of the 2009 Michigan Catalysis Society Giuseppe Parravano Memorial Award for Excellence in Catalysis Research. There will also be contributed papers, including graduate students competing for the Outstanding Student Presentation Awards. In addition, the annual business meeting of the MCS will be conducted during the Symposium. The main order of business will be the election of officers for the 2009-2010 season.

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~

Organic Reactions Catalysis Society

The Organic Reactions Catalysis Society announces its 23rd Conference will be held March 14-18, 2010 in beautiful Monterey, CA. The Conference provides scientists and engineers an opportunity present and discuss research findings on the application of catalytic reactions to the synthesis and production of organic chemicals. Focus areas include biomass conversion to useful chemicals, hydrogenation and oxidation in the specialty chemical and pharmaceutical arenas, C-X coupling, novel catalytic materials and reaction engineering. The ORCS Board is currently comprised of Chair Alan Allgeier (Amgen), Chair-Elect John Holladay (PNNL), Past Chair Mike Prunier (Lilly), Sec'y/Treasurer Helene Shea (Johnson-Matthey Pharma Services), Webmaster Setrak Tanielyan (Seton Hall), and Directors: Jim White (PNNL), Baoshu Chen (Evonik), Bert Chandler (Trinity U), Steve Perri (Eastman), Mike McGuire (GSK), Hans DeVries (DSM) and Chris Jones (GA Tech).

At the 22nd ORCS Conference (Richmond, VA 2008) the Society conferred Paul J. Rylander Awards on Prof. Brian James of the University of British Columbia and Professor John Hartwig of the University of Illinois, as well as, the Raney Award to Dr. Daniel Ostgard of Evonik (formerly Degussa). Nominations for 2010 granting of these prestigious awards are due September 18, 2010.

ORCS has a long history of publishing the proceedings of its biennial conference. This year, one page abstracts are due by September 8, 2010 and full manuscripts by November 16, 2010. Information on this and much more can be found at our newly renovated website www.orcs.org.

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As the San Francisco NAM approaches, please refer to the web page of the 21st NAM or the NACS for any last minute news about the meeting.

North American Meeting in San Francisco, June 7-12, 2009

The 2009 NAM will take place at the Hyatt Regency Hotel, located directly on the Embarcadero waterfront in San Francisco. The meeting co-chairs are Enrique Iglesia, Charles Wilson, and Bruce Gates. Further information is available on the meeting website (www.21nam.org); the website is now open for registration.

The following industrial sponsors have already provided support for the meeting: Air Products, Altamira, Avantium, BASF, BIOeCON, BP, Chevron, ConocoPhillips, Eastman, Evonik, ExxonMobil, Haldor Topsøe, Headwaters, Johnson Matthey, KiOR, Lummus, Parr, Sasol, Süd-Chemie, and UOP.

Those wishing to become sponsors should be in contact with the Fund Raising Chair, Jon McCarty, whose email address is JonGMcCarty@Eaton.com. Those interested in exhibits at the meeting should consult the web site.

The plenary speakers are the following:

Jeff Beck (ExxonMobil) – Houdry Award Winner

Avelino Corma (University of Valencia) – Boudart Award Winner

Manos Mavrikakis (University of Wisconsin) – Emmett Award Winner

The preliminary program of oral presentations is included in this newsletter, and the poster program is given as well.

Monday, June 8, 2009

Time	A	B	C	D	E
8:00 AM - 9:40 AM	**Plenary 1 - Monday**		Organizer: Meeting co-Chairs, 21st NAM		
	Molecular Design, Function, and Commercial Application of Shape Selective Catalysts for the Petrochemical Industry **Jeffrey S Beck**				
	Break				
9:40 AM - 12:00 noon	Chem - Session 1a Chairs: Eric E Stangland, The Dow Chemical Company /Bala Subramaniam, The University of Kansas	Env - Session 1a Chairs: William S Epling, University of Waterloo /Aleksey Yezerets, Cummins Inc	Energy - Session 1a Chairs: Michel Daage, ExxonMobil Process Research /James A Dumesic, University of Wisconsin -Madison	Fund - Session 1a Chairs: Matthew Neurock, University of Virginia /Fabio H Ribeiro, Purdue University	Fund - Session 2a Chairs: Matthew Neurock, University of Virginia /Fabio H Ribeiro, Purdue University
9:40 AM	**OA01**Allyl Transfer Reaction of Homoallyl Alcohols to Aldehydes Promoted by Oxide-supported Ruthenium Catalysts *Kenji Wada, Hiroki Miura, Teruyuki Kondo, Saburo Hosokawa, Masashi Inoue*	**KB01**Diesel NOx aftertreatment catalytic technologies: towards a convergence of the catalytic chemistry? *Pio Forzatti, Luca Lietti, Isabella Nova, Enrico Tronconi*	**OC01**Dehydration of Glucose into HMF by Lewis Acidic Metal Chlorides: Development of a Heterogeneous MECLX/Ionic Liquid SBA-15 Catalyst *Emiel JM Hensen*	**OD01**Au/ZnO and ZnO catalysts in methanol synthesis: A steady state, transient kinetic and DRIFTS study *Martin Muhler*	**OE01**Bridging the Environment Gap using First-Principles-Based Catalyst Modeling *William F Schneider, Rachel B Getman, Abhijit Phatak, David Schmidt, Hangyao Wang, Ye Xu*
10:00 AM			**OC02**Acid Catalyzed Monosaccharide Dehydration in the Condensed Phase *Basak Cinlar, Brent H Shanks*	**OD02**Operando infrared spectroscopy of low temperature CO oxidation on Au/SiO2 catalyst *Zili Wu, Sheng Dai, Steven H Overbury*	**OE02**Measuring the Electronic Structure of Alloy Materials and Relating it to their Catalytic Performance *Eranda Nikolla, Suljo Linic*
10:20 AM	**OA03**Bifunctional Catalyst for the One-step Continuous Synthesis of exo-tetrahydrodicyclopentadiene from Dicyclopentadiene *Wei Wang, Zhong-Wen Liu, Jian Lu, Zhao-Tie Liu*	**OB01**Dynamic Behavior of Fe-Zeolite Urea-SCR Catalysts *Aleksey Yezerets*	**KC01**Global Energy Challenges and Role of Catalysis for Sustainable Energy Development *Chunshan Song*	**OD03**Reaction-Relevant Gold Structures in Au-CeO2 and Au-Fe2O3 Catalysts and Structure sensitivity of the Water-Gas Shift Reaction *Yanping Zhai, Rui Si, Weiling Deng, Maria Flytzani-Stephanopoulos, Anatoly Frenkel, Steven H Overbury, George Flynn, Kwang Rim*	**OE03**First-principles studies of surface oxide formation on Pt electrode *Liang Qi, Ju Li*
10:40 AM	**OA04**Lipase-Catalyzed Diacylclycerol Production Under Sonochemical Irradiation *Rodrigo Octavio M A de Souza Sr, Octavio Augusto Ceva Antunes, Ivelize Babicz, Selma G F Leite*	**OB02**Mechanistic Evaluation of the Low Temperature Activity of Transition Metal Exchanged Zeolite SCR Catalysts *Joseph M Fedeyko, Bin Chen, Hai-Ying Chen*		**OD04**Tuning and Understanding Oxygen Activation by Gold: Synthesis and Characterization of New Au and Ni-Au Catalysts *Bert D Chandler, Cormac Long, Rachel J Korkosz, Heather Hartshorn, Christopher J Pursell*	**OE04**Theoretical and Experimental Studies of Ammonia Decomposition for Hydrogen Production *Danielle A Hansgen, Jingguang G Chen, Dionisios G Vlachos*
11:00	**OA05**Mechanistic Factors Influencing Recyclability of Co-Salen Catalysts in	**OB03**A micro calorimeter study of ammonia adsorption	**OC03**Hydrogenolysis of Glycerol to Propanediols over Multifunctional	**OD05**Highly Active CeO2-supported Au Clusters for Butadiene	**OE05**Catalytic Ethanol Decomposition: A Case Study in

AM	the Hydrolytic Kinetic Resolution of Epichlorohydrin *Surbhi Jain, Robert J Davis, Christopher W Jones, Marcus Weck*	over Cu Beta zeolite for urea SCR applications *Norman Wilken, Neal W Currier, Krishna Kamasamudram, Junhui Li, Aleksey Yezerets, Louise Olsson*	Catalysts *Abdullah Alhanash, Elena F Kozhevnikova, Ivan V Kozhevnikov*	Hydrogenation *Emiel JM Hensen*	Reducing Brute-Force DFT Work for Surface Reactivity by Combining BEP and Scaling Relations *Peter A Ferrin, Dante A Simonetti, Shampa Kandoi, James A Dumesic, Jens K Norskov, Manos Mavrikakis*
11:20 AM	**KA01**Tunable Cooperative Effects in Multi-Center Catalysis for the Synthesis of New Materials Binuclear Phenoxyiminato Polymerization Catalysts *Mike R Salata, Brandon A Rodriguez, Massimilano Delferro, Tobin J Marks*	**OB04**Modeling and Experimental Studies of HNCO as a Reactant for NOx Control *Maruthi N Devarakonda, Russell G Tonkyn, Diana N Tran, Jonathan L Male*	**OC04**Catalytic Deoxygenation of Free Fatty Acids over Pd/C *Jeremy G Immer, H Henry Lamb*	**OD06**A Transient Kinetic Analysis of the Epoxidation of Propene over Gold-Titania Catalysts *T Alexander Nijhuis, Elena Sacaliuc-Parvulescu, Bert M Weckhuysen, Jaap C Schouten*	**OE06**Mechanistic studies of the synthesis and decomposition of ethanol on Rh catalysts *YongMan Choi, Ping Liu*
11:40 AM		**OB05**Mechanistic Kinetics based Simulation of Automotive NH3 Oxidation Catalysts *Alexander F Scheuer, Anke Schuler, Alfons Drochner, Herbert Vogel, Martin Votsmeier, Jürgen Gieshoff*	**OC05**Catalytic Conversion of Carbohydrates to Mono-functional Hydrocarbons followed by Catalytic C-C coupling *Edward L Kunkes, Elif I Gurbuz, Hilde J Venvik, Dante A Simonetti, Ryan M West, Juan Carlos Serrano-Ruiz, Christian A Gaertner, James A Dumesic*	**OD07**Microkinetics of the water-gas shift reaction over Pt and Au supported dual-site catalysts *Olivier Thinon, Yves Schuurman, Priscilla Avenier, Fabrice Diehl*	**OE07**Oxidative Dehydrogenation of Propane on Small Pt Clusters A Density Functional Study *Larry A Curtiss, Jeff Greeley, Paul C Redfern, Peter Zapol, Faisal Mehmood, Stefan Vajda*
1:30 PM - 5:20 PM	Chemicals/Energy - Monday Afternoon Chairs:	Env - Session 1p Chairs: William S Epling, University of Waterloo /Aleksey Yezerets, Cummins Inc	Energy - Session 1p Chairs: Michel Daage, ExxonMobil Process Research /James A Dumesic, University of Wisconsin -Madison	Fund - Session 1p Chairs: Matthew Neurock, University of Virginia /Fabio H Ribeiro, Purdue University	Fund - Session 2p Chairs: Matthew Neurock, University of Virginia /Fabio H Ribeiro, Purdue University
1:30 PM	**OA06**Synergy in bimetallic Al-Zr-TUD-1 *Selvedin Telalovic, Anand Ramanathan, Ulf Hanefeld*	**OB06**The Different Impacts of SO_2 and SO_3 on Cu/Zeolite SCR Catalysts *Yisun Cheng, Christine Lambert, Do Heui Kim, Ja Hun Kwak, Charles H F Peden*	**OC06**Production of Hydrogen and Alkanes by Aqueous Phase Processing of Aqueous Fraction of Bio-oil *Tushar P Vispute, George W Huber*	**OD08**BaO/Pt(111) Model NOx Strorage/Reduction Catalysts *János Szanyi, Kumudu Mudiyanselage, Cheol-Woo Yi*	**OE08**Development and Application of Fast Transition State-Finding Strategies for Catalyzed Reactions *Anthony Goodrow, Alexis T Bell, Martin Head-Gordon*
1:50 PM	**OA07**Pd Supported on Zn^{II}-Cr^{III} Mixed Oxide as Catalyst for One-Step Synthesis of Methyl Isobutyl Ketone *Fahd Thabit Al-Wadaani, Elena F Kozhevnikova, Ivan V Kozhevnikov*	**OB07**Mechanisms of hydrocarbon poisoning of a urea SCR catalyst *Josh A Pihl, Russell G Tonkyn, Todd J Toops, Jonathan L Male, Darrell R Herling, C Stuart Daw*	**OC07**Catalytic upgrading of biomass-derived acids by dehydration/hydrogenation and C-C coupling reactions *Juan Carlos Serrano-Ruiz, James A Dumesic*	**OD09**Anomalous Surface Segregation of the Less Reactive Bimetallic Alloy Component Driven by CO Adsorption *Klas J Andersson, Federico Calle-Vallejo, Jan Rossmeisl, Ib Chorkendorff*	**KE01**Tailoring surface chemical properties using electronic structure theory *Jens K Norskov*
2:10	**OA08**Hydroxyapatite-Supported Silver Nanoparticle Catalyst for Selective	**OB08**Deactivation of Vanadia-based SCR Catalysts	**OC08**'Single-step' Catalytic Cellulose	**OD10**Studying the evolution of catalytic surfaces under realistic	

PM	Hydration of Nitriles to Amides in Water *Yusuke Mikami, Haruhiko Mori, Shusuke Arita, Takato Mitsudome, Tomoo Mizugaki, Koichiro Jitsukawa, Kiyotomi Kaneda*	by Phosphorus *Anker D Jensen, Francesco Castellino, Jan Erik Johnsson, Rasmus Fehrmann*	Conversion in Ionic Liquids *Yu Su, Heather M Brown, Conrad Z Zhang, Xiwen Hwang, Guosheng Li, Xiao-Dong Zhou, James E Amonette, John L Fulton, Donald M Camaioni, David L King, James A Franz*	conditions : Pd70Au30(110) surface properties under CO, O2 and CO + O2 elevated pressures *Francisco José Cadete Santos Aires*	
2:30 PM	**KA02**New Heterogeneously Catalyzed Processes for Environmentally Benign and Sustainable Chemical Production *Wolfgang F Hoelderich*	**OB09**Reactivity of Commercial Fe- and Cu-promoted Zeolite Catalysts in the NH3-NO/NO2 SCR for Diesel Exhaust Aftertreatment *Antonio Grossale, Isabella Nova, Enrico Tronconi*		**OD11**Rational Catalyst Design Applied to the Selective Hydrogenation of Acetylene *Felix Studt, Frank Abild-Pedersen, Thomas Bligaard, Rasmus Z Sørensen, Arkadii Kustov, Claus H Christensen, Jens K Nørskov*	**OE09**A First-Principles Study of Ethylene Transformation on M(111) (M = Pd, Pt, Ni, and Rh) *Hristiyan Aleksandrov, Zhao-Xu Chen, Duygu Basaran, Lyudmila Moskaleva, Qiao Sun, Notker Rösch*
2:50 PM		**OB10**Dual SCR Catalyst System for Lean NOx Reduction *Galen B Fisher, Craig L DiMaggio, Ken M Rahmoeller, Mark C Sellnau*	**OC10**Aromatic Production from Biomass by Catalytic Fast Pyrolysis *Torren R Carlson, Jungho Jae, George W Huber*	**OD12**Surface Science Model Approach to Ziegler-Natta Catalysts *JW (Hans) Niemantsverdriet, Adelaida Andoni, Peter Thune*	**OE10**Adaptive Kinetic Monte Carlo Simulation of Methanol Decomposition on Cu(110) *Donghai Mei, Lijun Xu, Graeme Henkelman*
3:10 PM	Break	Break	Break	Break	Break
3:40 PM	**OA09**Ternary Pt/Rh/SnO2 Electrocatalysts for Oxidizing Ethanol to CO2 *Ping Liu*	**OB11**Urea-SCR for NOx Diesel Emission Control: The influence of urea and its decomposition products on the SCR activity of zeolites *Maik Eichelbaum, Robert J Farrauto, Marco J Castaldi*	**OC11**Production of HMF from Aqueous Fructose - A Microwave Study *Thomas S Hansen*	**KD01**Which transition states and intermediates control catalyst activity, and how well do we know their energies? *Charles T Campbell*	**OE11**Catalyzing the Catalyst: Hydrogen Dissociation and Spillover on Pd Impurities in Cu(111) but not in Au(111) *John R Kitchin, Heather L Tierney, Ashleigh E Baber, E Charles H Sykes*
4:00 PM	**OA10**Partial Oxidation of Jet Fuel Over Molybdenum Dioxide *Oscar G Marin Flores, Su Y Ha*	**OB12**Evidence of WGS reaction: Direct H2 involvement in HC-SCR DeNOx: *Christopher J Brooks, John M Pigos*	**OC12**Layered Hydroxide Catalysts for Transesterification of Tributyrin with Methanol *Yuanzhou Xi, Robert J Davis*		**OE12**Catalytic Surfaces under a Pressure of Gas: Insights from Simulations *Philippe Sautet, Daniel Torres, Detre Teschner, Axel Knop-Gericke, Robert Schlogl*
4:20 PM	**OA11**Oxidative Desulfurization of Diesel Fuels Using Air by in-situ Hydroperoxide Generation for Fuel Cell Application *Ramanathan Sundararaman, Xiaoliang Ma, Chunshan Song*	**OB13**Reduction of surface nitrates by hydrogen as a key step in H2 assisted HC-SCR over Ag-Al2O3 *Hannes Kannisto, Hanna Härelind Ingelsten, Derek*	**OC13**Aqueous Phase Reforming of Glycerol: Reaction Pathways, Base Effects, and Catalyst Deactivation *David L King, Yong Wang, Guan-guang Xia, Yong Yang, David Heldebrant, Tom*	**OD13**Effect of Zn alloying on the reactivity of Pd catalysts *Eseoghene Jeroro, John M Vohs*	**KE02**Adsorption and reaction steps in naoporous sytems - accurate prediction by quantum chemistry and moelcular statistics *Joachim Sauer, Kaido Sillar, Stian Svelle, Christian Tuma, Torsten*

		Creaser, Magnus Skoglundh	*Peterson, Liang Zhang*		*Kerber*
4:40 PM	**OA12**deep desulfurization of fossil fuels by air in lactone solvent; the remarkable absence of a role for catalysts *Xiao Ding Xu, Jacob A Moulijn, Michiel Makkee*		**OC14**Upgrading of Bio-oil via Acid Removal: Effect of Various Alcohols and Aldehydes on Esterification of Acetic Acid *Nattaporn Lohitharn*	**OD14**In situ XPS studies of crotyl alcohol selective oxidation over Pd(111) and Au/Pd(111) surface alloys *Adam F Lee, Simon Hackett, Graham J Hutchings, James Naughton, Karen Wilson*	
5:00 PM	**OA13**Preferential CO Oxidation over Supported Ru Catalysts *Eun Duck Park, Hyun Chul Lee, Doohwan Lee, Kang Hee Lee*	**OB15**HC-SCR for Diesel NOx Reduction on Supported Metal Catalysts *Steven Schmieg, Michael B Viola, Richard J Blint*	**OC15**Simultaneous Transesterification and Esterification to Biodiesel Using Zinc Oxide Based Catalyst *Shuli Yan, Steven O Salley, K Y Simon Ng*	**OD15**Highly Selective Oxidative Dehydrogenation of Propane on Sub-Nanometer Platinum Clusters *Stefan Vajda, Michael J Pellin, Jeffrey P Greeley, Christopher L Marshall, Larry A Curtiss, Gregory A Ballentine, Jeffrey W Elam, Stephanie Catillon-Mucherie, Paul C Redfern, Faisal Mehmood, Peter Zapol*	**OE13**Adsorbate-adsorbate interactions in metal surface: DFT and ab initio thermodynamic studies of pressure- and temperature-dependent impact of alkalis on surface reactions of electronegative adsorbates *Suljo Linic, Honliang Xin*
5:30 PM - 8:00 PM	Poster Session 1				

Tuesday, June 9, 2009

Time	A	B	C	D	E
8:00 AM - 9:40 AM	**Plenary 2 - Tuesday** **Designing Mono- and Multifunctional Catalysts and Processes** **Avelino Corma**	Organizer: Meeting co-Chairs, co-Chairs, 21st NAM			
	Break				
9:40 AM - 12:00 noon	Chem - Session 2a Chairs: Eric E Stangland, The Dow Chemical Company /Bala Subramaniam, The University of Kansas	Env - Session 2a Chairs: William S Epling, University of Waterloo /Aleksey Yezerets, Cummins Inc	Energy - Session 2a Chairs: Michel Daage, ExxonMobil Process Research /James A Dumesic, University of Wisconsin - Madison	Fund - Session 3a Chairs: Matthew Neurock, University of Virginia /Fabio H Ribeiro, Purdue University	Fund - Session 4a Chairs: Matthew Neurock, University of Virginia /Fabio H Ribeiro, Purdue University
9:40 AM	**OA14**The Potential Industrial Application of Mesoporous Silicate in the Catalytic Oxidation of Aromatics under Room Temperature *Niankai Li, Yan Kong Sr, Cheng Wu, Yingjie Zhang, Dandan Cheng, Peng Sun, Jun Wang*	**OB16**Doped Cobalt Hydrotalcites as NOx Storage/Reduction Catalysts *Antonio Eduardo Palomares, Cristina Franch, Alvaro Uzcategui, Avelino Corma*	**OC16**Reactive adsorption of thiophene on Ni/ZnO: kinetic and in situ XRD studies *Igor Bezverkhyy, Andrey Ryzhikov, Olga Safonova, Pavel Afanasiev, Jean-Pierre Bellat*	**KD02**Chemical Imaging of Catalytic Solids at the Micron- and Nanoscale *Bert M Weckhuysen*	**OE14**Catalysis Science of Bulk Mixed Metal Oxide Catalysts: An *Operando* IR-TPSR Spectroscopic Study *Kamalakanta Routray, Israel E Wachs*

10:00 AM	**OA15**Catalytic Oxidation of Glycerol to High-Value Chemical Dihydroxyacetone *Wenbin Hu, Arvind Varma*	**OB17**Detailed kinetic modeling of NOx storage and reduction with hydrogen as the reducing agent *Anna Lindholm, Neal W Currier, Junhui Li, Aleksey Yezerets, Louise Olsson*	**OC17**Sulfur Removal via Selective Adsorption using Organic Framework Supported Molybdenum Carbides *Fan Shi, Katie Cychosz, Adam Matzger, Antek-Wong Foy Foy, Levi T Thompson*		**OE15**Identification of the role of carbon in highly active and selective MoOx-based catalysts for the skeletal hydroisomerisation of alkanes: a TPO and TAP study *Alexandre Goguet, Frederic C Meunier, Francesco Cavallaro, Sergiy Shekhtman, Christopher Hardacre*
10:20 AM	**OA16**Catalytic epoxidation of R-(+)-limonene using the Jacobsen's catalyst under heterogeneous conditions *Jairo A Cubillos Sr, Santiago Vásquez, Aída L Villa, Consuelo Montes de Correa*	**OB18**Isotopic Studies of NOX Storage and Reduction over Pt/BaO/Al2O3 using Temporal Analysis of Products *Ashok Kumar, Vemuri Balakotaiah, Michael P Harold*	**OC18**Rare Earth Oxides/Sulfides as High-temperature Sulfur Adsorbents *Ioannis Valsamakis*	**OD16**High Energy Diffraction and Open Cell Architectures for Studying Catalysts in Action *Matthew Graham O'Brien, Andrew Michael Beale, Bert Marc Weckhuysen*	**OE16**The effect of the supporting oxide on the activity of vanadia catalysts *Maria Veronica Ganduglia-Pirovano, Cristina Popa, Veronika Brázdová, Tanya K Todorova, Yoshiki Shimodaira, Joachim Sauer*
10:40 AM	**OA17**Ozonolysis Reactions in Dense Phase Carbon Dioxide *Andrew M Danby, Bala Subramaniam, Daryle H Busch*	**KB02**Elucidating Lean NOx Trap Regeneration and Degradation Chemistry: Insights from Intra-Catalyst Spatiotemporally Resolved Measurements *William Partridge, Jae-Soon Choi, Josh A Pihl, Todd J Toops, NA Ottinger, James E Parks II, VK Chakravarthy, Richard S Larson, CS Daw, Neal W Currier, Aleksey Yezerets*	**OC19**Selective Desulfurization of Hydrocarbon Fuels by Ag/TiO2: Preparation, Performance and Characterization *Sachin Nair, Alexander Samokhvalov, Eduardus Duin, Zenda Davis, John Heinzel, Bruce J Tatarchuk*	**OD17**Mechanistic study of ethylene hydroformylation over Rh/Al2O3 under reaction conditions by time resolved FTIR spectroscopy *Narayanappa Sivasankar, Heinz Frei*	**OE17**A First-Principles Study of Surface Doping of Ceria with Noble Metals for Hydrocarbon Conversion *Michael Janik, Adam D Mayernick*
11:00 AM			**OC20**Ambient Temperature Adsorptive Desulfurization of Natural Gas *Chandra Ratnasamy, Jon P Wagner, Steve Spivey*	**OD18**NMR relaxometry studies of adsorbate-catalyst interactions *Daniel Weber, Jonathan Mitchell, James McGregor, Zhenyu Huang, Lynn F Gladden*	**OE18**Developing Structural Models for Mo-based Selective Oxidation Catalysts Using High-Resolution Scanning Transmission Electron Microscopy (STEM) *Douglas J Buttrey, William D Pyrz, Douglas A, Blom, Vadim V Guliants, Thomas Vogt*
11:20 AM	**KA03**Novel Solvents Systems for Catalytic Processes *Charles L Liotta, Charles A Eckert*	**OB19**NOx Storage-Reduction Characteristics of Ba-Based Lean NOx Trap Catalysts Subjected to Simulated Road Aging *Yaying Ji, Courtney Fisk, Vencon Easterling, Mark Crocker, Jae-Soon Choi, William Partridge*	**OC21**A Novel Catalyst – Sorbent System for an Efficient H_2 Production with in Situ CO_2Capture *MH Halabi, MHJM de Croon, J van der Schaaf, PD Cobden, JC Schouten*	**OD19**A Novel Method to Assess Activation on Surfaces *Friederike C Jentoft, Jutta Kröhnert, Irina R Subbotina, Vladimir B Kazansky*	**OE19**A Combined Experimental and Theoretical Investigation of the Structure and Reactivity of $VO_x/TiO_2/SiO_2$ *William C Vining, Anthony Goodrow, Jennifer Strunk, Alexis T Bell*
11:40 AM		**OB20**Specific role of alumina surface sites for BaO anchoring and nitrate formation in BaO/γ-Al_2O_3 NO_x storage reduction (NSR) materials	**OC22**Adsorptive Denitrogenation of Liquid Hydrocarbon Streams on Carbon-Based Adsorbents *Masoud Almarri, Chunshan Song,*	**OD20**Exploration of single molecule fluorescence in haloperoxidase-like chemistry: hypobromite as the active vehicle	**OE20**Al doped ZnO support for methanol reforming: modified electronic structure and interaction with the active site

		Ja Hun Kwak, Donghai Mei, Cheol-Woo Yi, Do Heui Kim, Charles HF Peden, Lawrence F Allard, Janos Szanyi	*Xiaoliang Ma*	of active oxygen *Bert F Sels*	*Giulio Lolli, Raoul Naumann d'Alnoncourt, Malte Behrens, Robert Schlögl*
1:30 PM - 5:20 PM	Chem - Session 2p Chairs: Eric E Stangland, The Dow Chemical Company /Bala Subramaniam, The University of Kansas	Env - Session 2p Chairs: William S Epling, University of Waterloo /Aleksey Yezerets, Cummins Inc	Energy - Session 2p Chairs: Michel Daage, ExxonMobil Process Research /James A Dumesic, University of Wisconsin - Madison	Fund - Session 3p Chairs: Matthew Neurock, University of Virginia /Fabio H Ribeiro, Purdue University	Fund - Session 4p Chairs: Matthew Neurock, University of Virginia /Fabio H Ribeiro, Purdue University
1:30 PM	**OA19**Effect of Feed Configuration on n-Butane to Maleic Anhydride Yield: From Lab Scale to Commercial *Ali Shekari, Gregory S Patience, Richard E Bockrath*	**OB21**Understanding the Effect of Platinum Particle Size on the Rate of NO Oxidation *Andrew Smeltz, W Nicholas Delgass, Rachel B Getman, William F Schneider, Fabio H Ribeiro*	**OC23**Catalytic Glycerol Conversion into 1,2-Propanediol in Absence of Added Hydrogen: Bifunctional catalysis with Pt/NaY *Bert F Sels*	**KD03**Size and Composition Dynamics of bimetallic nanoparticle electrocatalysts probed using in-situ Small Angle X-ray Scattering (SAXS) *Chengfei Yu, Shirlaine Koh, Michael F Toney, Peter Strasser*	
1:50 PM	**OA20**Oxidation of Ethanol over Zeolite Supported Silver Catalysts *Rashid S Al-Hajri, David Chadwick*	**OB22**In Situ Redispersion of Platinum Nanoparticles Supported on Ceria-Based Oxide for Autoexhaust Catalysts *Yasutaka Nagai, Kazuhiko Dohmae, Yasuo Ikeda, Nobuyuki Takagi, Toshitaka Tanabe, Naoyuki Hara, Gemma Guilera, Sakura Pascarelli, Mark A Newton, Oji Kuno, Hongying Jiang, Hirofumi Shinjoh, Shin'ichi Matsumoto*	**OC24**Noble metal catalysts for the upgrading of wood-based pyrolysis oil *Andrea Gutierrez*		**OE22**Homologation of Dimethyl Ether to Highly Branched Alkanes on Acidic Zeolites *John H Ahn, Dante A Simonetti, Burcin Temel, Enrique Iglesia*
2:10 PM	**OA21**Direct Phenol Synthesis from Benzene/O2 and Active Oxygen Species on a Novel Tremendously Active Re-Pt/ZSM-5 Catalyst *Mizuki Tada, Linsheng Wang, Sachin Malwadkar, Yang Yong, Takashi Oikawa, Yasuhiro Iwasawa*	**OB23**Impact of Stepwise Desulfation on the Performance of a Ba-Based Commercial Lean NOx Trap Catalyst *Jae-Soon Choi, William P Partridge, Josh A Pihl, Todd J Toops, C Stuart Daw*	**OC25**Microkinetic Modeling of Catalytic Polyol Thermal Decomposition and Reforming on Platinum *Michael Salciccioli, Dionisios G Vlachos*	**OD21**Sub Second Liquid Transient ATR FT-IR Micro Flowcell for In-situ Analysis of Sorption Phenomena and Surface Kinetics *TJa Renckens, AR Almeida, MR Damen, Guido Mul, MT Kreutzer*	**KE03**New Mechanistic Insights into the Formation of Zeolite Catalysts *Raul F Lobo*
2:30 PM	**OA22**Characterization of Cu-Au, Ni-Au bimetallic catalysts by TOF-SIMS and SEM-EDS techniques *Tomasz P Maniecki, Paweł Mierczyński, Katarzyna Bawolak, Wojciech K Jozwiak*	**OB24**Potential of NOX storage/release materials for high temperature diesel soot oxidation *Arkady Kustov, Michiel Makkee*	**OC26**Catalytic Pyrolysis of Lignocellulosic Biomass to Bio-Oil - A Route to High Quality Bio-Fuels *Igor Babich, K Seshan, L Lefferts, J Moulijn, P O'Connor*	**OD22**In situ Spectroscopic Identification of Surface Intermediates in Aqueous-phase Metal-catalyzed Reactions *Kimberly Heck, Benjamin G Janesko, Quang X Nguyen, Gustavo E Scuseria, Naomi J Halas, Michael S Wong*	
2:50 PM	**OA23**Dehydrogenation of Paraffins using PtSn/Mg(Al)O: Catalyst Design and	**OB25**NOx and Soot Removal over Ba- and K-based Pt/Al2O3 4-Way Catalysts *Roberto Matarrese, Lidia Castoldi, Luca*	**OC27**Synthesis and Characterization of Organosulfonic Acid Functionalized Mesoporous	**OD23**Heterogeneous Catalysis in Liquid Phase; Challenges to Fundamentals and Engineering	

	Characterization *Georges G Siddiqi, Pingping Sun, Vladimir Galvita, Alexis T Bell*	*Lietti, Pio Forzatti*	Silica as Catalyst Support for the Deoxygenation of Vegetable Oil to Hydorcarbon Fuels *Jorge Beltramini, Siswati Lestari, Lu Max*	*Leon Lefferts*	
3:10 PM	Break	Break	Break	Break	Break
3:40 PM	**OA24**Pd-promoted selective gas phase hydrogenation of p-chloronitrobenzene over alumina supported Au *Catherine Louis, Mark A Keane*	**OB26**Effects of Thermal Degradation on the Ignition Properties of Propylene Oxidation *William S Epling, Osama Shakir, Aleksey Yezerets, Neal W Currier*	**OC28**Structure activity relations in solid base catalysed biodiesel synthesis *Karen Wilson, Pratibha Gai, Janine Montero, Adam F Lee*	**OD24**Insight into the liquid phase aerobic epoxidation of alkenes catalyzed by gold nanoparticles *Kevin Guillois, Frederic Chieux, Bertrand Istria, Johany Ringuet, Violaine Mendez, Valerie Caps*	**OE24**Dynamic Structural Changes in a Zeolite-Supported Iridium Catalyst for Ethylene Hydrogenation: Reversible Interconversion of Metal Complexes and Clusters Controlled by the Reactant Composition *Alper Uzun, Bruce Gates*
4:00 PM	**OA25**New reaction kinetic data on enantioselective hydrogenation of activated ketones over Pt-cinchona catalysts *Jozsef L Margitfalvi, Emilia Tálas*	**OB27**Effect of Precursor on the Coarsening Behavior of Nano-Particulate Alumina-Supported Pt-Pd Catalysts for NO Oxidation *Obiefune K Ezekoye, Andrew R Drews, Robert W McCabe, George W Graham, Xiaoqing Pan*	**OC29**Oxidative Decomposition of Cellulosic Materials *Weiling Deng, Sungsik Lee, Stefan Vajda, Joseph Libera, Jeffrey Elam, Christopher Marshall*	**OD25**Hydrogen Reactions on Pt supported on Au, Cu and HOPG – The Influence of the Substrate on Electrocatalytic Activity *Holger Wolfschmidt, Rainer Bußar, Odysseas Paschos, Tine Brülle, Ulrich Stimming*	**OE25**Templated Synthesis of Hierarchically Mesoporous Zeolites from Cationic Polymers and Their Excellent Catalytic Properties *Feng-Shou Xiao, Tiandi Tang, Chengyang Yin*
4:20 PM	**OA26**The Effect of Modifiers in Liquid Phase Hydrogenation: Use of Selective Poisons to enhance Selectivity *S David Jackson, Paloma E Garcia, Ailsa Lynch, Andy Monaghan*	**OB28**Emissions from Premixed Charge Compression Ignition (PCCI) Combustion and Affect on Emission Control Devices *James E Parks II, Vitaly Prikhodko, Teresa Barone, Sam Lewis, John M E Storey*	**OC30**The ECN Biomass To SNG Process *Jaap van Hal, CM van de Meijden, A van der Drift*	**OD26**A First Principles Analysis of the Mechanisms and Site Requirements for the Electrocatalytic Oxidation of Methanol and Formic Acid *Matthew Neurock, Michael Janik, Sally Wasileski*	**OE26**Hierarchical zeolites with tailored mesoporosity by partial detemplation and desilication *Sonia Abello, Adriana Bonilla, Danny Verboekend, Javier Pérez-Ramírez*
4:40 PM	**OA27**Hydrogenation of Nitrile Butadiene Rubber: Innovation of the Current Commercial Technology *Garry L Rempel, Qinmin Pan, Jialong Wu, Zhenli Wei*	**OB29**Enhanced emission of NH3 and N2O from Pd-supported catalysts *Isidro Mejia-Centeno Sr, Gustavo A Fuentes*	**OC32**Conversion of Bioethanol to 1-Butanol – A Step Towards Sustainable Transportation Fuels *Esa Toukoniitty, Dipak Madnani, Krisztian Kordas, Jyri-Pekka Mikkola*	**OD27**MS-IR Studies of Surface Formate Reactivity under Methanol Synthesis Conditions on Cu/SiO2 *Yong Yang, Charles A Mims, Robert Disselkamp, Charles H F Peden, Donghai Mei, Charles T Campbell*	**OE27**Preparation of interlayer-expanded zeolites having high catalytic performance through silylation of layered zeolitic precursors *Takashi Tatsumi, Hiroyuki Imai, Peng Wu, Satoshi Inagaki*
5:00 PM	**OA28**Design of a Versatile Bisalen Motif for Cooperative Co-Salen Mediated Epoxide Ring-Opening *Krishnan Venkatasubbaiah, Christopher S Gill, Tait Takatani, C David Sherrill, Christopher W*	**OB30**Regenerable sulfur traps: SOx storage and release kinetics *Lisa Kylhammar*		**OD28**Structural and spectroscopic study of the WGS activity for the CuFe2O4 catalyst *Michael Estrella, Laura Barrio, Wen Wen, Gong Zhou, Jonathan C Hanson, Jose Rodriguez,*	**OE28**FT-IR and catalytic characterization of the acidity of imogolite-based systems *Barbara Bonelli, Ilaria Bottero, Edoardo Garrone, FAbrizio Cavani, Nicola*

	Jones			*Xianqin Wang*	*Ballarini, Sauro Passeri*
5:30 PM - 8:00 PM	Poster Session 2				

Wednesday, June 10, 2009

Time	A	B	C	D	E
8:00 AM - 9:40 AM	**Plenary 3 - Wednesday** **Fundamental Catalysis: From Reaction Mechanisms to New Catalytic Materials** **Manos Mavrikakis**		Organizer: Meeting co-Chairs, 21st NAM		
9:40 AM - 12:00 noon	Fund - Session 6a Chairs: Matthew Neurock, University of Virginia /Fabio H Ribeiro, Purdue University	CRE - Session 1a Chairs: Thomas F Degnan, ExxonMobil Research and Engineering /Dionisios G Vlachos, University of Delaware	Energy - Session 3a Chairs: Michel Daage, ExxonMobil Process Research /James A Dumesic, University of Wisconsin -Madison	Energy - Session 4a Chairs: Michel Daage, ExxonMobil Process Research /James A Dumesic, University of Wisconsin -Madison	Fund - Session 5a Chairs: Matthew Neurock, University of Virginia /Fabio H Ribeiro, Purdue University
9:40 AM	**OA29**Surface chemistry with model coordination complexes and organometallic clusters for the preparation of noble metal-based carbon-supported catalysts *Christopher Willocq, Chantal Diverchy, Deborah Vidick, Sophie Hermans, Michel Devillers*	**KB03**Molecule-Based Modeling of Heavy Hydrocarbon Structure and Reactions: Discrete and Statistical Approaches *MIchael T Klein, Craig Bennett, Zhen Hou*	**OC33**Mechanism for Methane Steam Reforming over Transition Metals *Jens Sehested, Jon Geest Jakobsen, Stig Helveg, Glenn Jones, Thomas Bligaard, Jens K Nørskov*	**OD29**Selective decoration of sonochemically prepared MoS_2/Al_2O_3 with Co or Ni by impregnation with an acetylacetonate precursor *Sang-il Lee, Ara Cho, Jae Hyun Koh, Sang Heup Moon*	**OE29**Partial Oxidation of Alcohols on $TiO_2(110)$ and $(WO_3)_3/TiO_2(110)$ Model Catalysts *Yu Kwon Kim, Oleksander Bondarchuk, Bruce D Kay, J M White, Roger Rousseau, Zdenek Dohnalek*
10:00 AM	**OA30**Synthesis of Chromates in Chromasiloxane Ring Structures as Active Site Models for the Phillips' Catalyst *Cori A Demmelmaier, Rosemary E White, Jeroen A van Bokhoven, Susannah L Scott*		**OC34**The effect of the metal nature on deactivation during steam reforming of ethanol for hydrogen production over Pt/CeO2 and Co/CeO2 catalysts *Sania M de Lima, Lidia OO Costa, Lisiane V Mattos, Uschi M Graham, Gary Jacobs, Burtron H Davis, Fabio B Noronha*	**OD30**From Sulfided to Noble Metal Catalysts in the Hydrodeoxygenation of Aliphatic Esters *Andrea Gutierrez*	**OE30**Atomic-scale view of hydration and redox of VO_x supported on α-Fe2O3(0001) *Chang-Yong Kim, Jeffrey Klug, Anthony A Escuadro, Michael J Bedzyk, Peter C Stair*
10:20 AM	**OA31**Selective Adsorption of Manganese onto Cobalt for Optimized Mn/Co/TiO2 Fischer-Tropsch Catalysts *Theresa Feltes, Leticia Espinosa-Alonso, Emiel de Smit, Lawrence D'Souza, Randall Meyer, Bert M Weckhuysen, John Regalbuto*	**OB31**^{1}H DOSY NMR: An effective tool to investigate asphaltenes behavior *Emmanuelle Durand, Martin Clémancey, Jean-Marc Lancelin, Jan Verstraete, Didier Espinat, Anne-Agathe Quoineaud*	**OC35**Hydrogen Production from Steam Reforming of Bio-Ethanol over Non-Precious Metal Catalysts *Hua Song, Umit Ozkan*	**KD04**FCC Pretreatment Hydrotreating Catalysts *Sonja Eijsbouts, Steve Mayo, Louis Burns*	**OE31**Synthesis and Characterization of Supported Vanadium Oxides for the Oxidative Dehydrogenation of Cyclohexane *Staci L Wegener, Hack-Sung Kim, Tobin J Marks, Peter C Stair*

10:40 AM	**OA32**Synthesis, Characterization & Catalytic Activity of Novel Building Block Aluminosilicate Catalysts *Joshua G Abbott, Craig E Barnes*	**OB32**Factors contributing to the Effectiveness of Vanadium Catalysts for SO2 Oxidation using Steady-state and Transient Response Methods *Mario P DiGiovanni, Timothy R Felthouse, Gerald V Hook, John T Gleaves, Patrick L Mills*			**OE32**Modification of Palladium (II) Catalysis for Selective Partial Oxidation of Alcohols with Multifunctional Pyridylsiloxane Ligands *Michael N Missaghi, Harold H Kung*
11:00 AM	Keynote Presentation - Ryong Ryoo	**OB33**Effect of membrane treatment on CO competitive adsorption on 3μm Pd/23wt%Ag membranes *Astrid L Mejdell, Thijs A Peters, Rune Bredesen, Hilde J Venvik*	**OC37**Identification of the active catalyst phases of the bimaetallic Cobalt and Palladium Zinc oxides for the reforming reactions of alcohols *Barr Halevi, Eric Peterson, Jonathan Paiz, Hien Pham, Abhaya Datye*	**OD31**Intrinsic potential of supports for HDT revealed and assessed by clean CoMo preparation methods *Charbel Roukoss, Bo Phung Ngoc, Elodie Devers, Dorothée Laurenti, Karin E Marchand, Laurence Massin, Anne-Agathe Quoineaud, Christelle Legens, Michel Vrinat*	**OE33**The Effect of Ag Particle Shape and Surface Structure on Ethylene Epoxidation Selectivity *Phillip Christopher, Suljo Linic*
11:20 AM		**OB34**Kinetic studies on the stability of Pt for NO oxidation: effect of sulfur *Jorge H Pazmino, Jeffery T Miller, Robert M Rioux, Aleksey Yezerets, Neal W Currier, W Nicholas Delgass, Fabio H Ribeiro*	**OC38**Optimal Design of CH4 Catalytic Partial Oxidation Reformers on Rh-based Catalysts for Small-scale Syngas Production *Matteo Maestri, Alessandra Beretta, Pio Forzatti, Gianpiero Groppi, Enrico Tronconi, Dionisios G Vlachos*	**OD32**Desulfurization of and Tar Removal from Gasifier Effluents Using Mixed Rare Earth Oxides *Kerry M Dooley, Sumana Adusumilli, Vikram Kalakota*	**OE34**Adsorption and Dissociation of CO on Body Centered Cubic Transition Metals and Alloys: Effect of Coverage and Scaling Laws *Freek JE Scheijen, JW (Hans) Niemantsverdriet, Dani Curulla Ferre*
11:40 AM	**OA33**Synthesis of stable V-doped Mo_2C with high surface area *Thomas P B Cotter, Frank Girgsdies, Wei Zhang, Olaf Timpe, Annette Trunschke, Robert Schlögl*	**OB35**Experimental and Kinetic Investigations of NO Oxidation on Model Pt Catalysts *Divesh Bhatia, Michael P Harold, Vemuri Balakotaiah, Robert W McCabe*	**OC39**Millisecond Catalytic Reforming of Biomass for Synthetic Fuels *Joshua L Colby, Lanny D Schmidt*	**OD33**Hydrodenitrogenation of Carbazole and Quinoline over a Nano- Dispersed Mo Sulfide Catalyst Using In Situ Hydrogen *Kun Liu, Flora TT Ng*	**OE35**CO Oxidation on Rh/SiO_2 and Pt/SiO_2 Model Catalysts at Elevated (≈10torr) Pressures *Matthew Lundwall, Sean M McClure, Fan Yang, Zihao Zhou, D Wayne Goodman*
1:30 PM - 5:20 PM	Energy/Chemicals - Wednesday Afternoon Chairs:	Environmental - Wednesday PM Chairs: William S Epling, University of Waterloo /Aleksey Yezerets, Cummins Inc	CRE - Session 1p Chairs: Thomas F Degnan, ExxonMobil Research and Engineering /Dionisios G Vlachos, University of Delaware	Energy - Session 4p Chairs: Michel Daage, ExxonMobil Process Research /James A Dumesic, University of Wisconsin -Madison	Fund - Session 5p Chairs: Matthew Neurock, University of Virginia /Fabio H Ribeiro, Purdue University
1:30 PM	**OA34**Formic Acid as a Hydrogen Source for Vapor Phase Catalytic Reactions *Dmitri A Bulushev, Julian RH Ross*	**OB36**Improving Performance of Regenerable CaO-based CO2 Absorbent Using Novel Sintering-Resistant Formulations *Liyu Li, David L King, Jun Liu, Xiangxin Yang, Chris J Howard*	**KC02**Reversible and Irreversible Changes in Co Fischer-Tropsch Catalysts During Synthesis *Stuart Soled, Chris Kliewer, Gabor Kiss, Joseph Baumgartner*	**OD34**Inhibiting effect of model oxygenated compounds on the HDS of dibenzothiophenes over CoMoP/Al2O3 catalyst *Maxime Philippe, Frederic Richard Sr, Damien Hudebine, Sylvette Brunet*	**OE36**The use of electroless deposition methods to prepare novel bimetallic catalysts *John R Monnier, Melanie T Schaal, Kevin D Beard, Jayakiran Rebelli, Christopher T Williams, John W Van Zee*

1:50 PM	**OA35** Size Optimization of Ru Nanoparticles for the Generation of COx-free H2 from Ammonia *Elizabeth D'Addio, Jochen Lauterbach*	**OB37** Effects of Preparation Conditions and Ni/Co Ratio on NiCo Bimetallic Catalyst Performance for CO2 Reforming of CH4 *Chunyu Xi, Hui Wang*		**OD35** Hydrodeoxygenation of 4-Methylphenol over Mo Catalysts *Victoria M L Whiffen, Kevin J Smith*	**OE37** Surface-support interactions in Mn-based molecular oxidation catalysts *Justin M Notestein, Andrew Korinda, Nicholas Schoenfeldt*
2:10 PM	**KA04** Efficient Hydrogen Evolution Sites of Photocatalysts for Water Splitting *Kazunari Domen*	**OB38** Catalytic CO2 hydrogenation to feedstock chemicals for Jet Fuel synthesis *Robert Werner Dorner*	**OC40** Elucidating Mechanisms that Control Metal Sintering *Matthew Neurock, Yu Cai, Randall Meyer, John Lockemeyer, Randall Yeates, Donald Reinalda, Michael Lemanski*	**OD36** Kinetics Study of the Hydrogenation/Deoxygenation of Furfural *Surapas Sitthisa, Steven Crossley, Lance Lobban, Richard Mallinson, Daniel Resasco*	**OE38** Magnetic Resonance Imaging to Study Impregnation Processes on g-Al2O3 Support Bodies *L Espinosa-Alonso, KP de Jong, BM Weckhuysen*
2:30 PM		**OB39** Synthesis of DMC from CH3OH and CO2 over Ce05Zr05O2 Catalysts *Zhi-Fang Zhang, Zhong-Wen Liu, Jian Lu, Zhao-Tie Liu*	**OC41** Understanding Sintering of Supported Metal Catalysts *Gustavo A Fuentes, Elizabeth Salinas-Rodriguez, Enrique Soto-Mercader, Guillermo Rivera*	**OD37** Effect of sulfur compounds on the HDS/HYDO selectivity in the transformation of a model FCC gasoline over Mo based catalysts *Celine Fontaine, Yilda Romero, Christophe Bouchy, Antoine Daudin, Elodie Devers, Pascal Raybaud, Sylvette Brunet*	**OE39** Site-Isolated Pt-SBA15 Materials from Tris(tert-butoxy)siloxy Complexes of Pt(II) and Pt(IV) *Robert M Rioux, Daniel A Ruddy, Jeffery T Miller, T Don Tilley*
2:50 PM	**OA36** H2 Activation and Base Promoted Hydride Transfer Reactions Using Transition Metal Diphosphine Complexes: The Development of a Multi-Step Process to Regenerate Ammonia Borane *Michael T Mock, Robert G Potter, Daniel L DuBois, Donald M Camaioni, Tom Autrey, John C Linehan*	**OB40** CNT-promoted Pd-ZnO catalysts for hydrogenation of CO2 to CH3OH *Xue-Lian Liang, Zhi-Ming Liu, Peng Zhang, Hong-Bin Zhang*	**OC42** Deactivation of Accelerated Engine-Aged and Field-Aged Fe-Zeolite SCR Catalysts and the Role of the Diesel Oxidation Catalyst *Adam Foster, Ke Nguyen, Bruce Bunting, Todd J Toops*		**OE40** Design and Synthesis of Robust Calixarene-Capped Metal Clusters and *Alexander Katz, Jeong-Myeong Ha, de Silva Namal, Solovyov Andrew*
3:10 PM	Break	Break	Break	Break	Break
3:40 PM	**OA37** Continuous Homogeneous Hydroformylation with Nanofiltration for Retention of Polymer Supported Rh Catalyst Complexes *Jing Fang, Ranjan Jana, Jon Tunge, Bala Subramaniam*	**OB41** Enhancement of Palladium Catalytic Activity by Gold for Trichloroethene Reductive Dechlorination *Yu-Lun Fang, Pedro J J Alvarez, Jeffrey T Miller, Michael S Wong*	**OC43** Effect of Sulfur on Properties of Mo2C and Pt/Mo2C Catalysts *Josh A Schaidle, Adam Lausche*	**OD39** New insights in the control of the selectivity HDS/HYD in hydrotreatment *Noëmie Dos Santos, Hugues Dulot, Michel Vrinat*	**OE41** A Surface Science Approach to the Preparation of Alumina-Supported Ni-Mo Catalysts in Aqueous Solution *Asma Tougerti, Xavier Carrier, Michel Che*
4:00 PM	**OA38** Carbonylation of Aryl Olefins and Alcohols using Immobilized Pd Complex Catalysts *Bibhas R Sarkar, Yuanchun Li, Raghunath V Chaudhari*		**OC44** Nature of deactivation in SOFC anode catalysts in the presence of H2S *Nandita Lakshminarayanan, John N Kuhn, Umit S Ozkan*	**OD40** Ammoxidation Catalysis for NOx Control in Partial Combustion FCC *David M Stockwell, Qi Fu*	**OE42** Synthesis of Dendrimer Encapsulated One Nanometer Rh and Pt Particles and Their Catalytic Activity for Ethylene and Pyrrole Hydrogenation *Wenyu Huang, John N Kuhn, Chia-Kuang Tsung, Gabor A*

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4:20 PM	**OA39**Effects of Ligand Composition on the Activity of Rh(III) for the Oxidative Carbonylation of Toluene to p-Toluic Acid *Joseph Zakzeski, Andrew Behn, Alexis T Bell*	**OB43**Strategies for minimizing catalyst deactivation in the aqueous-phase hydrodechlorination of chlorinated pollutants *Salvador Ordonez, Beatriz P Vivas, Fernando V Díez*	**OC45**The role and structure of carbonaceous materials in dehydrogenation reactions *James McGregor, J Axel Zeitler, Edward PJ Parrott, Lynn F Gladden, Jean-Philippe Tessonnier, Thomas W Hansen, Dangsheng Su, Robert Schlogl*	**OD41**Hydrodesulfurization of 4,6-dimethyldibenzothiophene over high surface area metal phosphide *Rui Wang, Kevin J Smith*	**OE43**Seed-Mediated Synthesis of Nanostructured Supported Pd Catalysts and Applications in Selective Hydrogenation Reactions *Gilles D Berhault, Laurent Piccolo, Ana Valcarcel, Marta Bausach, Cécile Thomazeau, Denis Uzio*
4:40 PM	**OA40**Novel Vapor-Phase Carbonylation of Dimethoxymethane over Acid Zeolites *Fuat E Celik, Tae-Jin Kim, Alexis T Bell*	**OB44**Waste Water Purification from Phenol by Novel Polymer-Containing Nanocatalysts *Esther Sulman*	**OC46**Conversion of Hydrocarbon Fuels over Rhodium: Towards a Better Understanding of Coking of Catalyst *Claudia Essmann, Benjamin Schädel, Marco Hartmann, Lubow Maier, Thomas Schimmel, Olaf Deutschmann*	**OD42**The hydrogenation and direct desulfurization pathway in thiophene HDS over Co promoted and non-promoted MoS2 A density functional theory study *Poul Georg Moses, Henrik Topsøe, Berit Hinnemann, Jens K Nørskov*	**OE44**Structural Characterization of Lanthanide Promoted Sulfated Zirconia Catalysts *Shelly D Kelly, Ally Chan, George E Mickelson, Ning Yang, Simon Bare*
5:00 PM	**OA41**Structural-activity relationships of Au based catalysts for the carbonylation of methanol to acetic acid and methyl acetate: Identification of the active sites *Alexandre Goguet, Youssef Saih, Katabathini Narasimharao, Christopher Hardacre*	**OB45**Nano-particle SCR deNOx catalysts *Steffen B Kristensen, Andreas J Kunov-Kruse, Anders Riisager, Rasmus Fehrmann*	**OC47**Platinum Group Metal Catalysts for Hydrogen Production via the Sulfur Based Thermochemical Water Splitting Cycles *Daniel M Ginosar, Lucia M Petkovic, Kyle C Burch, Sergey Rashkeev, Helen H Farrell, Klaus van Benthem*	**OD43**Highly Stable Catalysts for Ethanol Steam Reforming *Ayman M Karim, James J Strohm, Vanessa Lebarbier, Guosheng Li, David King, Yong Wang*	**OE45**Synthesis and Characterization of Photocatalytically Active Titania Nanotubes *Elizabeth G Ranney, Johannes W Schwank*
5:30 PM - 8:05 PM	Poster Session 3				

Thursday, June 11, 2009

Time	**A**	**B**	**C**	**D**	**E**
8:00 AM - 12:00 noon	Environmental/Chemicals - Thursday Morning Chairs:	Energy - Session 5a Chairs: Michel Daage, ExxonMobil Process Research /James A Dumesic, University of Wisconsin - Madison	Energy - Session 6a Chairs: Michel Daage, ExxonMobil Process Research /James A Dumesic, University of Wisconsin -Madison	Fund - Session 8a Chairs: Matthew Neurock, University of Virginia /Fabio H Ribeiro, Purdue University	Fund - Session 7a Chairs: Matthew Neurock, University of Virginia /Fabio H Ribeiro, Purdue University
8:00 AM	**OA42**Synthesis and characterization of Au/Al2O3-CeO2 catalysts prepared by deposition-precipitation (DP) method: use on the Catalytic Wet Air Oxidation of gasoline oxygenates	**OB46**Highly Stable and Active Electrocatalysts for Oxygen Reduction : Presynthesized Bimetallic Nanocrystals on	**OC48**Performance of supported Co catalysts for Fischer-Tropsch synthesis *Anders Holmen, Shreyas P*	**OD44**Study of Morphology Changes in Reacting Nano Catalysts using Grazing Incidence Small-Angle X-ray Scattering *Randall E Winans, Byeongdu Lee,*	**OE46**Needle in a Haystack Catalysis *Xiaolin Zheng, John T Gleaves, Gregory S Yablonsky*

	Gilberto Torres, Oscar Ramirez, Jose Guadalupe Pacheco, Ignacio Cuauhtemoc, Gloria Alicia Del Angel, Rodolfo Zanella	Graphitic Carbon *Daniel A Slanac, Gaurav Gupta, Pavan Kumar, Jaclyn D Wiggins, Xiqing Wang, Steven Swinnea, Sheng Dai, Karren More, Keith J Stevenson, Keith P Johnston*	*Rane, Erik Z Tveten, Erling Rytter, Øyvind Borg*	*Soenke Seifert, Sungsik Lee, Jeffry W Elam, Michael J Pellin, Ingo Barke, Armin Klieber, Viola von Oeynhause, Karl-Heinz Meiwes-Broer, Stefan Vajda*	
8:20 AM	**OA43**Enhancement of 3-way CNG catalyst performance at high temperature due to the presence of water in the feed: on the role of steam reforming of methane *Patrick Francois Da Costa Sr, Sandra Capela Sr*	**OB47**Metal-Ceramic Nanocomposites for Utilization in Sulfur-Contaminated Fuel Streams *Rahul D Solunke, Shuang Liang, Goetz Veser*	**OC49**Theoretical Insights into Catalytic C1 Conversion Processes *Matthew Neurock, Corneliu Buda, Ya-Huei (Cathy) Chin, Enrique Iglesia*	**KD05**Unraveling the Complexity of Industrial Catalysts using in situ X-ray Absorption Spectroscopy *Simon Bare*	**OE47**Kinetic and Catalytic Consequences of Reactive Oxygen Atoms during CH4 Conversion on Group VIII Metal Clusters *Ya-Huei (Cathy) Chin, Corneliu Buda, Matthew Neurock, Enrique Iglesia*
8:40 AM	**OA44**Understanding the Chemistry Of NOx Reduction in the FCC Regenerator by Lambda Sweep Test *Qi Fu, David M Stockwell*		**OC50**The Role of Water Vapor in Methanol Synthesis on Copper Catalysts *Charles A Mims, Yong Yang, Charles H F Peden*		**OE48**Performance of Bimetallic Catalysts for Ethylene Epoxidation: Model vs Experiment *Joseph C Dellamorte, Jochen Lauterbach, Mark A Barteau*
9:00 AM	**OA45**Two-stage Catalytic Exhaust Treatment for Lean-Burn Natural Gas Engines *Burcu Mirkelamoglu, Meimei Liu, Samuel D Lentz, Umit S Ozkan*	**OB49**Nanosized (complex) metal hydrides for hydrogen storage prepared by melt infiltration of porous carbon materials *Philipp Adelhelm, Rene Bogerd, Jinbao Gao, Krijn de Jong, Petra de Jongh*	**OC51**Transient behavior of Cu/ZnO-based methanol synthesis catalysts *Peter C K Vesborg, Ib Chorkendorff, Stig Helveg*	**OD45**Trends in X-ray Absorption Near Edge Spectroscopy of Supported Pt Nanoparticles *Randall Meyer, Yu Lei, Jeffery T Miller*	**KE04**Active Species and Dynamic Structures for Selective Catalysis on Designed Surfaces and Nanoparticles *Yasuhiro Iwasawa*
9:20 AM	**OA46**The influence of the state of Pd on methane combustion in Pd-doped LaFeO3 perovskites *Arnim Eyssler, Davide Ferri, Anke Weidenkaff*	**OB50**Preferential oxidation of CO in hydrogen catalyzed by fine particles of Pt-based intermetallic compounds *Takayuki Komatsu*	**OC52**H2-D2 Kinetic Isotope Effect in CO2 Hydrogenation over Pt-Co/Al2O3 *Burtron H Davis, Muthu Kumaran Gnanamani, Wenping M*	**OD46**Spectroscopic Analysis of Supported Bimetallic Catalyst Surfaces *Sean M Oxford, Peter L Lee, Jeffrey T Miller, Mayfair C Kung, Harold H Kung*	
9:40 AM	Break	Break	Break	Break	Break
10:20 AM	**OA47**Zirconocene(II)-catalyzed Linear Dimerization of Terminal Alkynes *Jiri Pinkas, Karel Mach, Michal Horacek*	**OB51**Titania Nanotube Supported Nanoscale Gold Photoanodes for Photoelectrochemical Hydrogen Production *Peter H Aurora, Chang Kim, Levi T Thompson*	**OC53**Tuning of Stearate-Based Cu Colloids for Methanol Synthesis and ATR-FTIR Investigation of Strong Metal-Support Interactions *Martin Muhler*	**OD47**Characterization of PtRe/carbon catalysts used for conversion of sugars to hydrocarbons *Abhaya Datye, Andrew DeLaRiva, Lawrence F Allard, Dangsheng Su, Robert Schlogl, Oliver Daniel, Robert J Davis, Edward L Kunkes, James A*	**OE49**Metal catalyzed Sonogashira coupling reaction is a heterogeneous process: a study by model and practical catalysts *Vijay Kumar Kanuru*

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10:40 AM	**OA48** 1-butene/isobutane alkylation catalyzed by binary mixtures of ionic liquid and mineral acid *Shengwei Tang, Aaron Scurto, Christopher Lyon, Bala Subramaniam*	**KB04** Catalysis of Nano Particles Confined inside the Channels of CNTs *Xiulian Pan, Xinhe Bao*	**OC54** A Comparison of Rh and Base Metal Catalysts for the Conversion of Syngas to Ethanol *Xunhua Mo, Jia Gao, James G, Jr Goodwin*	**OD48** In situ TEM-EELS activation of iron Fischer-Tropsch catalysts *Stephan Janbroers, Peter Crozier, Henny W Zandbergen, Patricia J Kooyman*	**OE50** Selectivity in Olefin Isomerization: From Studies on Model Systems and Theory to Real Catalysts *Ilkeun Lee, Françoise Delbecq, Francisco Zaera*
11:00 AM	**OA49** Zeolite ITQ-22 as multipurpose alkylation catalyst *Cristina Martinez, Avelino Corma, Francisco Llopis, Fernando Rey, Susana Valencia*		**OC55** The Influence of CO on the Deactivation of a Pt-Re-Mo Trimetallic Low Temperature Water Gas Shift Catalyst *Lucas Dorazio, Robert J Farrauto, Marco J Castaldi*	**OD49** ETEM Studies of Ni Catalyst Sintering *Andrew DeLaRiva, Abhaya Datye, Thomas Hansen, Stig Helveg, Jens Sehested, Poul Hansen*	**OE51** Nanofaceted Pd-O Sites in Surface Ce-Pd-O Superstructures Boost Activity in the Combustion of Methane *Sara Colussi, Arup Gayen, Matteo Farnesi, Marta Boaro, Jordi Llorca, Stefano Fabris, Alessandro Trovarelli*
11:20 AM	**KA05** Research and Development with Modified Mordenite Zeolites *Guo-Shuh John Lee*	**OB52** Nitrogen-functionalized carbon nanotubes as a basic catalyst for biomass conversion reactions *Jean-Philippe Tessonnier, Alberto Villa, Olivier Majoulet, Dangsheng Su, Robert Schlögl*	**OC56** Bimetallic Pd-Zn and Pd-Fe Supported Catalysts for the Water-Gas Shift Reaction *Wilce Damion Williams*	**OD50** Understanding the Structure of Pd/ZnO Methanol Steaming Reforming Catalysts for Hydrogen Production *Jingyue Liu, Lawrence F Allard*	**OE52** A Microkinetic Analysis and Mechanism for the Water Gas Shift Reaction over Industrial Cu Catalysts *Rostam J Madon, Drew Braden, Peter Nagel, Shampa Kandoi, James A Dumesic*
11:40 AM		**OB53** Support Effect on the Dispersion and Aqueous Phase Reforming Activity of Carbon Nanotube Supported Platinum Catalysts *Xiaoming Wang, Nan Li, Jeffery A Webb, Fang Fang, Lisa D Pfefferle, Gary L Haller*	**OC57** Pulse Plated Mn-Cu-ZnO Nanowires/ tubes for Synthesis of Ethanol from CO Hydrogenation *Mayank Gupta, James J Spivey*	**OD51** Nanoscale Chemical Imaging of a Working Fischer-Tropsch Catalyst by in situ Scanning X-ray Transmission Microscopy *Emiel de Smit, Ingmar Swart, J Fredrik Creemer, Gerard H Hoveling, Mary K Gilles, Tolek Tyliszczak, Patricia J Kooyman, Henny W Zandbergen, Cynthia Morin, Bert M Weckhuysen, Frank M F de Groot*	**OE53** Rational Design of Bimetallic Gold-Platinum Catalysts for the Chemoselective Hydrogenation of Substituted Nitroaromatics *Pedro Serna, Patricia Concepcion, Avelino Corma*
1:30 PM - 5:20 PM	Chem - Session 4p Chairs: Eric E Stangland, The Dow Chemical Company /Bala Subramaniam, The University of Kansas	Energy - Session 5p Chairs: Michel Daage, ExxonMobil Process Research /James A Dumesic, University of Wisconsin - Madison	Energy - Session 6p Chairs: Michel Daage, ExxonMobil Process Research /James A Dumesic, University of Wisconsin -Madison	Env - Session 4p Chairs: William S Epling, University of Waterloo /Aleksey Yezerets, Cummins Inc	Fund - Session 7p Chairs: Matthew Neurock, University of Virginia /Fabio H Ribeiro, Purdue University
1:30 PM	**OA50** Addition of Aromatic C-H Bonds to Alkenes by Heterogeneous Ruthenium Catalysts *Hiroki Miura, Kenji Wada, Saburo Hosokawa, Masashi Inoue*	**OB54** On the Equivalence of Kinetic Data Obtained in Fixed-Bed and Slurry Reactors in the Fischer-Tropsch Synthesis *Carlo Giorgio Visconti, Luca Lietti, Enrico Tronconi, Pio Forzatti,*	**OC58** Operando XAFS and AI MD to characterize Rhodium Clusters in the Catalytic Dehydrogenation of Aminoboranes *Roger Rousseau, Greg K*	**KD06** UV Raman Spectroscopic Studies on Surface Phase Transformation and Photocatalytic Performance of TiO_2 *Can Li*	**OE54** Mechanisms of the Ethylbenzene Disproportionation: Transition State Shape Selectivity on Zeolites *Jun Huang*

		Chiara Gambaro	*Schenter, John F Fulton, John C Linehan, Tom Autrey*		
1:50 PM	**OA51**Mesoporous Molecular Sieves Based Catalysts for Olefin Metathesis *Hynek Balcar, Nadezda Zilkova, Diwa Mishra, Jiri Cejka*	**OB55**The influence of carbon on the deactivation of cobalt based FTS catalysts *DJ Moodley, AM Saib, J van de Loosdrecht, JW (Hans) Niemantsverdriet*	**OC59**Comparison of Different Preparation Methods of PtIr, PtIrSn and PtIrGe Catalysts for Hydrocarbon Transformation *Laurence Pirault-Roy, Christophe Poupin, Camille La Fontaine, Mounir Chaman, Zoltan Paal, Attila Wootsch*		**OE55**Mesoporosity derived by nonionic silylated-surfactant in the synthesis of siliceous MFI zeolite *Rino R Mukti, Ayae Sugawara, Atsushi Shimojima, Tatsuya Okubo*
2:10 PM		**OB56**Robust Fischer –Tropsch synthesis catalyst to complete convert N2-rich syngas in a single pass *Tiancun Xiao, Pierre Moreau, Yanjun Zhao, Sreekala Rugmini, Linda Roach, Mike Roberts, Derek Atkinson*	**OC60**Activity and Stability of Metal-supported Metal Adclusters *Jeff Greeley, Dusan Strmcnik, Vojislav Stamenkovic, Nenad Markovic*	**OD52**In situ IR study of adsorbed species and photogenerated electrons produced during photocatalytic degradation of ethanol on TiO2 *Felipe Guzman, Steven Chuang*	**OE56**Pseudo-bridging Silanols as Versatile Brønsted Acid Sites of Amorphous Aluminosilicates Surfaces *Céline Chizallet, Pascal Raybaud*
2:30 PM	**OA53**Hierarchically Structured-catalyst for Vapor Phase Beckmann Rearrangement: Effective Desilication of Silicalite-1 *Masahiko Matsukata, Takahiro Ito, Kohtaro Ueda, Mitsuko Takada, Yasushi Sekine, Eiichi Kikuchi*	**OB57**The influence of thermal history on the site nature and intrinsic catalytic properties of Co/SiO2 Fischer-Tropsch catalysts *Agustin Martinez, Gonzalo Prieto, Raul Murciano*	**OC61**Hydrogen Dissociation on Palladium-Sulfide Surfaces *James B Miller, Dominic Alfonso, Bryan D Morreale, Andrew J Gellman*	**OD53**Pt/V_2O_5-TiO_2 catalysts for VOCs abatement: V_2O_5 loading effects on the deep oxidation of benzene *Carlos R Apesteguía, Teresita F Garetto*	**OE57**Effective Dispersing and NMR Characterization of Polyoxometalates on Mesoporous Zeolite *Jun Liu, Kake Zhu, Xiaoyan She, Jian Zhi Hu, Zimin Nie, Ja Hun Kwak, Yong Wang, Charles H F Peden*
2:50 PM	**OA54**Kinetics and Mechanisms for Cracking Alkanes over Silicalite under Conditions of Industrial Interest *Hayim Abrevaya*	**OB58**A SSITKA Study to Understand the Cobalt Particle Size Effect in Fischer-Tropsch Catalysis *JP den Breejen, PB Radstake, GL Bezemer, V Frøseth, A Holmen, JH Bitter, KP de Jong*	**OC62**Application of Controlled Surface Reactions for the preparation of highly active tin modified Pt/C catalysts for electrooxidation of ethanol *Sergio García-Rodríguez, Ferenc Somodi, Irina Borbath, Jozsef L Margitfalvi, Jose LG Fierro Fierro, Sergio Rojas*		**OE58**Consequences of Composition and Acid Strength for Catalysis on Polyoxometalate Keggin Clusters *Josef Macht, Robert T Carr, Michael Janik, Matthew Neurock, Enrique Iglesia*
3:10 PM	Break	Break	Break	Break	Break
3:40 PM	**OA55**Selective liquid-phase intramolecular dehydration of 1-phenylethanol over solid acids *Carlos R Apesteguia, Nicolas M Bertero, Alberto J Marchi*	**OB59**Group 11 Promotion of Co/alumina Catalysts for Fischer-Tropsch Synthesis Gary Jacobs, Wenping Ma, Mauro Ribeiro, Yaying Ji, Burtron Davis	**KC03**Bifunctional and concerted catalysis for hydrocarbon conversion Johannes Lercher, Prof	**OD55**Effects of cobalt precursors and ceria support modification for the design of VOC oxidation catalysts *Lan Lu, Caroline Pirovano, Rose-Noëlle Vannier, Jean-Marc Giraudon, Jean-François Lamonier*	**OE59**Understanding Anomalous Constraint Index Results for Zeolites John R Carpenter, CY Chen, Shelia Yeh, Mark E Davis, Stacey I Zones

4:00 PM	**OA56**Ionone synthesis on solid acid catalysts *Verónica Díez, Carlos R Apesteguía, Isabel Di Cosimo*	**OB60**Iron Catalyst Supported on Carbon Nanotubes for Fischer-Tropsch Catalysts – Deactivation Study *Reza M Malek Abbaslou, Ahmad Tavasoli, Ajay K Dalai*		**OD56**Cryptomelane-Type of Manganese Oxide: A Hydrophobic Oxidation Catalyst *Jianl Luo*	**OE60**Consequences of Al Location and of Partial Confinement for Transition State Selectivity in Monomolecular Alkane Reactions on Zeolites *Rajamani Gounder, Enrique Iglesia*
4:20 PM	**OA57**1/2% Isobutane Conversion as Probe for Acid Strength of Solid Catalysts *Dan Fraenkel*	**OB61**The influence of the process conditions in the synthesis of higher alcohols from syngas over a $K_2CO_3/Co/MoS_2/C$ catalyst *Jakob M Christensen, Peter A Jensen, Anker D Jensen*	**OC63**Three-dimensional medium pore zeolites: Synthesis and Catalysis Martin Kubu, Nadezda Zilkova, Stacey I Zones, Allen W Burton, Jiri Cejka	**OD57**Supported gold catalysts for the decomposition of Volatile Organic Compounds: Total oxidation of propene at low concentration *Catherine Louis*	**OE61**Hydroisomerization of Light Alkanes over Zeolites *CY Chen, SD Banach, Allen W Burton, Stacey I Zones*
4:40 PM	**OA58**How to explain the highest basic reactivity of the weak basic OH sites compared to the strong basic O2- sites of MgO ? *Guylene Costentin, Hugo Petitjean, Céline Chizallet, Hélène Lauron-Pernot, Michel Che, Jocelyne Maquet, Christian Bonhomme, Françoise Delbecq, Philippe Sautet*	**OB62**Ni-decorated CNT-promoted Ni-Mo-K catalysts for higher alcohol synthesis from syngas *Chun-Hui Ma, Hai-Yan Li, Guo-Dong Lin, Hong-Bin Zhang*	**OC64**Novel insitu zeolite synthesis technique *Anne M Gaffney, Jan H Koegler*	**OD58**Nano CeO2-ZrO2/Mesoporous Silica Composite Materials With Higher Oxygen Storage Capacity and Improved CO Oxidation Efficiency *Cheralathan K Kanakkampalayam, Keiko Nakamura, Hirohito Hirata, Masaru Ogura*	**OE62**Kinetics and mechanism of double-bond isomerization of n-butenes over tungsten oxide supported on mesoporous silica SBA-15 *Xiaoyan She, Roger Rousseau, Ja Hun Kwak, Jian Zhi Hu, Yong Wang, Charles HF Peden*
5:00 PM	**OA59**Heteropoly Acids as Versatile Catalysts for the Synthesis of Fragrances from Terpenes *Kelly A da Silva Rocha, Patricia A Robles-Dutenhefner, Elena F Kozhevnikova, Ivan V Kozhevnikov, Elena V Gusevskaya*	**OB63**Catalytic Conversions of Cellulose and Cellobiose into Sorbitol in Water Medium over Ru/CNT Catalysts *Weiping Deng, Xuesong Tan, Wenhao Fang, Qinghong Zhang, Ye Wang*	**OC65**Structural Changes of Zeolites in Hot Liquid Water *Carsten Sievers, Andrew D'Amico, Jeroen A van Bokhoven, Christopher W Jones*	**OD59**Photocatalytic Elimination of Phenol and 2,4 Dichlorophenoxiacetic Acid by Mg-Zn-Al Layered Double Hydroxides *Jaime S Valente, Julia E Prince, Francisco Tzompantzi, Ricardo Gomez*	**OE63**Mechanistic Insights into the Thermal Degradation of Phosphomolybdic Acid *Hari Nair, Eric A Stach, Chelsey D Baertsch*

Friday, June 12, 2009

Time	A	B	C	D	E
8:00 AM - 12:00 noon	CRE - Session 2a Chairs: Thomas F Degnan, ExxonMobil Research and Engineering /Dionisios G Vlachos, University of Delaware	Energy - Session 7a Chairs: Michel Daage, ExxonMobil Process Research /James A Dumesic, University of Wisconsin -Madison	Energy - Session 8a Chairs: Michel Daage, ExxonMobil Process Research /James A Dumesic, University of Wisconsin -Madison	Fund - Session 9a Chairs: Matthew Neurock, University of Virginia /Fabio H Ribeiro, Purdue University	Fund - Session 10a Chairs: Matthew Neurock, University of Virginia /Fabio H Ribeiro, Purdue University
8:00 AM	**OA60**Novel Heterogeneous Contacting System – Microfibrous Entrapped Catalysts for Low Temperature Carbon Monoxide (CO) Oxidation *Shirish S Punde, Bruce J*	**OB64**Reactivity Descriptors for Improving Direct Methanol Fuel Cell Anode Catalysis *Peter A Ferrin, Anand U Nilekar, Jeff Greeley, Jan Rossmeisl,*	**OC66**The effect of CO2, H2O and metal dispersion on the catalytic partial oxidation of CH4 over Rh based catalysts *Alessandro Donazzi, Matteo Maestri, Brian C Michael, Alessandra Beretta,*	**OD60**Structure-sensitivity of methanol steam reforming over ceria and gold-doped ceria nanocrystals *Nan Yi, Rui Si, Howard Saltsburg, Maria Flytzani-Stephanopoulos*	**OE64**Densely Packed Alkanethiolate Monolayer of Rh- and Ir-Phosphine Complexes on Gold Surface — Preparation and Catalysis— *Kenji Hara, Ryuto Akiyama, Kohei Uosaki, Atsushi Fukuoka, Masaya*

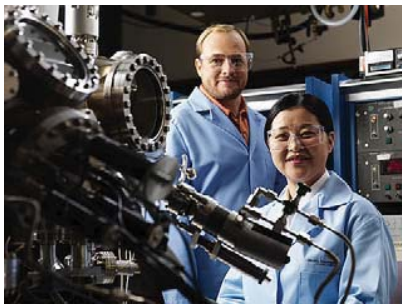
	Tatarchuk	*Manos Mavrikakis*	*Pio Forzatti, Gianpiero Groppi, Enrico Tronconi, Lanny D Schmidt, Dionisios G Vlachos*		*Sawamura*
8:20 AM	**OA61**Microchannel CO Methanation Reactors for NASA In-situ Resource Utilization *Robert A Dagle, Robert S Wegeng*	Keynote Presentation - Rich Masel	**OC67**Auto-thermal Reforming of Landfill Gas for Synthesis Gas Generation *McKenzie C Primerano, Marco J Castaldi, Robert J Farrauto*	**OD61**Extent of Pt-Sn Interaction And Its Relevance For The Selective Hydrogenation Of Cinnamaldehyde *Arie J Plomp, David M P van Asten, Ad M J van der Eerden, Päivi Mäki-Arvela, Dmitry Yu Murzin, KP De Jong, JH Bitter*	**OE65**Selective Propene Oxidation to Propylene Oxide or Acrolein on Immobilized Au6-10 Clusters: The Effect of Hydrogen and Water on Selectivity and Activity *Stefan Vajda, Sungsik Lee, Michael J Pellin, Byeongdu Lee, Soenke Seifert, Randall E Winans, Luis Molina, Julio A Alonso, Maria Lopez, Bjork Hammer*
8:40 AM	**OA62**Experimental study of methanol synthesis in a microchannel reactor *Hamidreza Bakhtiary Davijany, Fatemeh Hayer, Xuyen Kim Phan, Rune Myrstad, Hilde Venvik, Peter Pfeifer, Klaus Schubert, Anders Holmen*		**OC68**A Comparison of Pt-Re and Rh-Re Catalysts in Oxidative Reforming *Shizhong Zhao, Juergen Ladebeck*	**OD62**Structure Property Relationships of Supported Pt/Ni Bimetallic Catalysts *William W Lonergan, Dionisios G Vlachos, Jingguang G Chen*	**OE66**The direct deoxygenation reaction pathway of phenol and 2-ethylphenol over MoS2-based catalysts: a DFT study *Michael Badawi, Sylvain Cristol, Jean-François Paul, Edmond Payen*
9:00 AM	**OA63**Development and Application of a Novel MEMS-based Microreactor System for Gas-Phase Catalytic Reactions *Patrick L Mills, Srivenu Seelam, Klavs F Jensen, David J Quiram, Martin A Schmidt*	**OB65**Internal Reforming Methanol Fuel Cell *George Avgouropoulos, Joan Papavasiliou, Maria Geormezi, Joannis K Kallitsis, Theophilos Ioannides, Stylianos Neophytides*	**OC69**DME as a hydrogen carrier in auxiliary power systems: Development of Pd-based reforming catalysts *Lars J Pettersson, Marita Nilsson, Peter Jozsa*	**OD63**Microstructural optimization in metal/oxide catalysts: Higher intrinsic activity of copper by partial embedding of Cu nanoparticles *Malte Behrens, Robert Schlögl*	**OE67**Surface Modified Carbon Nanotubes as Highly Selective Dehydrogenation Catalyst *Dangsheng Su*
9:20 AM	**OA64**Wall coated capillary microreactors with embedded metallic nanoparticles for fine chemicals synthesis *Evgeny Rebrov, Angel Berenguer-Murcia, Ekaterina Klinger, Andrew Wheatley, Jaap Schouten*	**OB66**Integrated 10kWe Hydrodesulfurizer-Microchannel Steam Reformer for Fuel Cell Power from JP-8 and Road Diesel *David L King, Dale A King, Greg A Whyatt, Christopher M Fischer, Xiangxin Yang, Xiwen Huang*	**OC70**Ceria supported metal catalysts for partial oxidation of ethanol *Lidia OO Costa, Adriana M Silva, Lisiane V Mattos, André Luiz Pinto, Luiz Eduardo Borges, Fabio B Noronha*	**OD64**Size Dependence of Pyrrole Hydrogenation over Monodisperse Platinum Nanoparticles Supported on Mesoporous Silica *John N Kuhn, Wenyu Huang, Chia-Kuang Tsung, Gabor Somorjai*	**OE68**Atomic-Level Observations of Carbon Nanotube Growth using a Designer Catalyst *Renu Sharma, Edward Moore, Peter Rez, MMJ Treacy*
9:40 AM	**OA65**Accelerate Catalyst Studies using Novel High Throughput Heat Treatment Units *Guanghui Zhu, Jennifer Abrahamian, Frank Modica, Larry Ranes, Adriaan Sachtler*	**OB67**Deactivation of Ni/YSZ SOFC Anodes Exposed to CO/H2 Mixtures *Vanesa Alzate-Restrepo, Charles A Mims, Josephine Hill*	**OC71**Evolution of an Active Catalyst Material during Thermal Treatment *Nicole Giliard, Frank Girgsdies, Giulio Lolli, Malte Behrens, Robert Schlögl, Friederike C Jentoft*	**OD65**Comparison of Catalysts Consisting of Site-Isolated Mononuclear Rhenium Complexes, Trirhenium Clusters, and Larger Rhenium Clusters for n-Butane Conversion: Effects of Re Oxidation State and Cluster Size *Rodrigo Javier Lobo-Lapidus, Bruce Gates*	**OE69**The Effect of Oxide/Au Interface on the Chemical Activity of Au Nanostructures Supported on Oxides: A DFT study *Siris Laursen, Suljo Linic*
10:00	Break	Break	Break	Break	Break

AM					
10:20 AM	**OA66** Microwave Zeolite Synthesis: Reaction Engineering *W Curt Conner*	**OB68** Catalytic reforming of ethanol/gasoline blends for fuel cell vehicles *Amanda Simson, Marco J Castaldi, Robert J Farrauto*	**OC72** Fischer-Tropsch Synthesis in a Microchannel Reactor: The Influence of Cobalt Loading and Support Properties on FTS Performance *Francis P Daly, Haibiao Chen, Richard Long*	**KD07** Structure and Spectroscopy under ambient conditions of Pressure and Temperature: Novel techniques for fundamental studies in catalysis *Miquel Salmeron*	**OE70** Adsorption and Reaction of Rh(CO)2acac on Al2O3/Ni3Al(111) *Yu Lei, Jing Liu, Carolina Gomez, Randall Meyer, Michael Trenary, Bruce Gates, Conrad Becker*
10:40 AM	**OA67** Carbon Nanofibers As Catalyst Support For Efficient Mass Transfer In Liquid Phase Catalytic Reactions *Jitendra Kumar Chinthaginjala, Kulathuiyer Seshan, Leon Lefferts*	**OB69** A Stable Catalyst for Fuel Cell Grade Hydrogen Production from Methane Decomposition *Eduardo A Lombardo, Christian R Martinez, Laura M Cornaglia, Alicia V Boix, María E Rivas, José L García Fierro*	**OC73** Product Evolution in the Catalytic Partial Oxidation of Ethane over Pt and Rh Coated Monoliths *Brian C Michael, David Nare, Lanny D Schmidt*		**OE71** Roles of Al Sites of Zeolites in Anchoring cis-Ru(acac)2(C2H4)2 and in the Genesis of Catalytically Active Species for Ethylene Dimerization *Isao Ogino, Bruce Gates*
11:00 AM	**OA68** Novel fluidized bed reactors for more active catalysts *Juray De Wilde*	**OB70** Role of Nitrogen Functional Groups in Nanostructured Carbon Catalysts for Oxygen Reduction Reaction in PEM and Direct Methanol Fuel Cells *Elizabeth J Biddinger, Dieter von Deak, Umit S Ozkan*	**OC74** On the potential of Nickel Catalysts for Steam Reforming in Membrane Reactors *Johannis A Z Pieterse*	**OD66** Drifts study of the gas-phase epoxidation of propene over Au/TiO2 catalysts *Aida Ruiz, Bart Van der Linden, Michiel Makkee, Guido Mul*	**OE72** Mechanism of The Phillips Ethylene Polymerization Catalyst *Carole E Brown, Melissa L Mileham, Jerzy Krzystek, Robert W Meulenberg, Randall Achey, Riqiang Fu, Albert E Stiegman*
11:20 AM	**OA69** Mass Transfer and Reaction in Rotating Foam Reactors *Roman Tschentscher, T A Nijhuis, J van der Schaaf, B F M Kuster, J C Schouten*	**OB71** Novel Synthesis and Atomic Level Characterization of PtSn/C Nanocatalysts for Direct Ethanol Fuel Cell Applications *Jingyue Liu, Janet B Wilking, Lawrence F Allard*	**OC75** lignocellulosics conversion in a molten salt hydrate media *Rafael Menegassi, Christian Nederlof, Jianrong Li, Jacob A Moulijn, Paul O'Connor, Michiel Makkee*	**OD67** Trends in catalytic CO oxidation activity of nanoparticles *Hanne Falsig, Britt Hvolbæk, Tao Jiang, Iben Sig Kristensen, Thomas Bligaard, Claus Hviid Christensen, Jens K Nørskov*	**OE73** Relating Pore Structure to Activity at the sub-Crystal Level: an Electron Backscatter Diffraction and Fluorescence Microscopy Study *Bert F Sels*
11:40 AM	**OA70** Efficient Implementation of Detailed Surface Chemistry into Reactor Models Using Mapped Rate Data *Martin Votsmeier*	**OB72** Investigation and Improvement of the Stability of SOFC Cathodes Fabricated by Impregnation Methods *Fred Bidrawn, Shiwoo Lee, John M Vohs, Raymond J Gorte*	**OC76** Aqueous-Phase Hydrogenation of Acetic Acid over Transition Metal Catalysts: The Role of the Acetyl Species *Hakan Olcay, Ye Xu, George Huber*	**OD68** Effect of Particle Size and Shape on NH3 Decomposition on Ru *Ayman M Karim, Vinay Prasad, Anatoly Frenkel, William W Lonergan, Jingguang G Chen, Dionisios G Vlachos*	**OE74** The Relation Between a Non-uniform Catalytic Behavior of ZSM-5 Crystals and their Crystal Morphology as Revealed by a Combination of Micro-Spectroscopy and FIBEBSD *MHF Kox, E Stavitski, MR Drury, DaM de Winter, BM Weckhuysen*

Pacific Northwest
NATIONAL LABORATORY

Want to Shape the Future of Catalysis?

Position open for Director of the Institute for Interfacial Catalysis



Chemical transformations are at the heart of energy production and consumption, and catalysis lies at the core of efficient and effective use of our current energy sources, developing alternative energy sources, and reducing environmental impacts. If your passion is to shape the future of catalysis, join the Pacific Northwest National Laboratory's Institute for Interfacial Catalysis, or IIC. The IIC is the largest non-industrial catalysis R&D organization in the United States, and was established in 2005 in recognition of the critical mass of more than 75 permanent staff scientists and engineers contributing to catalysis R&D at PNNL of more than $20M/year.

At PNNL's IIC, catalysis research spans the range from the very fundamental to applied catalyst material and process development. A particular focus of the IIC is to promote "science to solutions" for efficient use of fossil fuels, developing advanced automobile emission control catalysts, improving fuel cell devices, and producing value-added chemicals and fuels from bio-based feedstocks.

We're currently looking for a seasoned professional to shape this growing area of research at PNNL, which is located in Eastern Washington. As the Director, you will provide leadership across PNNL for heterogeneous and molecular catalysis and their synthesis into interfacial catalysis to further develop the IIC's diverse programmatic funding base in this area. The Director also will manage and be a spokesperson for the IIC program and ensure PNNL continues to deliver excellence in catalysis science and engineering to our sponsors, including:

- Leading the development of the IIC's strategy and managing day-to-day activities.
- Providing technical leadership and direction.
- Maintaining a capability development effort to ensure that cutting-edge research tools are available for the research community.
- Establishing an outreach program to attract external collaborators to the facilities and expertise in the IIC.
- Leading and contributing to research proposals.
- Develop and lead groundbreaking catalysis research efforts relevant to IIC sponsors.

The successful candidate will have an established research career, outstanding publication record, and an international reputation in this area of expertise. Ideally, the candidate will have the ability to translate fundamental science to applied problems in catalysis, be an established leader and spokesperson in the catalysis community, and have a demonstrated ability to develop teams with diverse backgrounds working on focused problems.

Interested in the Position?

To apply or learn more about the responsibilities and minimum requirements to quality for the Director of the Institute for Interfacial Catalysis, go to http://jobs.pnl.gov and post your resume to **Job ID 116514**. You can learn more about ICC at http://iic.pnl.gov/.

Poster Session 1 (Preliminary)
Presentation Time: 5:30 PM - 8:00 PM
Monday, June 8, 2009

Reaction Mechanism for CO Oxidation over Iron Phosphate Supported Au Catalysts
• Meijun Li, Oak Ridge National Laboratory
• Zili Wu, Oak Ridge National Laboratory
• Zhen Ma, Oak Ridge National Laboratory
• Sheng Dai, Oak Ridge National Laboratory
• Steven H Overbury, Oak Ridge National Laboratory

Experimental and Theoretical Studies on green and efficient deoximation using H2O2 catalyzed by Montmorillonite-K10 supported MnCl2
• Gholam Reza Najafi, Islamic Azad University-Qom Branch
• Mohammed M Hashemi, Sharif university
• Ali Ezabadi, Islamic Azad University-North Tehran Branch
• Fatemeh Mollaamin, Islamic Azad University-Qom Branch

Overcoming the Deleterious Effects of Hafnium in Tungsten-Zirconia
• Bradley M Taylor, ConocoPhillips
• David Simon, ConocoPhillips

Microreactors for Gas-Liquid-Solid Reactions - Novel Catalyst Support based on Carbon Nanofibers
• Digvijay B Thakur, University of Twente
• Roald M Tiggelaar, University of Twente
• Han Gardeniers, University of Twente
• Leon Lefferts, University of Twente
• Kulathuiyer Seshan, University of Twente

Chemical Oscillation in ZSM-5 dealumination
• Guangwei MA, Shanghai Research Institute of Petrochemical Technology, SINOPEC

Influence of ZrO2 Nanoligands on the Catalytic Performance of Supported Pt/ZrO2/SiO2 Catalysts
• Somphonh P Phivilay, Lehigh University
• Wu Zhou, Lehigh University
• Christopher Kiely, Lehigh University
• Israel Wachs, Lehigh University

Raman and UV-Vis Spectroscopy Study of Vanadium-Containing Heteropoly Acids in Aqueous Solutions
• Julie E Molinari, Lehigh University
• Israel E Wachs, Lehigh University

DFT-Based Kinetic Models of Pressure-Dependent Carbonate Poisoning during CO Oxidation over RuO2(110)
• Hang Yao Wang, University of Notre Dame
• William F Schneider, University of Notre Dame

Support Effects in Hydrodesulfurization: a Combined Synchrotron XRD-Reactivity Approach
• Gilles D Berhault, Research Institute on Catalysis and Environment (IRCELYON)
• Apurva Mehta, Stanford University
• Felicia S Manciu, University of Texas at El Paso
• Russell R Chianelli, University of Texas at El Paso
• Pavel Afanasiev, Research Institute on Catalysis and Environment (IRCELYON)

Metal Oxide Nano-Sheets with (111) Surfaces as Catalysts and Catalyst Supports
• Ryan Richards, Colorado School of Mines
• Juncheng Hu, Colorado School of Mines
• Zhi Li, Colorado School of Mines
• Kake Zhu, Pacific Northwest National Laboratory
• Lifang Chen, Colorado School of Mines

A new, cheap and reproducible microwave method for large scale preparation of uniform and efficient nanocatalysts
• Claudia Antonetti, Scuola Normale Superiore
• Anna Maria Raspolli Galletti, University of Pisa
• Valentina De Luise, University of Pisa
• Marco Martinelli, University of Pisa
• Iginio Longo, Institute for Chemical and Physical Processes CNR Research Area of Pisa

Software Tools to Support High-Throughput Materials Discovery
• George Fitzgerald, Accelrys
• Max Petersen, Accelrys
• Michael Doyle, Accelrys

Density Functional Theory Study of the Effect of Sub-Surface H, C and Ag on C2H2 Hydrogenation on Pd(111)
• Pavithra Tirrupathi, University of Illinois at Chicago
• Randall Meyer, University of Illinois at Chicago
• Ally Chan, UOP LLC - a Honeywell Company
• Simon Bare, UOP LLC - a Honeywell Company

Density Functional Theory Study of Pd and Pt Pseudomorphic Monolayer Catalysts for Water Gas Shift
• Jelena Jelic, University of Illinois at Chicago
• Randall Meyer, University of Illinois at Chicago

Production and Properties of Commercially Useful Gold Catalysts
• David T Thompson, Project AuTEK
• Jason S McPherson, Project AuTEK

The use of ligands to determine the origin of selectivity in the hydrogenation of acetylene:ethylene mixtures
• F M McKenna, University of Aberdeen

Drying of Supported Catalysts - A Comparison of Model Predictions and Experimental Metal Profiles
• Xue Liu, Rutgers University
• Johannes Khinast, Graz University of Technology
• Benjamin Glasser, Rutgers University

Carbon Monoxide Adsorption and Oxidation on CeO2/Co3O4 Catalyst studied by In Situ IR Spectroscopy
• Chih-Wei Tang, ROC Military Academy

Preparation of supported nickel oxide with tunable particle size via confinement
• Mariska Wolters, Utrecht University
• Lotte J W van Grotel, Utrecht University
• Jelle R A Sietsma, Utrecht University
• Petra E de Jongh, Utrecht University
• Krijn P de Jong, Utrecht University

Support Crystal Plane Effects in the Steam Reforming of Alcohols on Pd/ZnO and Co/ZnO
• Matthew P Hyman, University of Pennsylvania
• John M Vohs, University of Pennsylvania

Mesoporous Aluminosilicates as Cata- lyst Supports for Conjugated Linoleic Acid Formation by Hydrogenation/Isomerization of Safflower Oil
• Nasima Chorfa, Université Laval
• Safia Hamoudi, Université Laval
• Joseph Arul, Université Laval
• Khaled Belkacemi, Université Laval

Hierarchical Zeolite Catalysts for Improved Methanol-to-Hydrocarbon Performance
• Claus Hviid Christensen, Haldor Topsøe A/S

Thin films of multimetallic layered double hydroxides obtained by the sol-gel method
• Jaime S Valente, Instituto Mexicano del Petroleo
• Julia E Prince, Universidad Autonoma Metropolitana-Azcapotzalco
• Ana M Maubert, Universidad Autonoma Metropolitana-Azcapotzalco

Preparation of L-Phenylalanine Polypeptide/SBA-15 Nanocomposites and Their Adsorbent Property
• Shuichi Naito, Kanagawa University
• Weihua Shen, Kanagawa University
• Kazuki Azemoto, Kanagawa University
• Akihiro Yoshida, Kanagawa University

A TPR XANES and XRD study of transition metal promoted Fe-based FT catalysts
• Andrew Campos, Louisiana State University
• Nattaporn Lohitharn, Iowa State University
• Amitava Roy, J Bennett Johnston Sr, Center for Advanced Microstructures and Devices
• James G, Jr Goodwin, Clemson University
• James J Spivey, Louisiana State University

Water activation on Rh: DFT study of the influence of surface coordination and pre-adsorbed oxygen
• Pieter W van Grootel, Eindhoven University of Technology
• Emiel JM Hensen, Eindhoven University of Technology
• Rutger A Van Santen, Eindhoven University of Technology

Promotion effect of alumina on sulfated zirconia for isomerization of n-butane under supercritical conditions
• Koichi Segawa, University of South Carolina

Nearly Uniform Tri- and Deca-Osmium Clusters Supported on MgO: Complementary Characterization by EXAFS and HAADF-STEM
• Apoorva Kulkarni, University of California Davis
• Shareghe Mehraeen, University of California Davis
• Norihiko Okamoto, University of California Davis
• Bryan Reed, Lawrence Livermore National Laboratory
• Nigel D Browning, University of California Davis
• Bruce C. Gates, University of California Davis

Deciphering the structure of WO3 on SBA-15 by XAFS and FEFF simulation
• Sung June Cho, PNNL
• Ja Hun Kwak, PNNL
• Yong Wang, PNNL
• Charles H F Peden, PNNL

In situ ATR studies on the mechanism of limonene epoxidation over PW-Amberlite
• Rolando Barrera Zapata, Universidad de Antioquia
• Aída Luz Villa, Universidad de Antioquia
• Consuelo Montes de Correa, Universidad de Antioquia
• Christopher Williams, University of South Carolina

Poster Session 1 (Preliminary)

Synthesis of SAPO-34 catalysts via controlled crystal growth
• Surendar Reddy Venna, University of Louisville
• Moises A Carreon, University of Louisville

Thermally Stable Amorphous and Nanocrystalline Mesoporous Gallium Oxide Catalysts
• Chinmay A Deshmane, University of Louisville
• Moises A Carreon, University of Louisville

Catalytic Soot Oxidation studied by ETEM
• Søren B Simonsen, Haldor Topsøe A/S
• Søren Dahl, Haldor Topsøe A/S
• Erik Johnson, Nano-Science Center, Niels Bohr Institute, University of Copenhagen
• Alfons M Molenbroek, Haldor Topsøe A/S
• Stig Helveg, Haldor Topsøe A/S

Characterization of Bound Medium-Pore Zeolites by High-Throughput Acid Treatments and Competitive Probe Molecule Reactions
• Paula Bogdan, UOP LLC, a Honeywell Company
• Mark Krawczyk, UOP LLC, a Honeywell Company
• Matthew Schmidt, UOP LLC, a Honeywell Company
• Jennifer Abrahamian, UOP LLC, a Honeywell Company
• James Rekoske, UOP LLC, a Honeywell Company
• Adriaan Sachtler, UOP LLC, a Honeywell Company

Important applications and multiple capabilities of open user XPS facility at University of South Carolina in study of catalysis
• Shuguo Ma, University of South Carolina

Characterization of Fe-Loaded Zeolites Using Spectroscopic Techniques
• Dana J Sauter, Northwestern University
• Peter C Stair, Northwestern University

Interactions of Hydrogen and Methanol with MO3 (M = W or Re) Surfaces: The Role of Interface on the Reactivity
• Donghai Mei, PNNL
• Sanliang Ling, Heriot-Watt University
• Maciej Gutowski, Heriot-Watt University

Computational insights into the mechanisms of arene C-B and C-C bond forming reactions catalyzed by ruthenium pincer complexes bearing classical and nonclassical hydride centers
• Markus Hölscher, RWTH Aachen University
• Andreas Uhe, RWTH Aachen University
• Walter Leitner, RWTH Aachen University

Effect of Alkanethiol Functionalization on Surface Reactivity in Catalytic Sensors
• Stephen Marshall, University of Colorado at Boulder
• Daniel K Schwartz, University of Colorado at Boulder
• J William Medlin, University of Colorado at Boulder

Essential Role of Solution Processing for the Stabilization and Catalytic Activity of TiO2-Supported Gold Nanoparticles
• Gabriel M Veith, Oak Ridge National Laboratory
• Andrew R Lupini, Oak Ridge National Laboratory
• Nancy J Dudney, Oak Ridge National Laboratory

Effect of zeolite framework structure on heptane cracking reaction patterns – a study in 3-d 10 ring zeolites
• Christopher P Nicholas, UOP LLC, A Honeywell Company
• Jaime Moscoso, UOP LLC, A Honeywell Company

The Effect of Cationic Gold on the Electronic Structure of Iron in Fe2O3-Supported Gold Nanoparticles
• Sergio Jimenez-Lam, Instituto Tecnologico de Celaya
• Gustavo A Fuentes, Universidad Autonoma Metropolitana-Iztapalapa
• Sergio A Gomez, Universidad Autonoma Metropolitana-Iztapalapa
• Brent E Handy, Universidad Autónoma de San Luis Potosí
• María G Cardenas-Galindo, Universidad Autónoma de San Luis Potosí
• Javier Guzman, University of Kansas
• Juan C Fierro-Gonzalez, Instituto Tecnologico de Celaya

Elucidating and Predicting the Chemisorption Properties on Catalytic Alloy Surfaces Applications to PdAu Alloys
• Craig Plaisance, University of Virginia
• Matthew Neurock, University of Virginia

Synthesis, characterization and evaluation of Au bimetallic catalysts prepared by electroless deposition methods
• Jayakiran Rebelli, University of South Carolina
• Micheal Dettwiller, Youngstown State University
• Joseph H Montaya, University of South Carolina
• Christopher T Williams, University of South Carolina
• John R Monnier, University of South Carolina
• Shuguo Ma, University of South Carolina

In-Situ Observation: from Mononuclear Species to Metal Clusters and then to Metal Nanoparticles
• Ning Yan, Peking University
• Yuan Kou, Peking University

Glycerol Hydrogenolysis over Ruthenium Catalyst Supported on Multiwall Carbon Nanotubes
• Juan Wang, Xiamen University
• Sihe Shen, Xiamen University
• Zhijie Lin, Xiamen University
• Youzhu Yuan, Xiamen University

Spectroscopic study of the electronic interactions in titania supported ruthenium sulfide HDS catalysts
• Perla Castillo-Villalón, Facultad de Química, Universidad Nacional Autónoma de México
• Jorge Ramírez, Facultad de Química, Universidad Nacional Autónoma de México

Chemicals from Ethanol - The Ethyl Acetate One-Pot Synthesis
• Alexandre B Gaspar, Instituto Nacional de Tecnologia
• Flávia G Barbosa, Instituto Nacional de Tecnologia
• Sonia Letichevsky, Instituto Nacional de Tecnologia
• Lucia G Appel, Instituto Nacional de Tecnologia

Selectivity limitations in the dehydration of glycerol to acrolein catalyzed by Keggin-type polyoxometalates
• Stefania Guidetti, Università di Bologna
• Nicola Ballarini, Università di Bologna
• Francesca Barone, Università di Bologna
• Fabrizio Cavani, Università di Bologna
• Marco Piccinini, Università di Bologna

Structure and function correlation of supported rhenium oxide catalysts for 2-butanol dehydration and ODH of ethanol
• Xiaoyan She, Pacific Northwest National Laboratory
• Ja Hun Kwak, Pacific Northwest National Laboratory
• Jianzhi Hu, Pacific Northwest National Laboratory
• Yong Wang, Pacific Northwest National Laboratory
• Charles HF Peden, Pacific Northwest National Laboratory

Development of an Online Tar Measuring Method for Quantitative Analysis of Biomass Producer Gas
• Mozhgan Ahmadi, KTH

Development of a magnetometer for in-situ catalyst characterization
• Michael Claeys, University of Cape Town
• Simon Kelly, University of Cape Town
• Eric van Steen, University of Cape Town
• Jan van de Loosdrecht, Sasol R&D, Sasolburg, 1947, South Africa
• Jakobus Visagie, Sasol R&D, Sasolburg, 1947, South Africa
• Igor Krylov, University of the Western Cape, Bellville, 7535, South Africa

Synthesis of a Disperse Phase of Barium Oxide on Aluminum Oxide by Successive Ionic Layer Deposition
• Thomas I Gilbert, University of Michigan
• Johannes W Schwank, University of Michigan

Trends underlying the Brønsted acidity and chemistry of zeolites
• Thomas Bligaard, Technical University of Denmark
• Jakob G Howalt, Technical University of Denmark
• Bjarke B Buus, Technical University of Denmark
• Anja Toftelund, Technical University of Denmark
• Berit Hinnemann, Haldor Topsøe A/S
• Glenn Jones, Technical University of Denmark

An inexpensive plug flow reactor for X-ray absorption spectroscopy at catalytically relevant reaction conditions
• Bradley R Fingland, Purdue University
• Fabio H Ribeiro, Purdue University
• Jeffery T Miller, Argonne National Laboratory

Enhanced Acid Site Accessibility in Hierarchical Zeolites
• Frederic Thibault-Starzyk, ENCAEN-CNRS
• Irina Stan, ENCAEN-CNRS
• Sonia Abello, Institute of Chemical Research of Catalonia (ICIQ)
• Adriana Bonilla, Institute of Chemical Research of Catalonia (ICIQ)
• Danny Verboekend, Institute of Chemical Research of Catalonia (ICIQ)
• Christian Fernandez, ENCAEN-CNRS
• Jean-Pierre Gilson, ENCAEN-CNRS
• Javier Pérez-Ramírez, Institute of Chemical Research of Catalonia (ICIQ)

The characterization of Ni-Au supported alloy as catalytically active system in partial oxidation of methane
• Katarzyna Bawolak-Olczak, Technical University at Lodz

TEM investigation of Pd/CeO2, Pd/Ce07Zr03O2, and Pd/ZrO2 model catalyst systems
• Obiefune K Ezekoye, University of Michigan

Poster Session 1 (Preliminary)

• Haiping Sun, University of Michigan
• Hung-Wen Jen, Ford Motor Company
• George W Graham, University of Michigan
• Xiaoqing Pan, University of Michigan

Dedicated Beamline Facilities for Catalytic Research – Synchrotron Catalysis Consortium
• Nebojsa Marinkovic, University of Delaware
• Jingguang G Chen, University of Delaware
• Anatoly Frenkel, Yeshiva University
• Radoslav R Adzic, Brookhaven National Laboratory

Synthesis of Mono- and Bimetallic Au Based Nanoparticle Catalysts Utilizing Solid Phase Dendrimer Templates
• Hannah S Halliday, Western Washington University
• Bert D Chandler, Trinity University
• John Gilbertson, Western Washington University

NO Oxidation Catalyzed by Pt: Elementary Steps, Structural Effects, and Synergistic Effects of NO2 Adsorption Sites
• Brian M Weiss, University of California Berkeley
• Enrique Iglesia, University of California Berkeley

O-enhanced CO Photodesorption from Pd(111)
• Yixiong Yang, SUNY Stony Brook
• YongMan Choi, Brookhaven National Laboratory
• Paul Szymanski, Los Alamos National Laboratory
• Nicholas Camillone III, Brookhaven National Laboratory
• Ping Liu, Brookhaven National Laboratory
• Michael G White, Brookhaven National Laboratory

Cu-zeolites in the Catalytic N2O Decomposition and Selective Oxidation of Methane: a Combined Spectroscopic-Catalytic Study
• Pieter J Smeets, KULeuven
• Julia S Woertink, Stanford University
• Marijke H Groothaert, KULeuven
• Emiel JM Hensen, Eindhoven University of Technology
• Edward I Solomon, Stanford University
• Bert F Sels, KULeuven
• Robert A Schoonheydt, KULeuven

Different Reaction Pathways for the Hydrogenation of o-cresol on Ruthenium, Rhodium, Palladium, and Platinum Nanoparticles Supported on Carbon
• Lianhai Lu, Dalian University of Technology
• Fang Guo, Dalian University of Technology
• Wenqiang Du, Dalian University of Technology

NOx adsorption on Al2O3 and Ag/Al2O3 from first principles
• Anders Hellman, Chalmers University of Technology
• Henrik Grönbeck, Chalmers University of Technology

High Temperature Decomposition and Reactivity of Brønsted Acid Sites in Zeolites
• Khalid A Al-majnouni, University of Delaware
• Dustin W Fickel, University of Delaware
• Raul F Lobo, University of Delaware

A DFT study on Cu doped Ag surfaces for propylene epoxidation
• M Olus Ozbek, Middle East Technical University
• Ali Can Kizilkaya, Middle East Technical University
• Mehmet Ferdi Fellah, Middle East Technical University
• Isik Onal, Middle East Technical University

Improving Carbon Tolerance of Ni Catalysts and Electrocatalysts
• Eranda Nikolla, University of Michigan
• Suljo Linic, University of Michigan
• Johannes Schwank, University of Michigan

Investigation of Lewis Acidity in Silica-Alumina and Its Importance to Rhenium-based Metathesis Catalysts
• S Michael Stewart, University of California, Santa Barbara
• Susannah L Scott, University of California, Santa Barbara
• Baron G Peters, University of California, Santa Barbara

Support Effects on Adatom Emission from Palladium Nanoparticles
• Levi R Houk, University of New Mexico
• Andrew DeLaRiva, University of New Mexico
• Ron Goeke, University of New Mexico
• Sivakumar R Challa, University of New Mexico
• Benjamin Grayson, Toyota Motor Engineering & Manufacturing
• Paul Fanson, Toyota Motor Engineering & Manufacturing
• Abhaya K Datye, University of New Mexico

Fingering instabilities in propagating fronts of the CO oxidation reaction on Pt(100)
• Daniel Bilbao, University of Delaware
• Jochen Lauterbach, University of Delaware

Investigation of gas-phase coupling in the CO oxidation reaction on polycrystalline Pt
• Daniel Bilbao, University of Delaware
• Jochen Lauterbach, University of Delaware

CO Dissociation on Ruthenium Steps
• SB Vendelbo, Center for Individual Nanoparticle Functionality (CINF), Technical University of Denmark,

A fractal description of pore structure in the SBA family of mesoporous silicates
• Michael A Smith, Villanova University
• Raul F Lobo, University of Delaware

The impact of diesel fuel quality on the reforming process in auxiliary power units
• Michael Fransson, KTH-Royal Institute of Technology
• Lars J Pettersson, KTH - Royal Institute of Technology
• Bård Lindström, PowerCell

Catalytic Gold Nanoparticles on an Iron Oxide Surface: A Scanning Tunneling Microscopy/Spectroscopy Study
• Kwang Rim, Columbia University
• Daejin Eom, Columbia University
• Li Liu, Columbia University
• Elena Stolyarova, Columbia University
• Joan Marie Raitano, Columbia University
• Siu-Wai Chan, Columbia University
• Maria Flytzani-Stephanopoulous, Tufts University
• George W Flynn, Columbia University

Quantification of Elemental Spatial Correlations in Commercial Automotive Catalysts
• Jae-Soon Choi, Oak Ridge National Laboratory
• Michael J Lance, Oak Ridge National Laboratory
• Charles EA Finney, Oak Ridge National Laboratory
• Larry R Walker, Oak Ridge National Laboratory
• C Stuart Daw, Oak Ridge National Laboratory

Bridging the Gap: Selective Oxidation of n-Butane to Maleic Anhydride under Steady-State and Non-Steady-State Conditions
• Xiaolin Zheng, Washington University in St Louis
• John T Gleaves, Washington University in St Louis
• Gregory S Yablonsky, Washington University in St Louis
• Patrick L Mills, Texas A&M University - Kingsville

Activation and Deactivation of Oxide-Supported Gold Catalysts for CO Oxidation prepared from an Organometallic Precursor: Characterization by Infrared and X-Ray Absorption Spectroscopies
• Yalin Hao, University of California Davis
• Veronica Aguilar-Guerrero, University of California Davis
• Rodrigo Lobo-Lapidus, University of California Davis
• Mihail Mihaylov, Bulgarian Academy of Sciences
• Elena Ivanova, Bulgarian Academy of Sciences
• Konstantin Hadjiivanov, Bulgarian Academy of Sciences
• Helmut Knözinger, LMU München
• Bruce Gates, University of California Davis

FTIR study of CO adsorption and electrical characterization of novel Pt/TiO2 Nanowire Catalysts fabricated using Electron Beam Lithography
• Prashant Deshlahra, University of Notre Dame
• Eduardo E Wolf, University of Notre Dame

Surface studies of H2S adsorption on bimetallic NiM (111) surfaces
• Meghana Rangan, University of Colorado, Boulder

Highly Uniform Platinum Nanoparticles Supported on SrTiO3 Nanocubes for Propane Oxidation
• Worajit Setthapun, Argonne National Laboratory
• Jeffrey W Elam, Argonne National Laboratory
• Federico A Rabuffetti, Northwestern University
• James A Enterkin, Northwestern University
• Kenneth R Poeppelmeier, Northwestern University
• Laurence D Marks, Northwestern University
• Peter C Stair, Northwestern University
• Jeffrey T Miller, Argonne National Laboratory
• Christopher L Marshall, Argonne National Laboratory

Outer-Sphere Effects in Heterogeneous Catalysis
• Justin M Notestein, University of California at Berkeley
• Jarred Ghilarducci, University of California at Berkeley
• Andrew Solovyov, University of California at Berkeley
• Leandro R Andrini, Universidad Nacional de La Plata
• Felix G Requejo, Universidad Nacional de La Plata
• Enrique Iglesia, University of California at Berkeley
• Alexander Katz, UC Berkeley

Investigation of Nanostructured Cu(X)O2 Delafossite by Scanning Transmission Electron Microscopy (STEM) and Electron Energy Loss Spectroscopy (EELS)
• Miaofang Chi, Oak Ridge National Laboratory
• Peng Zhang, University of California, Santa Barbara
• Eric McFarland, University of California, Santa Barbara

Atmospheric Pressure Glycerol Hydrogenolysis over Pt/C, Pt/Al2O3, and Copper Chromite Catalysts
• M Jason Kelly, North Carolina State University
• H Henry Lamb, North Carolina State University

Low Temperature Carbon Monoxide (CO) Oxidation using Microfibrous Entrapped Pt-Ceria/Silica Catalyst
• Shirish S Punde, Auburn University
• Bruce J Tatarchuk, Auburn University

Novel MEMS-Based Heating Stage for In-Situ, High Resolution Electron Microscopy
• Stephen Mick, Protochips, Inc

Poster Session 1 (Preliminary)

Characterization and kinetic evaluation of dendrimer-derived Pt-Ru/SiO2 catalysts for selective hydrogenation of 3,4-epoxy-1-butene
• Dongxia Liu, University of South Carolina
• Yaritza M Lopez, University of South Carolina
• John M Monnier, University of South Carolina
• Christopher T Williams, University of South Carolina

Water-gas Shift Reaction over Ceria-promoted Pt catalysts
• Eun Duck Park, Ajou University
• Hyun Chul Lee, Samsung Electronics Co, Ltd
• Doohwan Lee, Environment Group, Emerging Center
• Kang Hee Lee, Environment Group, Emerging Center

Dehydrogenation, Hydrogenolysis and Oxidation of Ethane on Pt(111) and Pt(211): Density Functional Theory Study and Micro-kinetic Analysis
• Ying Chen, University of Delaware
• Dionisios G Vlachos, University of Delaware

An Ab-Initio Study of CO Hydrogenation on Rh Surfaces
• Neeti Kapur, Nanostellar Inc
• Bin Shan, Nanostellar Inc
• Jangsuk Hyun, Nanostellar Inc
• John B Nicholas, Nanostellar Inc
• Kyeongjae Cho, University of Texas at Dallas

A First Principles Analysis of the Solution Phase Hydrogenolysis of Glycerol over Ru
• Nishant K Sinha, University of Virginia
• Matthew Neurock, University of Virginia

Carbon dioxide reforming of methane using a non thermal plasma - Effect of power supply on plasma-catalyst interaction
• Catherine Batiot-Dupeyrat, LACCO ESIP UMR-CNRS 6503
• Valentin Goujard, LACCO ESIP UMR-CNRS 6503
• Jean-Michel Tatibouët, LACCO ESIP UMR-CNRS 6503

Cathode catalysts for fuel cell development: a theoretical study based on band structure calculations for tungsten nitride and cobalt tungsten nitrides
• HIyoyuki Tominaga, Tokyo University of Agriculture and technology
• Masatoshi Nagai, Tokyo University of Agriculture and technology

Computationally Aided Catalyst Design for Steam Methane Reforming
• D Wayne Blaylock, Massachusetts Institute of Technology
• Teppei Ogura, Massachusetts Institute of Technology
• Anh H Dam, Norwegian University of Science and Technology (NTNU)
• HM Wang, Norwegian University of Science and Technology (NTNU)
• Yian Zhu, Norwegian University of Science and Technology (NTNU)
• Anders Holmen, Norwegian University of Science and Technology (NTNU)
• William H Green, Massachusetts Institute of Technology
• De Chen, Norwegian University of Science and Technology (NTNU)

Catalytic Oxi-cracking as a Route to Olefins - Efficient Mo-Li/MgO Catalysts for Hexane Conversion
• Cassia Boyadjian, University of Twente

The Role of Modifiers in Multi-component Au/MgO Catalysts Designed for Preferential Oxidation of CO
• Andras Tompos, Chemical Research Center
• Ervin Gy Szabo, Chemical Research Center
• Zoltan Paszti, Chemical Research Center
• József L Margitfalvi, Combitech-Nanotech Kft
• Gyorgy Radnoczi, Research Institute for Technical Physics and Materials Science

Doped ceria catalysts for an innovative self-cleaning domestic oven
• Pietro Palmisano, Politecnico di Torino
• Nunzio Russo, Politecnico di Torino
• Debora Fino, Politecnico di Torino
• Guido Saracco, Politecnico di Torino
• Vito Specchia, Politecnico di Torino
• Paolo Faraldi, Indesit Company
• Davide Polverini, Indesit Company
• Leonardo Arteconi, Indesit Company

Oxidative coupling of methane over Pb-substituted chlorapatite
• Sung Woo Im, Korea University
• Dae-Won Lee, Korea University
• Dong Jin Suh, Korea Institute of Science and Technology
• Joon Yeob Lee, Korea University
• Kwan-Young Lee, Korea University

Glycerol selective oxidation under acidic conditions
• Laura Prati, University of Milan
• Alberto Villa, University of Milan
• Gabriel M Veith, Oak Ridge National Laboratory
• Paolo Spontoni, University of Milan

Direct Electrochemical Oxidation of CH4 in a Solid Oxide Fuel Cell
• Rahul Singh, University of Akron
• Felipe Guzman, University of Akron
• Steven Chuang, University of Akron

Biomass for Fuels and Chemicals: The C-factor
• Claus Hviid Christensen, Haldor Topsøe A/S

Photocatalytic Reforming of Glycerol over Gold and Palladium as an Alternative Fuel Source
• Layla Saeed Almazroai, cardiff University

Catalytic conversion of biomass-derived platform chemicals
• Markus Hoelscher, RWTH Aachen University
• Barthel Engendahl, RWTH Aachen University
• Javed Ahmad, RWTH Aachen University
• Sonja Winterle, RWTH Aachen University
• Christina Kohlmann, RWTH Aachen University
• Morgan Thomas, RWTH Aachen University
• Lasse Greiner, RWTH Aachen University
• Jürgen Klankermayer, RWTH Aachen University
• Walter Leitner, RWTH Aachen University
• Marcel Liauw, RWTH Aachen University
• Frank Geilen, RWTH Aachen University

Chemicals from Biomass: Aerobic oxidation of 5-hydroxymethyl-2-furaldehyde into diformylfurane catalyzed by immobilized vanadyl-pyridine complexes
• Sara Iborra, Instituto de Tecnologia Quimica (UPV-CSIC)
• Avelino Corma, Instituto de Tecnologia Quimica (UPV-CSIC)
• Onofre Casanova, Instituto de Tecnologia Quimica (UPV-CSIC)

Methyl ester production from canola oil on heteregeneous base catalysts
• Emin Selahattin Umdu, Izmir Institute of Technology
• Sait Cemil Sofuoglu, Izmir Institute of Technology
• Erol Seker, Izmir Institute of Technology

Heterogeneous Catalyst and Process for Production of Biodiesel
• Rajiv Banavali, Rohm and Haas Company
• Alfred K Schultz, Rohm and Haas Company, LLC
• Robert T Hanlon, Rohm and Haas Company

De-etherification of lignin model compounds and lignins
• Yu-Chuan Lin, University of Massachusetts
• Yu-Ting Cheng, University of Massachusetts
• George W Huber, University of Massachusetts

Acetalization of Glycerol over Solid Acid Catalysts
• Claudio J A Mota, Universidade Federal do Rio de Janeiro
• Carolina X A da Silva, Universidade Federal do Rio de Janeiro
• Paulo H S Ribeiro, Universidade Federal do Rio de Janeiro
• Valter L C Gonçalves, Universidade Federal do Rio de Janeiro

Effect of Sulfur on Gasification of Lignin over Supported Metal Catalysts in Supercritical Water
• Masayuki Shirai, AIST
• Aritomo Yamaguchi, AIST
• Norihito Hiyoshi, AIST
• Osamu Sato, AIST
• Mitsumasa Osada, Ichinoseki National College of Technology

Reforming Raw Synthesis Gas from Wood Gasification
• Espen S Wangen, Norwegian University of Science and Technology (NTNU)
• Kristin R Trehjørningen, Norwegian University of Science and Technology (NTNU)
• Li He, Norwegian University of Science and Technology (NTNU)
• De Chen, Norwegian University of Science and Technology (NTNU)
• Edd A Blekkan, Norwegian University of Science and Technology (NTNU)

Furanics: versatile molecules for biofuels and bulk chemicals applications
• Ana S Dias, Avantium Technologies
• Ed de Jong, Avantium Technologies
• Gert-Jan Gruter, Avantium Technologies

Rapid Transesterification of Vegetable Oils with Phase Transfer Catalysts
• Yi Zhang, Natural Resources Canada

Bifunctional Materials for the Catalytic Conversion of Cellulose into Soluble Renewable Biorefinery Feedstocks
• Nelson Cardona-Martínez, University of Puerto Rico - Mayagüez
• Damian Reyes-Luyanda, University of Puerto Rico - Mayagüez
• Joany R Hernández-Pérez, University of Puerto Rico - Mayagüez
• Jose G León-Burgos, University of Puerto Rico - Mayagüez
• Miguel A Estremera-Reillo, University of Puerto Rico - Mayagüez
• Emilio Martínez-Morenilla, University of Puerto Rico - Mayagüez

Monoglyceride synthesis by glycerol transesterification on solid bases
• Cristián Ferretti, INCAPE
• Roberto Olcese, INCAPE
• Carlos Apesteguia, INCAPE
• Isabel Di Cosimo, INCAPE

Poster Session 1 (Preliminary)

Designing reforming catalysts for biomass derived syngas conditioning for fuel synthesis
• Kimberly A Magrini-Bair, National Renewable Energy Laboratory
• Whitney Jablonski, National Renewable Energy Laboratory
• Matt Yung, National Renewable Energy Laboratory
• Joel Pankow, National Renewable Energy Laboratory
• Yves Parent, Chemical Engineering Consulting Services

Cellulose Conversion by Supported Metal Catalysts
• Atsushi Fukuoka, Hokkaido University

Biomass gasification in an atmospheric fluidized bed: Tar elimination with commercial iron-based catalysts
• Vera Nemanova, Royal Institute of Technology

Biodiesel from Tall Oil Fatty Acids using Homogeneous and Heterogeneous Catalysts
• Ma Laura Pisarello, INCAPE (FIQ_- UNL - CONICET)

Development of Next-generation Biofuels- Positive Results Engine Tests with Furanics -
• Pieter Imhof, Avanatium Technologies

Development of Catalytic Strategies for Upgrading of Biofuels
• Steven Crossley, University of Oklahoma
• Surapas Sitthisa, University of Oklahoma
• Lance Lobban, University of Oklahoma
• Richard Mallinson, University of Oklahoma
• Daniel Resasco, University of Oklahoma

On Route to Molecular Immobilization of Cellulose on an Inorganic
• Brandon McKenna, UC Berkeley
• Alexander Katz, UC Berkeley

Aqueous Phase Reforming of Yellow Poplar to Hydrogen
• Timothy D Davis, United Technologies Research Center
• Sean C Emerson, United Technologies Research Center
• Theresa A Campbell, United Technologies Research Center
• Ying She, United Technologies Research Center
• Rhonda R Willigan, United Technologies Research Center
• Thomas Henry Vanderspurt, United Technologies Research Center

Cooperative Effect in Carboxylic Acid-Catalyzed Cellobiose Hydrolysis
• Neema A Mashayekhi, Northwestern University
• Chris M Downing, Northwestern University
• Michael N Missaghi, Northwestern University
• Mayfair C Kung, Northwestern University
• Harold H Kung, Northwestern University

Deoxygenation of Triglycerides to Olefins and Paraffins on PtSnK Catalysts
• Martina Chiappero, University of Oklahoma
• Phuong T M Do, University of Oklahoma
• Steven Crossley, University of Oklahoma
• Richard Mallinson, University of Oklahoma
• Lance Lobban, University of Oklahoma
• Daniel Resasco, University of Oklahoma

Spatial Resolution of Reactant Species Consumption in Diesel Oxidation Catalysts
• William S Epling, University of Waterloo
• Karishma Irani, University of Waterloo
• Xuxian Hou, University of Waterloo
• Richard Blint, General Motors R&D Center

In-situ FTIR and TPD studies on the interaction of NOx with CeO2
• Chundi Cao, Pacific Northwest National Laboratory
• Ja Hun Kwak, Pacific Northwest National Laboratory
• Do Heui Kim, Pacific Northwest National Laboratory
• Charles H F Peden, Pacific Northwest National Laboratory
• János Szanyi, Pacific Northwest National Laboratory

The Effect of Support on NO Oxidation over Supported Co3O4 Catalysts
• Dae Su Kim, Ajou University
• Tae Hun Yeon, Heesung Catalysts Corp
• Jae Eui Yie, Ajou University
• Eun Duck Park, Ajou University

Density Functional Theory Study of Surface and Bulk Nitrates of ⍺-Al2O3-supported Alkaline Earth Oxides
• Donghai Mei, PNNL
• Qingfeng Ge, Southern Illinois University
• Ja Hun Kwak, Pacific Northwest National Laboratory
• Do Heui Kim, Pacific Northwest National Laboratory
• Christelle Verrier, PNNL
• Janos Szanyi, PNNL

• Charles HF Peden, Pacific Northwest National Laboratory

On the effect of poor metals (Al, Ga, In) for NOx conversion by SCR ethanol
• Patrick Francois Da Costa, UPMC Paris 6

Synthesis and Characterization of model NOx Storage Materials: BaO/TiO2/⊠-Al2O3
• Stanislava Andonova, Bilkent University
• Göksu Seda Sentürk, Bilkent University
• Emine Kayhan, Bilkent University
• Emrah Ozensoy, Bilkent University

Thermal Stability and Structure of the Fe-Ba/⊠-Al2O3 Mixed-Oxide Systems as NOx Storage Materials
• Stanislava Andonova, Bilkent University
• Emine Kayhan, Bilkent University
• Göksu Seda Senturk, Bilkent University
• Emrah Ozensoy, Bilkent University

Co,Ba,K/ZrO2 coating stainless steel foam for the catalytic combustion of soot
• Ezequiel D Banús, Instituto de Investigaciones en Catálisis y Petroquímica (INCAPE - FIQ, UNL-CONICET)
• Viviana G Milt, Instituto de Investigaciones en Catálisis y Petroquímica (INCAPE - FIQ, UNL-CONICET)
• Eduardo E Miró, Instituto de Investigaciones en Catálisis y Petroquímica (INCAPE - FIQ, UNL-CONICET)
• María Alicia Ulla, Instituto de Investigaciones en Catálisis y Petroquímica (INCAPE - FIQ, UNL-CONICET)

Comparative investigation of simultaneous removal of NO and N2O on supported Pt catalysts: effect of thermal ageing
• Jean-Philippe Dacquin, Unité de Catalyse et de Chimie du Solide - Université de Lille
• Christine Lancelot, Unité de Catalyse et de Chimie du Solide - Université de Lille
• Christophe Dujardin, Unité de Catalyse et de Chimie du Solide - Université de Lille
• Pascal Granger, Unité de Catalyse et de Chimie du Solide - Université de Lille

Effect of Ceria on the Desulfation Characteristics of Model Lean NOx Trap Catalysts
• Vencon Easterling, University of Kentucky
• Mark Crocker, University of Kentucky
• Justin Ura, Ford Motor Company
• Joseph Theis, Ford Motor Company
• Robert W McCabe, Ford Motor Company

Modeling and Experimental Investigation of Zeolite Catalysts for NH3-SCR Aftertreatment
• Maruthi N Devarakonda, Pacific Northwest National Laboratory
• Russell G Tonkyn, Pacific Northwest National Laboratory
• Diana N Tran, Pacific Northwest National Laboratory
• Jonathan L Male, Pacific Northwest National Laboratory

Resolving the Contributions of Surface Lewis and Brønsted Acid Sites during NOx/NH3 SCR: An Operando TP-IR Spectroscopic Investigation
• Kevin Doura, Lehigh University
• Irène Malpartida, University de Caen/ENSICAEN/CNRS
• Marco Daturi, University de Caen/ENSICAEN/CNRS
• Israel Wachs, Lehigh University

A Kinetic Model for the Selective Catalytic Reduction of NOx with NH3 over a Fe-zeolite Catalyst
• Hanna Sjövall, Chalmers University of Technology
• Richard J Blint, GM Research and Development
• Ashok Gopinath, General Motors R&D India Science Lab,
• Louise Olsson, Chalmers University of Technology

Aspects of Propane, Isopropylamine and NH3 as Reducing Agent for NOx over HZSM-5 in oxygen excess
• Hanna Härelind Ingelsten, Chalmers University of Technology
• Roberto Matarrese, Laboratorio di Catalisi e Processi Catalitici
• Magnus Skoglundh, Chalmers University of Technology

Activity of commercial SCR catalyst for the oxidation of gaseous elemental mercury with respect to reaction conditions
• Sung-Won Ham, Kyungil University

Fluidized bed plasmas reactor for catalyst pretreatment Application for SCR NOx by hydrocarbons in stationary and mobile sources
• Patrick Francois Da Costa, UPMC Paris 6
• Michael Tatoulian, École Nationale Supérieur de Chimie Paris,

A new ECO-friendly catalytic system for removing NOx from automotive engine by urea/SCR technology
• Hyuk Jae Kwon, Pohang University of Science and Technology (POSTECH)
• Young Jin Kim, Pohang University of Science and Technology (POSTECH)
• In-Sik Nam, Pohang University of Science and Technology (POSTECH)
• Jin Woo Choung, Hyundai-Kia Motors
• Jeong Ki Kil, Hyundai-Kia Motors
• Hong-Jip Kim, Hyundai-Kia Motors
• Moon-Soon Cha, ORDEG Corporation

Pd-Promoted Catalysts for Low-temperature Diesel Engine De-NOx
• Brian Greenhalgh, CanmetENERGY-Ottawa
• Jean-Pierre Charland, CanmetENERGY-Ottawa
• Maria Stanciulescu, CanmetENERGY-Ottawa
• Raymond Burich, CanmetENERGY-Ottawa

Poster Session 1 (Preliminary)

• James F Kelly, CanmetENERGY-Ottawa

The nucleation sites for BaO on ⊠-Al2O3 studied by high sensitivity LEIS
• Hidde H Brongersma, Calipso BV
• Rik ter Veen, Tascon GmbH

Reaction Mechanism in Catalytic Soot Combustion with CeO2 Catalysts
• Martín S Gross, INCAPE - FIQ - UNL - CONICET
• María A Ulla, INCAPE - FIQ - UNL - CONICET
• Carlos A Querini, INCAPE - FIQ - UNL - CONICET

Deactivation Mechanism of Fe/Zeolite Catalysts by C3H6 Coking for Selective Catalytic Reduction of NO with Ammonia
• Junhua Li, University of Michigan
• Ralph T Yang, University of Michigan
• Yuhe Wang, University of Michigan
• Yisun Cheng, Ford Motor Company
• Christine Lambert, Ford Motor Company

Activity and Characterization of MnOX Catalysts for Selective Catalytic Reduction of NOx with NH3 at Low Temperatures
• Junhua Li, University of Michigan
• Jianjun Chen, Tsinghua University
• Jiming Hao, Tsinghua University
• Ralph T Yang, University of Michigan

BaKCo/CeO2 catalysts for diesel soot and NOx abatement
• Carlos A Querini, INCAPE, FIQ, UNL, CONICET
• María Alicia Ulla, INCAPE, FIQ, UNL, CONICET
• M Ariela Peralta, INCAPE, FIQ, UNL, CONICET

Supported Metallic Catalysts for Hydrocarbon Selective Catalytic Reduction of NOx from Diesel Engines
• Roberto Lanza, KTH

The Formation of N2O from NH3-SCR Reaction over Commercial V2O5/TiO2-Based Catalysts
• Yong-Hyun Lee, Daegu University
• Moon Hyeon Kim, Daegu University
• Sung-Won Ham, Kyungil University

Bifunctional Catalyst for the Selective Catalytic Reduction of NO by Diesel Fuel
• Christopher L Marshall, Argonne National Laboratory
• Robert M Firebaugh, Integrated Fuels Technology
• Michael K Neylon, Argonne National Laboratory
• Mario J Castagnola, Argonne National Laboratory

Reduction of NOx by H2 over Pt-K/Al2O3 Lean NOx Trap Catalysts
• Lidia Castoldi, Politecnico di Milano
• Luca Lietti, Politecnico di Milano
• Pio Forzatti, Politecnico di Milano

Experimental Investigation of the Reduction of NOx Species by CO over Pt-Ba-Al2O3 Lean NOx Trap Systems
• Isabella Nova, Politecnico di Milano
• Luca Lietti, Politecnico di Milano
• Pio Forzatti, Politecnico di Milano
• Francesca Frola, Università di Torino
• Federica Prinetto, Università di Torino
• Giovanna Ghiotti, Università di Torino

NOx Removal over a Double-bed NSR-SCR Reactor Configuration
• Luca Lietti, Politecnico di Milano
• Pio Forzatti, Politecnico di Milano

Effective Global Kinetic Model for Dynamic Regeneration of NOx Storage and Reduction Catalyst
• Petr Koci, Institute of Chemical Technology, Prague
• Jan Stepanek, Institute of Chemical Technology, Prague
• Frantisek Plat, Institute of Chemical Technology, Prague
• Sarka Bartova, Institute of Chemical Technology, Prague
• Milos Marek, Institute of Chemical Technology, Prague
• Milan Kubicek, Institute of Chemical Technology, Prague

Support effect towards Palladium particles stability followed during NO + H2 + O2 reactions: comparison between Pd/Al2O3 and Pd/LaCoO3 catalysts
• Christophe Dujardin, Unité de Catalyse et de Chimie du Solide - Université de Lille
• Jean-Philippe Dacquin, Unité de Catalyse et de Chimie du Solide - Université de Lille
• Pierre Miquel, Unité de Catalyse et de Chimie du Solide - Université de Lille
• Sylvain Cristol, Université des Sciences et Technologies de Lille
• Sergey Nikitenko, FWO
• Wim Bras, NWO
• Pascal Granger, Unité de Catalyse et de Chimie du Solide - Université de Lille

Characteristics of Pt-BaO/CeO2 lean NOx trap catalysts: the role of the CeO2 support in the desulfation process
• Do Heui Kim, Pacific Northwest National Laboratory
• Ja Hun Kwak, Pacific Northwest National Laboratory
• János Szanyi, Pacific Northwest National Laboratory
• Xianqin Wang, New Jersey Institute of Technology
• Jonathan C Hanson, Brookhaven National Laboratory
• Charles HF Peden, Pacific Northwest National Laboratory

Elucidating Effects of Rh, CeO2 and Feed Conditions During NOx Storage and Reduction on Pt/Rh/BaO/CeO2 Monolith Catalysts
• Yongjie Ren, University of Houston
• Robert Clayton, University of Houston
• Vemuri Balakotaiah, University of Houston
• Michael P Harold, University of Houston

Bimetallic Catalysts for the Selective Catalytic Reduction of NOx Using Reformate and Propylene as Reductants
• Richard C Ezike, University of Michigan-Ann Arbor
• Levi Thompson, University of Michigan

Performance improvement of MgCo2O4 catalyst for N2O decomposition
• Stefania Furfori, Politecnico di Torino
• Samir Bensaid, Politecnico di Torino
• Nunzio Russo, Politecnico di Torino
• Debora Fino, Politecnico di Torino

Impact of Dopants in Ba-based NOx Storage Reduction (NSR) Catalysts on Sulfation, Desulfation and Performance
• Todd J Toops, Oak Ridge National Laboratory
• Chengdu N Liang, Oak Ridge National Laboratory
• Josh A Pihl, Oak Ridge National Laboratory
• Nathan A Ottinger, Oak Ridge National Laboratory

The Effect of CO2 on NOx Storage/Reduction Catalysts
• Janos Szanyi, PNNL
• Christelle Verrier, PNNL
• Ja Hun Kwak, PNNL
• Do Heui Kim, PNNL
• Chundi Cao, PNNL
• Charles HF Peden, PNNL
• Guillaume Clet, LCS ENSICAEN

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Poster Session 2 (Preliminary)
Presentation Time: 5:30 PM - 8:00 PM
Tuesday, June 9, 2009

3-D Quantification of Heterogeneous Catalysts
• Ilke Arslan, University of California-Davis
• John C Walmsley, SINTEF Materials and Chemistry
• Erling Rytter, StatoilHydro
• Edvard Bergene, StatoilHydro
• Paul A Midgley, University of Cambridge

A Comparative Study of Monoclinic ZrO2(111) and
⊠-Al2O3(100)-supported Ce2O4
• Lei Cheng, Southern Illinois University at Carbondale

A DFT Study of Ethylene Epoxidation on AgO and Ag2O Slab Surfaces
• M Olus Ozbek, Middle East Technical University
• Isik Onal, Middle East Technical University
• Rutger A Van Santen, Eindhoven University of Technology

Adsorption and activation of methyl acetate on Pd surfaces
• Lijun Xu, Oak Ridge National Laboratory
• Ye Xu, Oak Ridge National Laboratory

Adsorptive Removal of Tetrahydrothiophene in a Pipeline Natural Gas
• Hee Chul Woo, Pukyong National University
• Doohwan Lee, Samsung Electronics Co, Ltd
• Hyun Chul Lee, Samsung Electronics Co, Ltd
• Eun Duck Park, Ajou University

Advanced Structural TEM Analysis and Electrochemical Investigation on Pt/Cu Core-Shell Nanoparticles
• Odysseas Paschos, Technische Universitaet Muenchen
• Petra Bele, Technische Universitaet Muenchen
• Ulrich Stimming, Technische Universität München

Application of TiO2 Nanotubes for Photocatalytic Water Splitting
• Osman Karslioglu, Middle East Technical University
• Sadig Kuliyev, Vestel Defence Industries
• Deniz Uner, Middle East Technical University

Aqueous Phase Fischer-Tropsch Synthesis with a Ruthenium Nanocluster Catalyst
• Chao-xian Xiao, Peking University

Bimetallic Doping of Titanium Dioxide for Use in Photocatalytic Splitting of Water
• Akawat Sirisuk, Chulalongkorn University
• Eakachai Manatiwson, Chulalongkorn University
• Piyasan Praserthdam, Chulalongkorn University

Carbon Nanotube-Promoted Cu-Zn Catalysts for Efficient Hydrogenolysis of Glycerol to Glycols
• Zhijie Lin, Xiamen University
• Sihe Shen, Xiamen University
• Juan Wang, Xiamen University
• Youzhu Yuan, Xiamen University

Catalytic Partial Oxidation of Diesel Fuel: Effect of Alkaline Earth Metal Dopant at the A-site of a Rh-Substituted Pyrochlore
• Daniel Haynes, Parsons
• David A Berry, National Energy Technology Laboratory
• Dushyant Shekhawat, National Energy Technology Laboratory
• Mark W Smith, REM Engineering Services
• James J Spivey, Louisiana State University

Characterization of hydrocarbon deposits present on methane reforming catalysts
• Stewart F Parker, STFC Rutherford Appleton Laboratory
• Christopher D Frost, STFC Rutherford Appleton Laboratory
• David Lennon, University of Glasgow
• Neil G Hamilton, University of Glasgow
• Ian S Silverwood, University of Glasgow
• R Mark Ormerod, Keele University
• Hayley Parker, STFC Rutherford Appleton Laboratory
• John Staniforth, STFC Rutherford Appleton Laboratory

Characterization and catalytic activities of supported NiW catalysts
• Charbel Roukoss, IFP Lyon
• Christelle Legens, IFP Lyon
• Audrey Bonduelle, IFP Lyon
• Cyril Schlund, IFP Lyon

Chemical Species Evolution for the Catalytic Partial Oxidation of Lower Alcohols on Rh-coated Monoliths
• Jason Brian Walker, University of Minnesota
• Lanny D Schmidt, University of Minnesota

CO oxidation by Ti and Al doped ZnO: the heteroatom activation of adsorbed oxygen
• Wei Tang, University of California, Santa Barbara
• Raj Pala, University of California, Santa Barbara
• Eric McFarland, University of California, Santa Barbara
• Horia Metiu, University of California, Santa Barbara

Comparative In Situ DRIFTS-MS Study of 12CO and 13CO TPR on CuO/CeO2 Catalyst
• Parthasarathi Bera, Instituto de Catálisis y Petroleoquímica, CSIC
• Antonio López Cámara, Instituto de Catálisis y Petroleoquímica, CSIC
• Aitor Hornés, Instituto de Catálisis y Petroleoquímica, CSIC
• Arturo Martínez-Arias, Instituto de Catálisis y Petroleoquímica, CSIC

Comparison of Pt and Cu promotional effects in CO2 Hydrogenation over Co/Al2O3
• Muthu Kumaran Gnanamani, University of Kentucky
• Wenping Ma, The University of Kentucky
• Gary Jacobs, University of Kentucky
• Burtron H Davis, University of Kentucky

Complex reaction networks in the conversion of ethylene to ethylidyne on flat and stepped Pd
• Karoliina Honkala, University of Jyväskylä

Conversion of Cellulose to H2 Using Metals Supported Mesorporous Catalysts
• Akshat Tanksale, University of Queensland
• Jorge Norberto Beltramini, University of Queensland
• Gao Qing Max Lu, University of Queensland

Deoxygenation of Methyl Esters over Supported Noble Metal Catalysts
• Phuong T M Do, University of Oklahoma
• Martina Chiappero, University of Oklahoma
• Lance L Lobban, University of Oklahoma
• Daniel E Resasco, University of Okla- homa

Development of methanol synthesis at low-temperature from CO2-rich syngas over metal oxide catalyst
• Pornpiman Srisatabusaya, Chulalongkorn University
• Prasert Reubroycharoen, Chulalongkorn University

Dibenzothiophene Oxidation with Hydrogen Peroxide: Kinetic Modeling
• LF Ramírez-Verduzco, Instituto Mexicano del Petróleo
• Jose Antonio De los Reyes, UAM-I
• Ja Muñoz Arroyo, Instituto Mexicano del Petróleo

Direct Use Of H2-Poor Syngas In the Fischer-Tropsch Synthesis
• Matteo Lualdi, KTH - Royal Institute of Technology
• Sara Lögdberg, KTH - Royal Institute of Technology
• Sven Järås, KTH - Royal Institute of Technology
• Anders Holmen, Norwegian University of Science and Technology (NTNU)

DME synthesis at low temperature
• Prasert Reubroycharoen, Chulalongkorn university

Early Transition Metal Carbide and Nitride Catalysts for Fischer-Tropsch Synthesis
• Josh A Schaidle, University of Michigan

Effect of Catalyst Preparation on the Steam Reforming Behavior of Supported Nickel Catalysts
• Jale F Akyurtlu, Hampton University
• Vidya Sagar Guggilla, Hampton University
• Ates Akyurtlu, Hampton University

Effect of Catalyst Preparation Solvent on the Activity/Selectivity and Physical Properties of a Co/Ru/La-Al2O3 Fischer-Tropsch Catalyst
• Kari Cook, Brigham Young University
• Robson Peguin, Brigham Young University
• William C Hecker, Brigham Young University
• Calvin H Bartholomew, Brigham Young University

Effect of preparation method of Co9Fe3Bi1Mo12O51 on the catalytic performance in the oxidative dehydrogenation of n-butene
• Ji Chul Jung, Seoul National University
• Howon Lee, Seoul National University
• In Kyu Song, Seoul National University

Effect of Promoters on the Mechanistic Aspects of CO Hydrogenation on Rh/SiO2
• Jia Gao, Clemson University

Effect of Ru Deposition Order on Co Fischer-Tropsch Catalysis
• Kari Cook, Brigham Young University
• Robson Peguin, Brigham Young University
• Calvin H Bartholomew, Brigham Young University
• William C Hecker, Brigham Young University

Enhanced Catalyst Lifetime and Selectivity in the Conversion of Methanol to Gasoline over HZSM-5 by Desilication with NaOH
• Stian Svelle, University of Oslo
• Unni Olsbye, University of Oslo
• Karl Petter Lillerud, University of Oslo
• Finn Joensen, Haldor Topsøe
• Pablo Beato, Haldor Topsøe
• Marina Kustova, Haldor Topsøe
• Martin Spangsberg Holm, Haldor Topsøe
• Claus Hviid Christensen, Haldor Topsøe
• Morten Bjørgen, Norwegian University of Science and Technology

Enhancing the accessibility of mordenite crystal agglomerates by alkaline treatment
• Adri NC van Laak, Utrecht University

Poster Session 2 (Preliminary)

Estimating the Surface Area of Micro-Meso-porous Catalytic Materials
• Geoff Tompsett, University of Massachusetts Amherst
• Eunyoung You, University of Massachusetts Amherst
• W Curtis Conner, University of Massachusetts Amherst

Estimation of Nitrogen Atomic Charges in N-Containing Aromatic Compounds and their Relevance in Hydrotreatment
• Diego Valencia, Universidad Nacional Autónoma de México
• Tatiana Klimova, Universidad Nacional Autónoma de México
• Francesc Illas, Universitat de Barcelona
• Isidoro García-Cruz, Instituto Mexicano del Petróleo

Ethanol Oxidation on Metal Oxide-supported Platinum Catalysts
• Sergey N Rashkeev, Idaho National Laboratory
• Lucia M Petkovic, Idaho National Laboaratory
• Daniel M Ginosar, Idaho National Laboaratory

First Principle Modeling of Catalyst Nanoparticle Synthesis
• Giannis Mpourmpakis, University of Delaware
• Dionisios G Vlachos, University of Delaware

First Principles Calculations of Supported Catalysts: CO Oxidation on MgO-supported Gold Nanoparticles
• Giannis Mpourmpakis, University of Delaware
• Dionisios G Vlachos, University of Delaware

First-principles Design of Electrocatalysts for Direct Borohydride Oxidation
• Michael Janik, Pennsylvania State University
• Gholamreza Rostamikia, Pennsylvania State University

First-principles investigations of the Ni3Sn alloy under steam reforming conditions
• Souheil Saadi, Haldor Topsøe A/S and Center for Atomic-scale Materials Design, DTU
• Berit Hinnemann, Haldor Topsøe A/S
• Stig Helveg, Haldor Topsøe A/S
• Charlotte C Appel, Haldor Topsøe A/S
• Frank Abild-Pedersen, Center for Atomic-scale Materials Design
• Jens K Nørskov, Center for Atomic-scale Materials Design

Fischer-Tropsch synthesis by Nb2O5-supported iron or cobalt catalysts
• Ricardo R Soares, University of Uberlandia

Fischer-Tropsch Trickle-Fixed-Bed Reactor Model
• Kyle M Brunner, Brigham Young University
• Calvin H Bartholomew, Brigham Young University
• William C Hecker, Brigham Young University

Fuel Gas Production from Waste Paper over Supported Metal Catalysts in High-Temperature Liquid Water
• Aritomo Yamaguchi, AIST
• Norihito Hiyoshi, AIST
• Osamu Sato, AIST
• Kyoko K Bando, AIST
• Masayuki Shirai, AIST

Functions of Transition Metal Oxide Nanoparticles in H2 Production from Bio-alcohols
• Min Yang, New Jersey Institute of Technology
• Yuliana Leon, New Jersey Institute of Technology
• Xianqin Wang, New Jersey Institute of Technology

General framework for surface catalysis derived from Brønsted relation and Polanyi relation through analytical mathematics approach
• Shinichi Ichikawa, Tokyo Woman's Christian University

HDS screening capabilities using Avantium's parallel fixed bed technology
• Alejandro Perez de Santana, Avantium technologies

Heteropolytungstate nickel salts: new starting materials for the preparation of hydrocracking catalysts
• Karima Ben Tayeb, UCCS CNRS Lille
• Carole Lamonier, UCCS CNRS Lille
• Christine Lancelot, UCCS CNRS Lille
• Michel Fournier, UCCS CNRS Lille
• Edmond Payen, UCCS CNRS Lille
• Fabrice Bertoncini, Institut Français du Pétrole
• Audrey Bonduelle, Institut Français du Pétrole

Higher Alcohol Synthesis From Syngas Over Molybdenum Based Catalysts
• Robert Andersson, KTH (Royal Institute of Technology)
• Magali Boutonnet, KTH (Royal Institute of Technology)
• Sven Järås, KTH - Royal Institute of Technology

Higher Alcohols and Cyclic Acetals from Glycerol
• Aiguo Liu, Sud-Chemie Inc
• Chris Luckett, Sud-Chemie Inc
• Faye Li, Sud-Chemie Inc
• Todd Cole, Sud-Chemie Inc
• Wayne Turbeville, Sud-Chemie Inc

Highly Active and Stable Ni-Ce-ZrO2 Catalysts in Combined H2O and CO2 Reforming of Methane for Gas to Liquids (GTL)
• Hyun-Seog Roh, Yonsei University
• Dae-Woon Jung, Yonsei University
• Ic-Hwan Eum, Yonsei University
• Byung-Chul Yoo, Yonsei University
• Kee Young Koo, Korea Institute of Energy Research
• Wang Lai Yoon, Korea Institute of Energy Research

How much do we know about Aerobic Oxidations?
• Ive Hermans, ETH Zurich

Hydrogenation of Carboxylic Acids over P-Mo-V Heteropoly Compounds in Comparison with the Constituent Mo and V Oxides
• Ivan V Kozhevnikov, University of Liverpool

In situ ATR study of adsorbed species and photogenerated electrons during G-S and L-S photocatalytic reactions
• Duane D Miller, The University of Akron

In situ characterization of an inverse CeO2/CuO powder catalyst for the WGS reaction
• Laura Barrio, Brookhaven National Laboratory
• Michael Estrella, Brookhaven National Laboratory
• Wen Wen, Shanghai Institute of Applied Physics
• Jonathan Hanson, Brookhaven National Laboratory
• Jose A Rodriguez, Brookhaven National Laboratory
• Aitor Hornes, Instituto de Catalisis y Petroleoquimica
• Arturo Martinez-Arias, Instituto de Catalisis y Petroleoquimica
• Marcos Fernandez-Garcia, Instituto de Catalisis y Petroleoquimica

In Situ Observation of the Nanostructural Evolution of a Ni/SiO2 Catalyst during the Partial Oxidation of Methane
• Ritubarna Banerjee, Arizona State University
• Peter Crozier, Arizona State University

In-situ generated nanocatalysts for NaBH4 hydrolysis studied by liquid phase calorimetry: influence of the nature of the metal on the H2 production rate
• Anthony Garron, Institut de Recherches sur la Catalyse et l'Environnement de Lyon (IRCELYON)
• Simona Bennici, Institut de Recherches sur la Catalyse et l'Environnement de Lyon (IRCELYON)
• Aline Auroux, Institut de Recherches sur la Catalyse et l'Environnement de Lyon (IRCELYON)

Influence of phosphorus on the activity of Ru/Co/ZrP/SiO2 Fischer-Tropsch catalyst
• Jong Wook Bae, Korea Research Institute of Chemical Technology (KRICT)
• Seung-Moon Kim, Korea Research Institute of Chemical Technology (KRICT)
• Yun-Jo Lee, Korea Research Institute of Chemical Technology (KRICT)
• Ki-Won Jun, Korea Research Institute of Chemical Technology (KRICT)

Investigating mechanisms of hydrocarbon formation from synthesis gas on Fe(100)
• JW (Hans) Niemantsverdriet, Eindhoven University of Technology

Investigation of Electronic Effects on Enantioselective Catalysis with Hybrid Quantum Mechanics/Molecular Mechanics Calculations
• Gloria A Emberger, Northwestern University
• Randall Q Snurr, Northwestern University
• Linda J Broadbelt, Northwestern University

Is there a synergistic effect between FT and MTH processes?
• Priscila C Zonetti, Instituto Nacional de Tecnologia
• Alexandre B Gaspar, Instituto Nacional de Tecnologia
• Eledir V Sobrinho, CENPES/Petrobras
• Eduardo F Sousa-Aguiar, CENPES/Petrobras
• Lucia G Appel, Instituto Nacional de Tecnologia

Low temperature CO oxidation and long-term stability of Au/In2O3-TiO2 catalysts
• Vicente Rodríguez, UANL
• Rodolfo Zanella, CCADET, UNAM
• Lina A Calzada, CCADET, UNAM
• Ricardo Gomez, Universidad Autonoma Metropolitana- Iztapalapa

Low-temperature Ethanol Steam Reforming for Hydrogen Production over Rh, Pt, and Rh-Pt Catalysts
• Va Suárez-Toriello, Universidad Autónoma Metropolitana Iztapalapa
• Ja de los Reyes, Universidad Autónoma Metropolitana Iztapalapa
• P del Angel, Instituto Mexicano del Petróleo
• Ja Montoya, Instituto Mexicano del Petróleo

Mesocellular Silica-supported Pd Nanoparticles for Catalytic Decarboxylation of Fatty Acids
• Eric W Ping, Georgia Institute of Technology
• Thomas F Fuller, Georgia Institute of Technology
• Christopher W Jones, Georgia Institute of Technology

Poster Session 2 (Preliminary)

Mesoporous carbon supported nickel phosphide catalysts prepared by solid phase reaction
• Guojun Shi, Nanjing University
• Jianyi Shen, Nanjing University

Mesoporous PtRu on Fiber-bed Supports: High-performance Anodes for Direct Liquid Fuel Cells
• Elod Gyenge, University of British Columbia
• Tommy T Cheng, Ballard Power Systems

Metal nanoparticles in cubic mesostructures for regenerable deep desulfurization of warm syngas
• Liyu Li, Pacific Northwest National Laboratory
• David L King, Pacific Northwest National Laboratory
• Jun Liu, Pacific Northwest National Laboratory

Metallic Phases of Cobalt-based Catalysts in Ethanol Steam Reforming: The Effect of Cerium Oxide
• Sean S-Y Lin, Washington State University
• Do Heui Kim, Pacific Northwest National Laboratory
• Su Y Ha, Washington State University

Methacrolein Oxidation on Heteropolyacid Catalyst: Activation of the Catalyst by the Reaction Product and Dynamics of the Active Center
• Igor Filimonov, GS-Caltex Corporation
• Won-Ho Lee, LG Chem, Ltd

Methane Partial Oxidation Mechanism over Pt-Ru Catalysts
• Roberto Lanza, KTH

Microscopy and Reactivity of Commercial Benzene Hydrogenation Catalysts after Years On-Stream
• Antoine Negiz, UOP LLC
• James E Rekoske, UOP LLC

Mo and Ni loading Influence on catalytic activity of NiO-MoO3/MgOTiO2
• Alida E Cruz, Universidad Autonoma del Estado de Hidalgo
• Zeferino Contreras, Universidad Autonoma del Estado de Hidalgo
• Julio C Mogica, Universidad Autonoma del Estado de Hidalgo
• Alejandro Alvarez, Universidad Autonoma del Estado de Hidalgo
• Alfredo Guevara, Universidad Autonoma del Estado de Hidalgo

Molecular Aspects of Silica Gel Formation
• Istvan Halasz, PQ Corporation
• Mukesh Agarwal, PQ Corporation

MoS2 Catalyst for Bioethanol Synthesis from Syngas
• Min Huang, The University of Texas at Dallas
• Kyeongjae Cho, University of Texas at Dallas

Na Promoted Pt/TiO2: a Novel Single-stage Water Gas Shift Catalyst
• Xinli Zhu, University of Oklahoma
• Trung Hoang, University of Oklahoma
• Lance L Lobban, University of Oklahoma
• Richard G Mallinson, University of Oklahoma

New Possibilities in High Sensitivity Low Energy Ion Scattering (LEIS) for Probing the Outermost Atomic Layer
• Thomas Grehl, ION-TOF GmbH
• Ewald Niehuis, ION-TOF GmbH
• Rik ter Veen, Tascon GmbH
• Hidde H Brongersma, Tascon GmbH/ION-TOF GmbH

NiMoP heteropolycompounds supported on Ti/SBA-15 as catalysts for desulfurization of 4,6-dimethyldibenzothiophene
• Jorge Ramírez, Facultad de Química, Universidad Nacional Autónoma de México
• V Macias, Facultad de Química, Universidad Nacional Autónoma de México
• A Gutierrez-Alejandre, Facultad de Química, Universidad Nacional Autónoma de México

Novel Materials for Electrochemical Hydrogenation
• Adam Lausche, University of Michigan
• Kanako Okada, University of Michigan
• Saemin Choi, Inmatech
• Levi Thompson, University of Michigan

Optimization of Au/MgO and Au/Al2O3 catalysts for the PROX reaction
• József L Margitfalvi, Combitech-Nanotech Kft
• András Tompos, Institute of Nanochemistry and Catalysis, Chemical Research Center, Hungarian Academy of

Sciences,
• Lajos Végvári, Combitech-Nanotech Kft

Oxidative coupling of methane over Na2WO4-SiO2 Catalyst: Effect of SiO2 Supports
• Young-Woong Suh, Korea Institute of Science and Technology
• Yuna Ko, Korea Institute of Science and Technology
• Dong Jin Suh, Korea Institute of Science and Technology
• Tae-Jin Park, Korea Institute of Science and Technology

Oxidative Desulfurization of Dibenzothiophene over SiO2-supported MoO3-CeO2
• Jian Zhang, State Key Laboratory of Fine Chemicals, Dalian University of Technology
• Xiumei Bai, State Key Laboratory of Fine Chemicals, Dalian University of Technology
• Xiang Li, State Key Laboratory of Fine Chemicals, Dalian University of Technology
• Anjie Wang, State Key Laboratory of Fine Chemicals, Dalian University of Technology
• Xuehu Ma, Liaoning Key Laboratory of Petrochemical Technology and Equipments, Dalian University of
• Technology

Oxygenated Additives Production for Diesel Fuel by Glycerol Etherification
• F Frusteri, National Council of Research– CNR-ITAE
• G Bonura, National Council of Research– CNR-ITAE
• L Spadaro, National Council of Research– CNR-ITAE
• F Arena, Messina University
• O Di Blasi, National Council of Research– CNR-ITAE

Partial Oxidation of Methane using Mo2C/CeO2 as Catalyst
• Karine A Cortez, Petrobras
• Adriana M Silva, National Institute of Technology
• Fabio B Noronha, National Institute of Technology
• Victor Teixeira da Silva, Universidade Federal do Rio de Janeiro

Peculiarities of supported gold catalysts The role of nano-environment in the activity control of supported gold catalysts
• Jozsef L Margitfalvi, Institute of Nanochemistry and Catalysis, Chemical Research Center, Hungarian Academy
• of Sciences
• Mihály Hegedûs, Institute of Nanochemistry and Catalysis, Chemical Research Center, Hungarian Academy of
• Sciences
• András Tompos, Institute of Nanochemistry and Catalysis, Chemical Research Center, Hungarian Academy of
• Sciences
• Ervin Gy Szabó, Institute of Nanochemistry and Catalysis, Chemical Research Center, Hungarian Academy of
• Sciences
• Ferenc Somodi, Institute of Nanochemistry and Catalysis, Chemical Research Center, Hungarian Academy of
• Sciences
• Ágnes Szegedi, Institute of Nanochemistry and Catalysis, Chemical Research Center, Hungarian Academy of
• Sciences

Perovskites Catalysts for a Green Nitric Acid Production: Kinetics and Modeling
• Grégory Biausque, Institut de recherche sur la catalyse et l'environnement de Lyon-université lyon1
• Yves Schuurman, Institut de recherche sur la catalyse et l'environnement de Lyon-université lyon1

Perovskites La1-xMxNiO3 in the Partial Oxidation of Methane
• Soraia Teixeira Brandão, Universidade Federal da Bahia
• Otanéa Brito de Oliveira, Universidade Federal da Bahia
• Paulo Vitor dos Santos Ferreira, Universidade Federal da Bahia

Physical and Chemical Characterization of Upgraded Bio-oils via Hydrodeoxygenation
• Sanjeev Gajjela, Mississippi State University
• Fei Yu, Mississippi State University
• El-Barbary Hassan, Mississippi State University
• Philip Steele, Mississippi State University

Polyol Hydrogenolysis by in-situ Generated Hydrogen
• Debdut S Roy, The University of Kansas

Pore-Expanded MCM-41 Aluminosilicate Bifunctional Catalysts for the Selective Ring Opening of Polynuclear Aromatics
• Nabil Al-Yassir, University of Ottawa
• Abdelhamid Sayari, University of Ottawa

Processing of Polymeric Cord by Low-Temperature Catalytic Pyrolysis
• Esther Sulman, Tver Technical University

Raising the activity and selectivity of cobalt catalysts for Fischer-Tropsch synthesis with a novel carbon nanotubes support in a CSTR
• Mariane Trepanier, University of Saskatchewan
• Ahmad Tavasoli, Research Institute of Petroleum Industry
• Ajay K Dalai, University of Saskatchewan
• Nicolas Abatzoglou, Universite de Sherbrooke

Rational synthesis of heterostructured active centers for Au nano-catalysts
• Hongfeng Yin, Oak Ridge National Laboratory
• Zhen Ma, Oak Ridge National Laboratory
• Shouheng Sun, Brown University
• Steven H Overbury, Oak Ridge National Laboratory
• Sheng Dai, Oak Ridge National Laboratory

Reforming Liquid Hydrocarbons with Ni-substituted Barium Hexaaluminates: Effect of Oxygen-conducting Support
• Mark W Smith, REM Engineering Services, PLLC
• David A Berry, National Energy Technology Laboratory
• Dushyant Shekhawat, National Energy Technology Laboratory
• Daniel J Haynes, Parsons
• James J Spivey, Louisiana State University

Poster Session 2 (Preliminary)

Rh Supported on Y2O3 Nanotube: A Novel Catalyst for Steam Reforming of Ethanol to Hydrogen
• Xusheng Wu, National University of Singapore
• Sibudjing Kawi, National University of Singapore

Selective hydrogenation of citral on Rh-Ge/TiO2 bimetallic catalysts: Influence of the precursor salts
• Aurélie Vicente, Université of Poitiers
• Yaritza Lopez, University of South Carolina
• Gwendoline Lafaye, Université of Poitiers
• Catherine Especel, Université of Poitiers
• Christopher Williams, University of South Carolina
• Patrice Marécot, Université of Poitiers

Silicon low flow microreactor for measuring catalytic activity
• Toke R Henriksen, Technical University of Denmark
• Peter C K Vesborg, Technical University of Denmark
• Jakob L Olsen, Technical University of Denmark
• Adam Monkowski, Technical University of Denmark
• Ole Hansen, Technical University of Denmark
• Ib Chorkendorff, Technical University of Denmark

Single phase Au-Pd catalyst
• Laura Prati, University of Milan
• Alberto Villa, University of Milan
• Dang Sheng Su, Fritz Haber Institute
• Di Wang, Fritz Haber Institute
• Gabriel M Veith, Oak Ridge National Laboratory

Structure and Catalytic Characterization of Cobalt-Molybdenum Sulfide Nanoplatelets
• Nora Elizondo, University of North Texas

Structure, Dynamics, and Dehydrogenation Properties of a Supported Single-site Organoiridium Catalyst
• Neng Guo, Argonne National Laboratory
• Hongbo Li, Los Alamos National Laboratory
• R Tom Baker, Los Alamos National Laboratory
• Alfred P Sattelberger, Argonne National Laboratory
• Jeffrey T Miller, Argonne National Laboratory
• Christopher L Marshall, Argonne National Laboratory

Study of Au/CeZrO4 catalysts for the low temperature water gas shift reaction; identification of the active Au species
• Helen Daly, CenTACat, Queen's University Belfast
• Frederic C Meunier, LCS, ENSICAEN, University of Caen, CNRS
• Ratchaneekorn Pilasombat, CenTACat, Queen's University Belfast
• Robbie Burch, CenTACat, Queen's University Belfast
• Alexandre Goguet, CenTACat, Queen's University Belfast
• Christopher Hardacre, CenTACat, Queen's University Belfast

Syngas Conversion to Higher alcohols over K-promoted Co-Mo-alumina-Rh/C catalyst
• Amit Gujar, Mississippi State University
• Vamshikrishna Guda, Mississippi State University
• Shetian Liu, Mississippi State University
• Mark G White, Mississippi State University
• Hossein Toghiani, Mississippi State University

Syngas production in oxy-CO2 reforming of methane over La1-xSrxNiO3 perovskite-type oxides
• Kesada Sutthiumporn, National university of Singapore
• Sibudjing Kawi, National University of Singapore

Synthesis of Metal-Silica Core-Shell and Yolk-Shell Nanocatalysts with Exceptional Dimensional Control
• Lu Zhang Whaley, University of Pittsburgh
• Rongwen Lu, University of Pittsburgh
• Goetz Veser, University of Pittsburgh

Synthesis, Characterization, and Simulation of Nitrogen-Substituted Y Zeolite Catalysts
• Karl Hammond, University of Massachusetts Amherst
• Fulya Dogan, SUNY Stony Brook
• Murad Gharibeh, University of Massachusetts Amherst
• Clare P Grey, SUNY Stony Brook
• Scott M Auerbach, University of Massachusetts Amherst
• W Curtis Conner, University of Massachusetts Amherst

Ta Clusters on Amorphous Silica: DFT Calculations Reveal a Notable Flexibility of the Support
• Alexander Genest, Technische Universität München
• Hristiyan Aleksandrov, Technische Universität München
• Shane M Parker, Technische Universität München
• Aleksey M Shor, Russian Academy of Sciences
• Vladimir A Nasluzov, Russian Academy of Sciences
• Bruce C. Gates, University of California Davis
• Notker Rösch, Technische Universität München

The Effect of Low Concentrations of CO on H2 Activation on Pt/C
• Jack Z Zhang, Clemson University
• Kitiya Hongsirikarn, Clemson University

The effects of specific features of the defect structure on the bonding and mobility/reactivity of oxygen in ceria-based nanomaterials
• Tatyana Kuznetsova, Boreskov Institute of Catalysis

The Role of Carbocations and Alkoxides on Hydrocarbons Reactions Catalyzed by Zeolites
• Nilton Rosenbach, Universidade Federal do Rio de Janeiro
• Alex P A dos Santos, Universidade Federal do Rio de Janeiro
• Claudio J A Mota, Universidade Federal do Rio de Janeiro

The Role of Pd Dispersion in Deoxygenation of Palmitic and Stearic Acids over Pd/C Catalysts
• Olga A Simakova, Abo Akademi University

Thermal Stability and Reducibility of Surface Oxygen and Nitrogen Functional Groups on Carbon Nanotubes and Their Application in Electro-catalysis
• Martin Muhler, Ruhr-University Bochum

Thermal Versus Catalytic Decomposition of Ammonium Nitrate
• Kamal Farhat, University of Poitiers, Laboratory of Catalysis, LACCO, UMR CNRS 6503
• Yann Batonneau, University of Poitiers, Laboratory of Catalysis, LACCO, UMR CNRS 6503
• Charles Kappenstein, University of Poitiers, Laboratory of Catalysis, LACCO, UMR CNRS 6503

Time of Flight mass spectrometry for quantitative data analysis in fast transient studies using a Temporal Analysis of Products (TAP) Reactor
• Alexandre Goguet, CenTACat, Queen's University Belfast
• Christopher Hardacre, CenTACat, Queen's University Belfast
• Noleen Maguire, CenTACat, Queen's University Belfast
• Kevin Morgan, CenTACat, Queen's University Belfast
• Steve Thompson, Scientific Analysis Instruments Ltd
• Sergiy Shekhtman, CenTACat, Queen's University Belfast

Tungsten Monocarbide (WC) as an Alternative Anode Electrocatalyst in Proton Exchange Membrane Fuel Cells
• Alan L Stottlemyer, University of Delaware
• Ping Liu, Brookhavan National Laboratory
• Jingguang G Chen, University of Delaware

Use of Ni Based Catalyst for Toluene Hydrocracking
• Hebert Molero, University of Calgary
• Carmen Galarraga, University of Calgary
• Felicia Feng, University of Calgary
• Eumir Hernandez, University of Calgary
• Viola Birss, University of Calgary
• Pedro Pereira, University of Calgary

UV/Vis Spectroscopic Investigations in Homogeneous Catalysis
• Hans-Joachim Drexler, Leibniz-Institute for Catalysis at the University of Rostock
• Christian Fischer, Leibniz-Institute for Catalysis at the University of Rostock
• Angelika Preetz, Leibniz-Institute for Catalysis at the University of Rostock
• Detlef Heller, Leibniz-Institute for Catalysis at the University of Rostock

V- Mo Based catalysts for Oxidative Desulfurization of diesel fuel
• Omar Gonzalez-Garcia, Universidad Nacional Autonoma de Mexico
• Luis Cedeño, Universidad Nacional Autonoma de Mexico

XAFS study of gold catalysts supported on nanostructured alumina and alumina doped with Ce-Zr mixed oxides
• Irina L Simakova, Boreskov Institute of Catalysis
• Andrey V Simakov, CNYN-Universidad Nacional Autónoma de México

Magnetic Nanoparticle Supported Metal Alkoxide Catalysts for the Ring-opening Polymerization of ñ-Caprolactone
• Wei Long, Georgia Tech
• Christopher W Jones, Georgia Institute of Technology

Modified by MgO Silica Gels and Aluminium Oxide as Active Acid-Base Catalysts for Oxidative Dehydrogenation of Ethylbenzene
• Dilgam B Tagiyev, Azerbaijan Medical University

Understanding the nature of manganese supported on activated carbon and its catalytic applications in aromatic alcohol oxidation
• Qinghu Tang, Nanyang Technological University
• Yuanting Chen, Nanyang Technological University
• Yanhui Yang, Nanyang Technological University

Methanol decomposition as a first stage for methanol-only routes to acetic acid
• Justin S J Hargreaves, University of Glasgow
• Graham Ormsby, University of Glasgow
• Evert Ditzel, BP Chemicals Ltd

Benzyl alcohol oxidation over gold catalyst supported on SBA-16 mesostructured silica
• Qinghu Tang, Nanyang Technological University
• Hui Sun, Nanyang Technological University
• Yu Du, Nanyang Technological University
• Yanhui Yang, Nanyang Technological University

Selective and solvent free epoxidation of fatty esters over oxoperoxophosphotungstic catalysts
• Evelyne Poli, University of Poitiers - CNRS
• Yannick Pouilloux, University of Poitiers - CNRS

Poster Session 2 (Preliminary)

• Jean-Marc Clacens, University of Poitiers - CNRS

Atomistic Thermodynamic Approach for Determining Cu Catalyst Morphologies Under Reactive Water-Gas-Shift Conditions
• Nilay G Inoglu, Carnegie Mellon University
• John R Kitchin, Carnegie Mellon University

Hydroformylation of Olefins Catalyzed by gem-dithiolato-bridged Rhodium Complexes
• Alvaro J Pardey, Universidad Central de Venezuela
• José D Suarez, Universidad Central de Venezuela
• Marisol C Ortegas, Universidad Central de Venezuela
• Clementina Longo, Universidad Central de Venezuela

Hydroformylation of synthetic naphtha catalyzed by gem-dithiolato-bridged rhodium complexes
• José D Suarez, Universidad Central de Venezuela
• Alvaro J Pardey, Universidad Central de Venezuela
• Marisol C Ortega, Universidad Central de Venezuela
• Clementina Longo, Universidad Central de Venezuela
• Sergio Moya, Universidad de Santiago de Chile,

The Influences of Reductant on the Strcuture and Catalytic Activity of Co-MCM41 with High Cobalt Content
• Peng Sun, State Key Laboratory of Materials-Oriented Chemical Engineering, Nanjing University of Technology
• Yan Kong, State Key Laboratory of Materials-Oriented Chemical Engineering, Nanjing University of Technology
• Xinjie Xu, State Key Laboratory of Materials-Oriented Chemical Engineering, Nanjing University of Technology
• Jun Wang, State Key Laboratory of Materials-Oriented Chemical Engineering, Nanjing University of Technology

Multifunctional Heterogeneous Catalysts for Cascade Reactions in the Preparation of Fragrances
• Maria J Climent, Instituto de Tecnologia Quimica (UPV-CSIC)
• Avelino Corma, Instituto de Tecnologia Quimica (UPV-CSIC)
• Sara Iborra, Instituto de Tecnologia Quimica (UPV-CSIC)
• Maria Mifsud, Instituto de Tecnologia Quimica (UPV-CSIC)
• Velty Alexandra, Instituto de Tecnologia Quimica (UPV-CSIC)

Selective Hydrogenolysis of Glycerol to Propylene glycol over supported Palladium Catalysts: Effect of Support
• Maria Grazia Musolino, University Mediterranea of Reggio Calabria
• Luciano A Scarpino, University Mediterranea of Reggio Calabria
• Concetta Busacca, University Mediterranea of Reggio Calabria
• Francesco Mauriello, Politecnico of Torino
• Rosario Pietropaolo, University Mediterranea of Reggio Calabria

Study of the mechanism of methylation of phenol over acid zeolites
• Maria E Sad, Universidad Nacional del Litoral
• Cristina L Padro, Universidad Nacional del Litoral
• Carlos R Apesteguia, Universidad Nacional del Litoral

Microwave synthesis of thermally stable TUD-1 materials
• Sang-Eon Park, Inha University, Incheon, 402-751, Korea

Direct Synthesis of Ionic liquid (N-methylimidazole) onto Mesoporous SBA-15 and Base Catalytic Applications
• Nanzhe Jiang, Inha University, Incheon, 402-751, Korea

New catalytic processes for the conversion of biomass to levulinic acid and to gamma-valerolactone
• Valentina De Luise, University of Pisa
• Anna Maria Raspolli Galletti, University of Pisa
• Anna Iuliano, University of Pisa
• Marco Martinelli, University of Pisa
• Claudia Antonetti, Scuola Normale Superiore

Stabilization and recovery of gold catalysts in the carbene transfer reaction to alkenes within ionic liquids
• Maria J Sabater, Instituto de Tecnología Química UPV-CSIC, Universidad Politécnica de Valencia

Promoting effect of ionic liquids in citral hydrogenation: one-pot production of citronellal on modified metal/support catalysts
• Jürgen Arras, Technische Universität Darmstadt
• Martin Steffan, Technische Universität Darmstadt
• Yalda Shayeghi, Technische Universität Darmstadt
• Peter Claus, Technische Universität Darmstadt

Kinetics of Selective hydrogenation of alpha,beta-unsaturated aldehydes over Supported Ionic Liquid Catalysts (SILCA)
• Pasi Virtanen, Åbo Akademi University
• Jyri-Pekka Mikkola, Åbo Akademi University

Multinuclear rhodium complexes in asymmetric hydrogenation
• Angelika Preetz, Leibniz-Institute for Catalysis at the University of Rostock
• Wolfgang Baumann, Leibniz-Institute for Catalysis at the University of Rostock
• Hans-Joachim Drexler, Leibniz-Institute for Catalysis at the University of Rostock
• Christian Fischer, Leibniz-Institute for Catalysis at the University of Rostock
• Detlef Heller, Leibniz-Institute for Catalysis at the University of Rostock

Liquid phase oxidation of n-Octane in the presence of vanadium based materials
• Mihaela Florea, University of Bucarest

Hydrogenation of citral on IrAu/TiO2 catalysts: Effect of the preparation method
• Gabriela Díaz, Instituto de Física, UNAM
• Antonio Gómez-Cortés, Instituto de Física, UNAM
• Hugo Rojas, Universidad Pedagógica y Tecnológica de Colombia

Hydroesterification/acetalization of 2-methyl-2-pentene catalyzed by Na3[Rh(NO2)6] supported on poly(4-vinylpiridine)
• Marisol C Ortega C, Universidad Central de Venezuela
• Doménico M Venuti, Universidad Central de Venezuela
• Álvaro J Pardey, Universidad Central de Venezuela
• Clementina Longo, Universidad Central de Venezuela

Imine Hydrogenation Catalyzed by Ruthenium Complexes
• Sergio A Moya, Universidad de Santiago de Chile, Facultad de Química y Biología
• Pedro Aguirre, Universidad de Chile, Facultad de Ciencias Químicas y Farmacéuticas
• Rebeca Sartori, Universidad de Santiago de Chile, Facultad de Química y Biología

Using Calcium Oxide Based Catalysts in Transesterification of Soybean Oil with Methanol
• Shuli Yan, Wayne State University
• Steven O Salley, Wayne State University
• K Y Simon Ng, Wayne State University

Vanadium oxides supported on hydroxyapatite for the activation of n-pentane and n-hexane
• Sooboo Singh, University of KwaZulu-Natal

Gas-Phase Epoxidation of propylene over Ag/TS-1 Prepared with KOH As Precipitator
• Jinxue Wang, Dalian University of Technology
• Min Liu, Dalian University of Technology
• Guanfeng Liu, Dalian University of Technology
• Xinwen Guo, Dalian University of Technology

Phosphated Zirconia as Promoter of n-Hexane Isomerization
• Juan Manuel Hernández, Instituto Politécnico Nacional
• Luz Arcelia García, Instituto Politécnico Nacional
• Ricardo García, Instituto Tecnológico de Ciudad Madero

Highly selective synthesis of 2,6-dimethylnaphthanlene by HCl modified halides-aluminum chloride ionic liquids
• Wei Wu, Heilongjiang University
• Min Xu, Heilongjiang University
• Lin-Fei Xiao, Heilongjiang University
• Yu Wang, Heilongjiang University
• Cheng-Cai Zhao, Daqing Chemical Research Center

Acetonitrile hydrogenation: Influence of Acid-base Properties of the Support on Selectivities
• Camille La Fontaine, University of Poitiers, Laboratory of Catalysis, LACCO, UMR CNRS 6503
• Lise Martial, University of Poitiers, Laboratory of Catalysis, LACCO, UMR CNRS 6503
• Raluca Ionescu, University of Poitiers, Laboratory of Catalysis, LACCO, UMR CNRS 6503
• Charles Kappenstein, University of Poitiers, Laboratory of Catalysis, LACCO, UMR CNRS 6503
• Laurence Pirault-Roy, University of Poitiers, Laboratory of Catalysis, LACCO, UMR CNRS 6503

Synthesis, Characterization and Alkylation Performance of the MOR/MCM-41 Composite Material
• Jia Liu, State Key Laboratory of Fine Chemicals, Dalian University of Technology
• Linying Wang, State Key Laboratory of Fine Chemicals, Dalian University of Technology
• Xiang Li, State Key Laboratory of Fine Chemicals, Dalian University of Technology
• Anjie Wang, State Key Laboratory of Fine Chemicals, Dalian University of Technology

(NH4)2SiF6-modified ZSM-12 as catalysts for the synthesis of 2,6-dimethylnaphthalene
• Wei Wu, Heilongjiang University
• Weiguo Wu, Heilongjiang University
• Lingfei Li, Heilongjiang University
• Wei Yang, Heilongjiang University
• OV Kikhtyanin, Boreskov Institute of Catalysis
• AV Toktalev, Boreskov Institute of Catalysis
• GV Echevskii, Boreskov Institute of Catalysis

Catalyst Design for the Hydrogenation of Cinnamic Acid to Hydrocinnamic Acid
• Jaime L Morrow, Evonik Degussa Corporation
• Jason L Carson, Evonik Degussa Corporation
• Venu Arunajatesan, Evonik Degussa Corporation

Poster Session 2 (Preliminary)

Selective hydrogenation of acetylene on nanocrystalline ñ-Al2O3-supported Pd catalysts: Influences of preparation method and support crystallite size
• Piyasan Praserthdam, Chulalongkorn University

Development of Superior Cr2O3/Al2O3 Catalysts for Fixed-bed Dehydrogenation of Light Alkanes
• Wolfgang Ruettinger, BASF Catalysts LLC
• Amanda Josey, BASF Catalysts LLC
• Ron Jagta, BASF Catalysts LLC
• Mike Breen, BASF Catalysts LLC
• Saeed Alerasool, BASF Catalysts LLC

Homogeneous Mo-based Catalysts for Transesterification between Dimethyl carbonate and Phenol
• Eun Duck Park, Ajou University

Copper supported on ZnxAlyOz catalysts for methanol synthesis
• Pawel Mierczynski, Politechnika Lodzka

Pd-Promoted Selective Gas Phase Hydrogenation of Butadiene over Alumina-supported Au Catalysts
• Catherine Louis, Université Pierre et Marie Curie UPMC

Imidazole-NHC Organocatalysis- The Benzoin Condensation
• Craig Williamson, University of Aberdeen

The influence of Ru and ZrO2 addition to Co/SiO2 catalysts on composition and distribution of liquid products obtained in Fischer-Tropsch synthesis
• Agnieszka Michalak, Institute of General and Ecological Chemistry/Technical University of Lodz

Synthesis of Superacid Catalysts for Biodiesel Production
• Warintorn Thitsartarn, National University of Singapore

Vapor-Phase Hydrolysis of Monochlorobenzene over CuZSM-5 Catalyst Prepared By Solid-State Ion Exchange
• Lin Haiqiang, Xiamen University

Pd2(dba)3 in Butylpyridiunuim Ionic Liquids as Catalytic System for Copper- and Phosphine-Free Sonogashira Cross Coupling
• Octavio Augusto Ceva Antunes, Federal University of Rio de Janeiro
• Paulo Galdino de Lima, Federal University of Rio de Janeiro

Kinetic study of liquid-phase hydrogenation of citral over Pt and PtSn supported catalysts
• Cesar A Barrales, Universidad Autonoma Metropolitana-Iztapalapa
• Tomás Viveros, Universidad Autonoma Metropolitana-Iztapalapa
• Antonio Monzon, University of Zaragoza

Oxidation of 2,6-Dimethylphenol to 2,6-Dimethyl-1,4-Benzoquinone
• Carmen Victoria Caceres, Centro de Investigación y Desarrollo en Ciencias Aplicadas "Dr Jorge Ronco"
• (CINDECA)
• Magdalena Palacio, Centro de Investigación y Desarrollo en Ciencias Aplicadas "Dr Jorge Ronco" (CINDECA)
• Paula I Villabrille,, Centro de Investigación y Desarrollo en Ciencias Aplicadas "Dr Jorge Ronco" (CINDECA)
• Gustavo P Romanelli, Centro de Investigación y Desarrollo en Ciencias Aplicadas "Dr Jorge Ronco" (CINDECA)
• Patricia G Vazquez, Centro de Investigación y Desarrollo en Ciencias Aplicadas "Dr Jorge Ronco" (CINDECA)

Ethanol conversion to toluene over HZSM-5
• Yusuf Makarfi, Lomonosov State Academy of Fine Chemical Technology
• Valentin Tretyakov, AV Topchiev Institute of Petrochemical Synthesis RAS
• Anatoly Lermontov, AV Topchiev Institute of Petrochemical Synthesis RAS
• Lubov Koval, Tomsk State University, Tomsk Russia
• Vladimir Erofeev, Tomsk State University, Tomsk Russia

Selective hydrogenation of the C=O group in unsaturated aldehydes by Pd-based catalytic systems
• Andrea Donato, University of Reggio Calabria
• Lidia De Luca, University of Reggio Calabria
• Maria Grazia Musolino, University of Reggio Calabria
• Rosario Pietropaolo, University of Reggio Calabria
• Giuseppe Rizzo, University of Messina
• Giovanni Neri, University of Messina

Diameter Tuning of Single-walled Carbon Nanotube Using Co-MCM-41
• Nan Li, Yale University
• Xiaoming Wang, Yale University
• Gary L Haller, Yale University

• Lisa D Pfefferle, Yale University

Amine MCM-41 Organocatalysts
• Daniel F Shantz, Texas A&M University
• Qingqing Wang, Texas A&M University

Tantalum Clusters Supported on Silica-Alumina and on ñ-Al2O3: Influence of Support Composition and Chemistry on Cluster Structure
• Junming Sun, University of California, Davis
• Bruce C. Gates, University of California Davis

Catalytic Properties of Au/HMS-Ti towards the oxidation of 1-hexene
• Nancy Martin Guaregua, UAM-I
• Alejandro Lopez-Gaona, UAM-I
• Gilberto Cordoba, UAM-I
• Margarita Viniegra, UAM-I

Characterization of the Surface Properties of Silp Catalyst
• Minh Thang Le, Hanoi University of Technology

Relating Pentane Isomerization Activity to the Acidic Properties and Surface Density of WOx/ZrO2
• Nikolaos Soultanidis, Rice University
• Antonis Psarras, Aristotle University
• Charles A Roberts, Lehigh University
• Israel E Wachs, Lehigh University
• Michael S Wong, Rice University

Discovery and Optimization of Novel High Performance Polyolefin Catalysts
• Margarete Leclerc, Symyx Technolo- gies

Effects of Thermal Treatment on the Phase Composition and Performance of VMoNbTe(Sb)Ox Catalysts for the Selective Oxidation of Propane to Acrylic Acid
• K Wang, ExxonMobil Research and Engineering Company
• W Mortier, ExxonMobil Process Research
• J Vartuli, ExxonMobil Research and Engineering Company
• R Nielson, ExxonMobil Research and Engineering Company
• J Dakka, ExxonMobil Research and Engineering Company
• A-J Bons, ExxonMobil Chemical Company
• A Winesett, ExxonMobil Chemical Company

Poster Session 3 (Preliminary)
Presentation Time: 5:30 PM - 8:00 PM
Wednesday, June 10, 2009

Hydrogen production from dimethyl ether on Rh-based catalysts
• Stefano Cavallaro, University of Messina
• Emanuele Gucciardi, University of Messina
• Vitaliano Chiodo, National Counsil of Research (CNR)
• Natale Mondello, National Counsil of Research (CNR)
• Salvatore Freni, National Counsil of Research (CNR)
• Jan CJ Bart, University of Messina
• Hydrogen from sustainable feedstocks – Design of stable catalysts for the steam reforming of model oxygenates
• Berta Matas Güell, University of Twente
• Kevin Nichols, University of Twente
• Han Gardeniers, University of Twente
• Igor Babich, University of Twente
• Leon Lefferts, University of Twente
• Kulathuiyer Seshan, University of Twente

An innovative calorimetric investigation of the kinetics of hydrogen release from catalyzed hydrolysis of borohydrides
• Simona Bennici, Institut de Recherches sur la Catalyse et l'Environnement de Lyon (IRCELYON)
• Ljiljana Damjanovic, Institut de Recherches sur la Catalyse et l'Environnement de Lyon (IRCELYON)
• Aline Auroux, Institut de Recherches sur la Catalyse et l'Environnement de Lyon (IRCELYON)

Liquid-phase Ethanol Reforming with Water over Alumina-Supported Ir and Pt Catalysts
• Shuichi Naito, Kanagawa University
• Takehiko Sakamoto, Kanagawa University
• Sachio Takemoto, Kanagawa University
• Akihiro Yoshida, Kanagawa University

Modelling of a Pd-Ag Membrane Reactor for the Production of Ultrapure H2 from the Dry Reforming of Methane
• Eduardo A Lombardo, INCAPE (FIQ, UNL-CONICET)
• Leandro Coronel, INCAPE (FIQ, UNL-CONICET)
• Laura M Cornaglia, INCAPE (FIQ, UNL-CONICET)
• John F Múnera, INCAPE (FIQ, UNL-CONICET)

Solar Hydrogen Production by Photo-oxidation of Water from Doped Iron Oxide Photoanodes
• Alan Kleiman-Shwarsctein, University of California Santa Barbara
• Yong-Sheng Hu, University of California Santa Barbara
• Arnold J Forman, University of California Santa Barbara
• Galen D Stucky, University of California Santa Barbara
• Eric W McFarland, University of California Santa Barbara

Oxidative Steam Reforming of Ethanol over Bimetallic PtRu Catalysts
• Chen-Bin Wang, Chung Cheng Institute of Technology, National Defense University
• Jia-Lin Bi, Chung Cheng Institute of Technology, National Defense University
• Wen-Feng Wang, Chung Cheng Institute of Technology, National Defense University
• Chi-Han Wang, Chung Cheng Institute of Technology, National Defense University
• Chuin-Tih Yeh, Yuan Ze University

Syngas Production via Combined H2O and CO2 reforming of Methane over Ce-promoted Ni/Al2O3 Catalyst: Effect of Ce addition on coke formation
• Kee Young Koo, Korea Institute of Energy Research
• Hyun-Seog Roh, Yonsei University
• Un Ho Jung, Korea Institute of Energy Research
• Wang Lai Yoon, Korea Institute of Energy Research

Catalytic steam reforming of coke oven gas for hydrogen production
• Joo-Hyoung Park, Research Institute of Industrial Science and Engineering (RIST)
• Kyong-Tae Kim, Research Institute of Industrial Science and Engineering (RIST)
• Dong Jun Koh, Research Institute of Industrial Science and Engineering (RIST)
• Dong Nam Shin, Research Institute of Industrial Science and Engineering (RIST)
• Heedong Chun, Research Institute of Industrial Science and Engineering (RIST)
• Hyeon Park, Pohang Iron and Steel Company (POSCO)
• Yong Shik Jeong, Pohang Iron and Steel Company (POSCO)

Hydrogen production by ethanol steam reforming over Co-hydrotalcites
• jose Luis Contreras, Universidad Autónoma Metropolitana-Azcapotzalco

Partial Oxidation of Methane over Ni, Pd and Pt Catalysts - Mechanism Investigation
• Soraia Teixeira Brandão, Universidade Federal da Bahia
• Lilian Maria Tosta Simplício, Universidade Federal da Bahia
• Roberto Batista da Silva Jr, Universidade Federal da Bahia

Enolization of Acetic Acid on Monoclinic Zirconia Surface
• Alexey Ignatchenko, University of North Dakota

Surface Properties and Catalytic Behavior of Ru Supported on Composite La2O3-SiO2 Oxides
• Betina Faroldi, INCAPE (FIQ, UNL-CONICET)
• Eduardo A Lombardo, INCAPE (FIQ, UNL-CONICET)
• Laura M Cornaglia, INCAPE (FIQ, UNL-CONICET)

Evaluation of a zoned Rh-Pt catalyst for hydrogen generation from diesel fuel via autothermal reforming
• Xanthias Karatzas, KTH - Royal Institute of Technology
• Lars J Pettersson, KTH - Royal Institute of Technology

Structural Investigation of Model Planar Perovskite-Supported Precious-Metal Catalysts
• Michael B Katz, University of Michigan
• Hong Liu, University of Michigan
• Hung-Wen Jen, Ford Motor Company
• Richard E Soltis, Ford Motor Company
• George W Graham, University of Michigan
• Xiaoqing Pan, University of Michigan

Preparation and characterization of Ni-Ag surface alloy catalysts
• Anh Hoang Dam, Norwegian University of Science and Technology (NTNU)

In-situ UV/Vis spectroscopy for analysis of dynamics of surface processes: Kinetics of reduction and oxidation of VOx in the oxidative dehydrogenation of propane over VOx/Ti-Si-MCM-41 with O2 and N2O
• Olga Ovsitser, Leibniz Institute for Catalysis, Branch Berlin
• Angelika Brückner, Leibniz Institute for Catalysis, Branch Berlin
• Evgenii V Kondratenko, Leibniz Institute for Catalysis, Branch Berlin

In Situ Characterization of Ethanol Reforming Catalysts (Rh-Pd/CeO2) Using Time-Resolved X-Ray Diffraction
• Gong Zhou, Brookhaven National Laboratory
• Laura Barrio, Brookhaven National Laboratory
• Michael Estrella, Brookhaven National Laboratory
• Sanjaya Senanayake, Brookhaven National Laboratory
• Hicham Idriss, The University of Auckland
• Jonathan C Hanson, Brookhaven National Laboratory
• Jose Rodriguez, Brookhaven National Laboratory

In-situ ATR-IR Study of CO Oxidation over Pt/Al2O3 and Pd/Al2O3 in Water - Promotion Effects by Water and pH
• Barbara L Mojet, University of Twente
• Leon Lefferts, University of Twente
• Sune D Ebbesen, Risø – DTU National Laboratory for Sustainable Energy

Methane Dry Reforming with CO2: A Study of Surface Carbon Species
• Laszlo Guczi, Institute of Isotopes & Institute of Surface Chemistry and Catalysis, Chemical Research Center,
• HAS
• G Stefler, Institute of Isotopes & Institute of Surface Chemistry and Catalysis, Chemical Research Center, HAS
• Z Schay, Institute of Isotopes & Institute of Surface Chemistry and Catalysis, Chemical Research Center, HAS
• Olga Geszti, Research Institute for Technical Physics and Materials Science,
• Istvan Sajo, Chemical Research Center
• Andras Tompos, Chemical Research Center

Influence of the ZnO surface structure on the reactivity of Pd/ZnO catalysts for methanol steam reforming
• Kake Zhu, Pacific Northwest National Laboratory
• Jun Liu, Pacific Northwest National Laboratory
• Patrick Burton, University of New Mexico
• Eric Peterson, University of New Mexico
• Yong Wang, Pacific Northwest National Laboratory

Modelling the C2+ hydrocarbons during the Fischer-Tropsch synthesis using transient kinetics
• Nilenindran Sundra Govender, Sasol Technology R&D (Pty) Ltd
• Mart HJM de Croon, Eindhoven University of Technology
• J C Schouten, Eindhoven University of Technology

Enhancement of sugar char surface area by chemical and physical activation processes
• Jidon Janaun, University of British Columbia
• Naoko Ellis, University of British Columbia

Nanostructured Phase-Pure MoV-based Oxides in Selective Oxidation of Propane to Acrylic Acid
• Yury V Kolen'ko, Fritz Haber Institute / Max Planck Society
• Wei Zhang, Fritz-Haber Institute of the Max Planck Society
• Till Wolfram, Fritz Haber Institute / Max Planck Society
• Almudena Celaya Sanfiz, Fritz Haber Institute / Max Planck Society
• Frank Girgsdies, Fritz Haber Institute / Max Planck Society
• Dangsheng Su, Fritz Haber Institute / Max Planck Society
• Annette Trunschke, Fritz Haber Institute / Max Planck Society
• Robert Schlögl, Fritz Haber Institute / Max Planck Society

crucial role of Vanadium in La2Ni(X)V(1-X)O4+d catalyst for selective oxidation of propane
• Salvatore Crapanzano, University of Twente
• IV Babich, University of Twente
• L Lefferts, University of Twente

Dealkylation and ring opening: Comparison of energetics from ab initio calculations
• Chandra Mouli Kotikalapudi, University of Saskatchewan
• Ajay K Dalai, University of Saskatchewan

Poster Session 3 (Preliminary)

Activity and Selectivity of Co-Mo Catalysts Supported on Different Silicas for the Synthesis of Single-Walled Carbon Nanotubes
• M Pilar Ruiz, University of Oklahoma
• Verónica M Irurzun, University of Oklahoma
• Cristina Caamaño, University of Oklahoma
• Daniel E Resasco, University of Oklahoma

Synthesis of Single-Walled Carbon Nanotubes Over Co-Mo Catalysts Prepared by the Sol-Gel Method
• Verónica M Irurzun, University of Oklahoma
• Daniel E Resasco, University of Oklahoma

Synthesis of zeotypes with ñ structure and their activity on R-(+)-Limonene epoxidation with hydrogen peroxide–urea adduct
• Farlán Taborda, Universidad de Antioquia
• Aída Luz Villa, Universidad de Antioquia
• Consuelo Montes de C, Universidad de Antioquia

Autothermal Reforming of Liquid Fuels with Ni/CZO Catalysts
• Johannes W Schwank, University of Michigan
• Andy Tadd, University of Michigan
• Xiaoyin Chen, University of Michigan
• Ben Gould, University of Michigan
• Joe Mayne, University of Michigan
• Kevin Dahlberg, University of Michigan

Catalytic Stability of Immobilized Enzyme on Passivated SBA-15 for Transesterification of Vegetable oil and Methanol
• Warintorn Thitsartarn, National University of Singapore

Photodecomposition of H2S to Produce H2 over CdS/Carbon-doped TiO2 Composite Catalyst
• Xue-feng Bai, Institute of Pertochemistry, Heilongjiang Academy of Sciences
• Hui-juan Fan, Institute of Pertochemistry, Heilongjiang Academy of Sciences

Steam Reforming of Ethanol to Hydrogen over Rh/Y2O3 Catalyst
• Xusheng Wu, National University of Singapore
• Sibudjing Kawi, National University of Singapore

Lanthanum nickelate-perovskite: Catalyst for production of COx-free hydrogen and carbon nanotube from decomposition of CH4
• Thawatchai Maneerung, National University of Singapore
• Kus Hidajat, National University of Singapore
• Sibudjing Kawi, National University of Singapore

Probabilistic Analysis of Single Particle Temporal Analysis of Products Microreactor
• Renato Feres, Washington University in St Louis
• Gregory S Yablonsky, Washington University in St Louis
• Xiaolin Zheng, Washington University in St Louis
• John T Gleaves, Washington University in St Louis

Understanding the Functioning of Supported Metal Oxide Catalysts using a combination of Ethanol Oxidation and X-ray Absorption Spectroscopy
• Hari Nair, Purdue University
• Jeffery T Miller, Argonne National Laboratory
• Chelsey D Baertsch, Purdue University

Photodecomposition of H2S to Produce H2 over CdS/Al-MCM-41 Composite Catalyt
• Xue-feng Bai, Institute of Pertochemistry, Heilongjiang Academy of Sciences
• Ying Cao, Heilongjiang University

New CoSn/ZnO catalysts in the reduction of methyl oleate into unsaturated alcohols
• Karine De Oliveira Vigier, LACCO UMR-CNRS 6503

Hydrogen Storage and Release from Organic Heteroaromatic Compounds: A Kinetic Study
• Farnaz Sotoodeh, Department of Chemical & Biological Engineering
• Kevin J Smith, Department of Chemical & Biological Engineering

LaNiO3 perovskite catalysts modified with Sr or Zr: Catalysts for simultaneous CO2 reforming and partial oxidation of methane
• Kesada Sutthiumporn, National university of Singapore
• Sibudjing Kawi, National University of Singapore

The Effect of Lanthanum on the Performance of PtSn/Al2O3 Reforming Catalysts The Impact of AlV Species on the Metal-Support Interaction
• Ignacio Contreras, Universidad Autonoma Metropolitana-Iztapalapa
• JH Bitter, Utrecht University
• Tomás Viveros, Universidad Autonoma Metropolitana-Iztapalapa
• KP de Jong, Utrecht University

Photocatalytic decomposition of H2S to Produce H2 over ZnO/ZnS Composite Photocatalyst
• Xue-feng Bai, Institute of Pertochemistry, Heilongjiang Academy of Sciences
• Dan Wu, Dalian University of Technology

Hydrogen Production from Dimethyl Ether by Partial Oxidation and Reforming
• Qijian Zhang, Liaoning University of Technology
• Yingchun Zhou, Liaoning University of Technology
• Feng Du, Liaoning University of Technology
• Xinxin He, Liaoning University of Technology
• Ping Qi, Liaoning University of Technology
• Huan Wang, Liaoning University of Technology

Metal-Polymeric Nanocatalysts of Selective Oxidation and Hydrogenation
• Esther Sulman, Tver Technical University

Transient studies of perovskite anode catalyst for a direct CH4 Solid Oxide Fuel Cell
• James Fisher, University of Akron
• Steven SC Chuang, University of Akron

Modification and Characterization of Nanotubular Halloysite for Heterogeneous Catalytic Applications
• David L Cocke, Lamar University
• Gary Beall, Texas State University

Hydrogen production from oxidative reforming of methanol over catalysts prepared by novel combustion synthesis methods
• Anand Kumar, University of Notre Dame
• Alexander S Mukasyan, University of Notre Dame
• Eduardo E Wolf, University of Notre Dame

Functionalization of the Internal Surface to the Ultra Stable Zirconium Metal Organic Framework, UiO-66
• Karl Petter Lillerud, University of Oslo
• Søren Jacobsen, University of Oslo
• Merete H Nilsen, University of Oslo
• Unni Olsbye, University of Oslo
• Mats Tilset, University of Oslo
• Silvia Bordiga, UniVersita di Torino,
• Carlo Lamberti, University of Oslo

Spin Crossing Enhancement of Propane Oxidative Dehydrogenation on Supported Vanadium Oxide Catalysts: A Density Functional Study
• Stan A Zygmunt, Valparaiso University
• Daniel S Brandt, Valparaiso University
• Paul C Redfern, Argonne National Laboratory
• Peter Zapol, Argonne National Laboratory
• Larry A Curtiss, Argonne National Laboratory

Stable Sub-Nanometer Pd Species on Alumina Surfaces
• Eric J Peterson, University of New Mexico
• Barr Halevi, University of New Mexico
• Andrew De La Riva, University of New Mexico
• Hien Pham, University of New Mexico
• Lawrence F Allard, Oak Ridge National Laboratory
• Abhaya K Datye, University of New Mexico

On the nature of catalytically active sites in GaMFI High temperature XPS study and DFT modeling
• Alexander I Serykh, University of South Carolina
• Michael D Amiridis, University of South Carolina

Dendrimer Encapsulated Gold Nanoparticles for Room Temperature CO Oxidation in Aqueous Solutions
• Peter E H Kracke, Tufts University
• Terry E Haas, Tufts University
• Maria Flytzani-Stephanopoulos, Tufts University

Trends in the Reactivity of CO and Light Oxygenates on Subnanometer Metal Clusters: A Density Functional Theory Study
• Jeff Greeley, Argonne National Laboratory
• Faisal Mehmood, Argonne National Laboratory
• Daniel Torres, Argonne National Laboratory
• Paul C Redfern, Argonne National Laboratory
• Peter Zapol, Argonne National Laboratory
• Stefan Vajda, Argonne National Laboratory
• Larry A Curtiss, Argonne National Laboratory

The Influence of Reducing Agents on Palladium Crystallite Size and Distribution on Activated Carbon Catalysts
• Tracy D Dunn, Evonik Degussa Corporation
• Jaime R Blanton, Evonik Degussa Corporation
• Takuma Hara, Evonik Degussa Japan
• Venu Arunajatesan, Evonik Degussa Corporation

Hydrothermal Synthesis of Nanosized Alpha Alumina Powders for Catalytic Applications
• Wojciech L Suchanek, Sawyer Technical Materials, LLC

Pore-Expanded MCM-41 Aluminosilicate for Acid-Catalyzed Reactions: Direct (One-pot) versus Post Alumination
• Nabil Al-Yassir, University of Ottawa
• Abdelhamid Sayari, University of Ottawa

Resonance Raman spectroscopic study of alumina supported vanadium oxide catalysts
• Hack-Sung Kim, Northwestern University/ Argonne National Laboratory
• Peter C Stair, Northwestern University

Poster Session 3 (Preliminary)

First principles studies of electrochemical reactions at solid oxide fuel cell (SOFC) anodes
• David Ingram, University of Michigan
• Suljo Linic, University of Michigan

Gold Species supported on Ceria Structured as Nanofibres and Nano fine Crystals
• Brenda Acosta, Universidad Michoacana de San Nicolás de Hidalgo
• Ricardo Rangel, Universidad Michoacana de San Nicolás de Hidalgo
• Elena Smolentseva, CNYN-Universidad Nacional Autónoma de México
• Felipe Castillon, CNYN-Universidad Nacional Autónoma de México
• Miguel Estrada, CICESE
• Andrey Simakov, CNYN-Universidad Nacional Autónoma de México
• Sergio Fuentes, CNYN-Universidad Nacional Autónoma de México

Molybdenum Carbide Supported Platinum Catalysts for Water-Gas Shift: A Theoretical and Experimental Investigation
• Neil M Schweitzer, The University of Michigan
• Levi Thompson, The University of Michigan
• Suljo Linic, University of Michigan

Dealing with Complexities in Chemical Reaction Networks
• Saurabh A Vilekar, Worcester Polytechnic Institute
• Ilie Fishtik, Worcester Polytechnic Institute
• Ravindra Datta, Worcester Polytechnic Institute

Selective Hydrogenation of Acetylene Over Alumina Supported Pd and Pd-Mg Catalysts
• Ying Ji, Texas A&M U-Commerce
• Chunkai Shi, Texas A&M U-Commerce
• Amir Karimloo, Texas A&M U-Commerce
• Jessica Elizalde, Texas A&M U-Commerce
• Ben W-L Jang, Texas A&M U-Commerce

Role of Metallic and Cationic Gold Species Supported on Nano-sized Ce-Zr-Al-O Mixed Oxides in CO Oxidation
• Andrey Simakov, CNYN-Universidad Nacional Autónoma de México
• Elena Smolentseva, CNYN-Universidad Nacional Autónoma de México
• Felipe Castillon, CNYN-Universidad Nacional Autónoma de México
• Miguel Estrada, CICESE
• Eunice Vargas, Universidad Autonoma de Baja California
• Sergio Fuentes, CNYN-Universidad Nacional Autónoma de México

Reduction of Supported Pd Nitrate Catalysts by RF Non-thermal Plasmas
• Yanan Li, Texas A&M U-Commerce
• Ben W-L Jang, Texas A&M U-Commerce

Supported Bimetallic Au-Pd Catalysts for Selective Oxidation of Arabinose to Arabinaric Acid
• Elena Smolentseva, CNYN-Universidad Nacional Autónoma de México
• Bright Kusema, Åbo Akademi University
• Andrey Simakov, CNYN-Universidad Nacional Autónoma de México
• Felipe Castillon, CNYN-Universidad Nacional Autónoma de México
• Dmitry Murzin, Abo Akademi University
• Eunice Vargas, Universidad Autonoma de Baja California
• Sergio Fuentes, CNYN-Universidad Nacional Autónoma de México

From Sub-Nanometer to Nanometer Size Silver Catalysts: The Effect of Catalyst Size in Selective Oxidation of Propene
• Stefan Vajda, Argonne National Laboratory
• Sungsik Lee, Argonne National Laboratory
• Jeffrey W Elam, Argonne National Laboratory
• Michael J Pellin, Argonne National Laboratory
• Byeongdu Lee, Argonne National Laboratory
• Soenke Seifert, Argonne National Laboratory
• Randall E Winans, Argonne National Laboratory
• Larry A Curtiss, Argonne National Laboratory
• Jeffrey P Greeley, Argonne National Laboratory
• Paul C Redfern, Argonne National Laboratory
• Yu Lei, Argonne National Laboratory
• Randall Meyer, University of Illinois at Chicago
• Arantxa Fraile-Rodriguez, Swiss Light Source, Paul-Scherrer Institute

• Kristian Sell, Swiss Light Source, Paul-Scherrer Institute
• Ingo Barke, Swiss Light Source, Paul-Scherrer Institute
• Armin Kleibert, Swiss Light Source, Paul-Scherrer Institute
• Viola von Oeynhausen, Swiss Light Source, Paul-Scherrer Institute
• Karl-Heinz Meiwes-Broer, Universitaet Rostock

Dynamic Transformations of Gold Species supported on Nanostructured Alumina, Ceria, and Ceria-zirconia Mixed Oxides prepared by Sol-gel Synthesis
• Andrey Simakov, CNYN-Universidad Nacional Autónoma de México
• Elena Smolentseva, CNYN-Universidad Nacional Autónoma de México
• Felipe Castillon, CNYN-Universidad Nacional Autónoma de México
• Miguel Estrada, CICESE
• Eunice Vargas, Universidad Autonoma de Baja California
• Ricardo Rangel, Universidad Michoacana de San Nicolás de Hidalgo
• Brenda Acosta, Universidad Michoacana de San Nicolás de Hidalgo
• Sergio Fuentes, CNYN-Universidad Nacional Autónoma de México
• Vladimir Sobolev, Boreskov Institute of Catalysis
• Roman Kenzhin, Boreskov Institute of Catalysis

Dendrimer-Derived Ir-Pd/ñ-Al2O3 Catalysts
• Yaritza M Lopez-de Jesus, University of South Carolina
• Aurélie Vicente, Université of Poitiers
• John R Monnier, University of South Carolina
• Gwendoline Lafaye, Université of Poitiers
• Patrice Marécot, Université of Poitiers
• Christopher T Williams, University of South Carolina

Molybdenum Carbide and Oxycarbide Hydrogen Production Catalysts: Preparation, Characterization, and Evaluation
• Robert Savinelli, University of California
• Jun Li, University of California
• Ram Seshadri, Univeristy of California
• Susannah L Scott, University of California, Santa Barbara

Catalytic Steam and Dry Reforming of Methane Using Rh Clusters Supported on Sr-substituted Hexaaluminate
• NE McGuire, Colorado School of Mines,
• NP Sullivan, Colorado School of Mines,
• RJ Kee, Colorado School of Mines,
• H Zhu, Colorado School of Mines,
• JA Nabity, TDA Research Inc
• J Engel, TDA Research Inc
• DT Wickham, Reaction Systems LLC
• M Kaufman, Colorado School of Mines,

Improved performance of PtRu/C prepared by the selective deposition of Ru on Pt as an anode of PEM fuel cell
• Hyun Tae Kim, Seoul National University
• Han-Ik Joh, Seoul National University
• Sang Heup Moon, Seoul National University

Exploratory Study of Selective Aromatic Ring Opening Using Oxidative Pre-treatment
• Yi Zhang, Natural Resources Canada

Metal Ring Opening Catalyst Discovery for Fuel Upgrading
• Feng Xu, UOP LLC, A Honeywell Company
• Steve Bradley, UOP LLC, A Honeywell Company

Reaction of Ethylene with Nucleophiles on Titania
• Prashant R Daggolu, Mississippi State University
• Mark G White, Mississippi State University

Production of Olefins via Oxidative Dehydrogenation of Simple Refinery Alkanes in the Presence of H2S
• Zahra A Premji, University of Calgary

Effects of Redox History on Reducibility, Structural and Electrical Properties of CexZr1-xO2 for Its Applications as a SOFC Anode Electrocatalyst
• Alessandro Trovarelli, University of Udine
• Stefano Desinan, University of Udine
• Marta Boaro, University of Udine
• Chiara Abate, University of Udine
• Matteo Ferluga, University of Udine
• Carla de Leitenburg, University of Udine

Catalytic Ignition of Cold O2/H2 Mixtures for Space Propulsion Applications
• Rachid Amrousse, University of Poitiers, Laboratory of Catalysis, LACCO, UMR CNRS 6503
• Rachid Brahmi, University of Poitiers, Laboratory of Catalysis, LACCO, UMR CNRS 6503
• Yann Batonneau, University of Poitiers, Laboratory of Catalysis, LACCO, UMR CNRS 6503
• Dan Amariei, University of Poitiers, Laboratory of Catalysis, LACCO, UMR CNRS 6503
• Charles Kappenstein, University of Poitiers, Laboratory of Catalysis, LACCO, UMR CNRS 6503
• Marie Theron, CNES (Centre National d'Études Spatiales)
• Patrick Bravais, Air Liquide

Highly Active, Low-NiW Content Catalysts for HDT Prepared from H3PW12O40 Supported on Al, Ti, and Zr-modified SBA-15
• Lilia Y Lizama, Universidad Nacional Autónoma de México
• Tatiana E Klimova, Universidad Nacional Autónoma de México

Poster Session 3 (Preliminary)

Synthesis and Properties of Metal Phosphide Hydrotreating Catalysts Containing Noble Metals
• Mark E Bussell, Western Washington University
• Amy F Gaudette, Western Washington University
• Erin P Gleason, Western Washington University

Advanced Slurry Hydrocracking Process: Technology for Heavy Oil Conversion
• Maureen L Bricker, Honeywell
• James McGehee, Honeywell
• Robert Haizmann, Honeywell
• Paul Zimmermann, Honeywell
• Alak Bhattacharyya, Honeywell
• Lorenz Bauer, Honeywell
• Beckay Mezza, Honeywell

Study of the hydrodenitrogenation reaction with PtMo/NaY zeolite catalysts
• Riat C Colman, Universidade Federal do Rio de Janeiro
• Maria Auxiliadora S Baldanza, Universidade Federal do Rio de Janeiro
• Martin Schmal, Universidade Federal do Rio de Janeiro

Effect of citric acid on the synthesis of tungsten phosphide hydrotreating catalysts
• Blessing Ibeh, University of Calgary
• Shihua Zhang, University of Calgary
• Josephine Hill, University of Calgary

Effect of Nickel and Cobalt Promoters on SBA-15-supported MoS2 Catalysts for Deep Hydrodesulfurization
• Diego Valencia, Universidad Nacional Autónoma de México
• Oliver Y Gutiérrez, Universidad Nacional Autónoma de México
• Lilia Y Lizama, Universidad Nacional Autónoma de México
• Isidoro García-Cruz, Instituto Mexicano del Petróleo
• Tatiana E Klimova, Universidad Nacional Autónoma de México

Hydrodeoxygenation of benzofuran and its oxygenated derivatives (2,3-dihydrobenzofuran and 2-ethylphenol) over NiMoP/Al2O3 catalyst Effect of H2S in the feed
• Frédéric Richard, University of Poitiers
• Sylvette Brunet, CNRS

Advanced Slurry Hydrocracking of Heavy Oil: New, Commercializable Catalysts
• Alak Bhattacharyya, UOP - A Honeywell Company
• Beckay Mezza, UOP - A Honeywell Company
• Maureen Bricker, UOP - A Honeywell Company
• Lorenz Bauer, UOP - A Honeywell Company

Hydrogenation of Naphthalene over Various Supported Metal Catalysts as a Model Hydrogen Storage Process using Low Grade Hydrogen Containing CO
• Hiroshi Miura, Saitama University
• Hiroshi Sekine, Saitama University
• Yosuke Ino, Saitama University
• Masaaki Ohshima, Saitama University
• Hideki Kurokawa, Saitama University

Hydrodeoxygenation of Woody Tar and Model Compounds
• Makoto Toba, National Institute of Advanced Industrial Science and Technology (AIST)
• Yoko Abe, National Institute of Advanced Industrial Science and Technology (AIST)
• Takehisa Mochizuki, National Institute of Advanced Industrial Science and Technology (AIST)
• Yuji Yoshimura, National Institute of Advanced Industrial Science and Technology (AIST)

High-temperature sorbents for desulfurization of biomass-derived syngas
• Singfoong Cheah, National Renewable Energy Laboratory
• Kimberly A Magrini-Bair, National Renewable Energy Laboratory

Structure and performance of new TiO2 and TiO2-Al2O3 materials as V traps in FCC
• Ivan Alonso Santos-Lopez, Universidad Autónoma de San Luis Potosí
• Brent E Handy, Universidad Autónoma de San Luis Potosí
• Maria-Guadalupe Cardenas-Galindo, Universidad Autónoma de San Luis Potosí

• Roberto Garcia de Leon, Instituto Mexicano del Petroleo

Hydrodesulfurization of Dibenzothiophene over MCM-41 Supported Pd and Pt Catalysts
• Feng Zhou, State Key Laboratory of Fine Chemicals, Dalian University of Technology
• Anjie Wang, State Key Laboratory of Fine Chemicals, Dalian University of Technology
• Xiang Li, State Key Laboratory of Fine Chemicals, Dalian University of Technology
• Linying Wang, State Key Laboratory of Fine Chemicals, Dalian University of Technology

Influence of the Sulfidation Pressure on the Hydrodesulfurization Activity of Supported CoMo Sulfide Catalysts
• Emiel JM Hensen, Eindhoven University of Technology

Optimization of CoMo-based Catalysts in the Sour Gas Shift Process
• Justin X Wang, Sud-chemie Inc
• Yeping Cai, Sud-chemie Inc

Deep Hydrogenation of C9 Petroleum Resin over Skeletal Nickel Prepared from Ni-Al-Mo Alloys by Rapidly Quenching Technology
• Lianhai Lu, Dalian University of Technology
• Zeming Rong, Dalian University of Technology
• Wenqiang Du, Dalian University of Technology

The role of metal and support sites on the hydrogenation of acetic acid on Ru-based catalysts
• Salvador Ordonez, University of Oviedo
• Enrique Iglesia, University of California at Berkeley

Non-parametric analysis of active sites distribution of nitrided Mo/Al2O3 catalyst during carbazole HDN
• SHigetaka Kai, Tokyo University of Agriculture and technology
• Hyroyuki Tominaga, Tokyo University of Agriculture and technology
• Masatoshi Nagai, Tokyo University of Agriculture and technology

Hydrotreating of Renewable Feedstocks – Process Design based on Understanding of Reaction Routes
• Rasmus G Egeberg, Haldor Topsøe A/S
• Bjorn Donnis, Haldor Topsøe A/S
• Peder Blom, Haldor Topsøe A/S
• Kim G Knudsen, Haldor Topsøe A/S

Promoted ZnO/Silica For Wide Temperature Range H2S Removal, While Inhibiting COS Formation
• Priyanka Dhage, Auburn University
• Alexander Samokhvalov, Auburn University
• Divya Repala, Auburn University
• Eduardus Duin, Auburn University
• Bruce J Tatarchuk, Auburn University

Effect of Pore Diameter Variation on CNT-supported Catalyst Activity for Hydrotreating of Coker Light Gas Oil
• Stefan K Sigurdson, University of Saskatchewan
• Ajay K Dalai, University of Saskatchewan
• John Adjaye, Sycrude Canada Ltd

Alumina doped with Fe synthesized by a sol-gel method: Characterization and trichloroethylene catalytic combustion
• Javier Rivera De la Rosa, Centro de Inovación, Investigación y Desarrollo en Ingeniería y Tecnología (CIIDIT)
• Araceli Hernández, Universidad Autónoma de Nuevo León
• Carlos J Lucio Ortíz, Universidad Autónoma de Nuevo León
• Jose A De los Reyes Heredia, Universidad Autonóma Metropolitana I

Ternary Wide Band Gap p-Block Metal Semiconductor ZnGa0O4 for Photocatalytic Benzene Degradation
• Zhaohui Li, Fuzhou University

Hydrothermal synthesis and catalytic performances of a new series of photocatalyst R2Sn2O7 (R = Nd, Sm, Eu, Gd, Er, Yb)
• Wanjun Wang, Fuzhou University
• Jinhong Bi, Fuzhou University
• Ling Wu, Fuzhou University
• Zhaohui Li, Fuzhou University
• Xianzhi Fu, Fuzhou University

Effects of the modification with tungstosilicic acid on the physicochemical properties of mesoporous titania
• Vanesa Fuchs, Centro de Investigación y Desarrollo en Ciencias Aplicadas (CINDECA), Dto Química, Fac Cs Exactas, UNLP-CCT La Plata, CONICET
• Mirta Blanco, Centro de Investigación y Desarrollo en Ciencias Aplicadas (CINDECA), Dto Química, Fac Cs Exactas, UNLP-CCT La Plata, CONICET
• Luis Pizzio, Centro de Investigación y Desarrollo en Ciencias Aplicadas (CINDECA), Dto Química, Fac Cs Exactas, UNLP-CCT La Plata, CONICET

Complete Oxidation of Chlorinated Aromatic Compounds over Metal Oxide Composite Aerogel Catalysts
• Dong Jin Suh, Korea Institute of Science and Technology
• Jinsoon Choi, Hyosung R&DB Labs

Kinetics of chloroform hydrodechlorination over Pd/TiO2 washcoated cordierite minimonolith
• Carlos A González, Universidad de Antioquia
• Consuelo Montes de Correa, Universidad de Antioquia

Poster Session 3 (Preliminary)

TiO2/ZSM-5 composite photocatalyst: effects of zeolite crystal size and acidity on photocatalytic activity in the degradation of azo dye
• Peng Guo, Dalian University of Technology
• Chunyan Liu, Dalian University of Technology
• Min Gao, Dalian University of Technology
• Hongchen Guo, Dalian University of Technology
• Xiangsheng Wang, Dalian University of Technology
• Lixing Chen, Dalian University of Technology

Effect of Gas Phase Water on Formic and Acetic Acid Adsorption on Anatase TiO2
• Kristi L Pelz, University of Colorado
• J Will Medlin, University of Colorado
• John L Falconer, University of Colorado

Palladium-gold catalysts for H2O2 direct synthesis at room temperature and atmospheric pressure
• Francesco Pinna, Università di Venezia

Microwave hydrothermal synthesis of AgInS2 with high visible light photocatalytic activity
• Wenjuan Zhang, Fuzhou University
• Danzhen Li, Fuzhou University
• Zhixin Chen, Fuzhou University
• Chun Chen, Fuzhou University
• Meng Sun, Fuzhou University
• Xianzhi Fu, Fuzhou University

Synthesis of Iron/titania Photocatalysts
• Brenda B Zermeno-Resendiz, Instituto Tecnológico de Ciudad Madero
• Ricardo Garcia-Alamilla, Instituto Tecnológico de Ciudad Madero
• Edgar Moctezuma, Universidad Autonoma de San Luis Potosi

Catalytic properties of Au-Ir/TiO2 catalyst in CO oxidation
• Gabriela Díaz, Instituto de Física, UNAM
• Rodolfo Zanella, CCADET, UNAM

Catalytic oxidation of trichloroethylene in humid air over titania-zirconia supported palladium catalysts
• HL Tidahy, Université des Sciences et Technologies de Lille
• J-M Giraudon, Université des Sciences et Technologies de Lille
• J-F Lamonier, Université des Sciences et Technologies de Lille
• Martial Roussel, Facultés Universitaires Notre Dame de la Paix
• Bao-lian Su, Facultés Universitaires Notre Dame de la Paix
• Stéphane Siffert, Université du Littoral Côte d'Opale
• Antoine Aboukaïs, Université du Littoral Côte d'Opale

Selective Catalytic Reduction of NO by NH3 over V2O5-WO3/TiO2 Catalysts
• Akawat Sirisuk, Chulalongkorn University
• Izkun Arunyakasemsuk, Chulalongkorn University
• Piyasan Praserthdam, Chulalongkorn University

Catalytic Wet Air Oxidation of Phenol – Deactivation phenomenon and insight into regeneration possibilities
• Sylvain Keav, Université de Poitiers
• Agnès Martin, Université de Poitiers
• Jacques Barbier, Université de Poitiers
• Daniel Duprez, Université de Poitiers

On the unexpected promoting effect of the Cl-containing Pd precursor on the CH4-SCR of NOx of Cl-free Pd/WOx-ZrO2 catalysts
• Marco Faticanti, UPMC Univ Paris 06,
• Xavier Carrier, UPMC - Université Pierre et Marie Curie
• Jean-Marc Krafft, UPMC Univ Paris 06,
• Michel Che, UPMC Univ Paris 06,
• Cyril Thomas, UPMC Univ Paris 06,

A joint catalytic and FT-IR spectroscopic study of NO SCR reduction by hydrogen generated in line on perovskite-type catalysts for automotive diesel exhaust gas treatment
• Stefania Furfori, Politecnico di Torino
• Marco Armandi, Politecnico di Torino
• Barbara Bonelli, Politecnico di Torino
• Nunzio Russo, Politecnico di Torino
• Debora Fino, Politecnico di Torino
• Guido Saracco, Politecnico di Torino
• Vito Specchia, Politecnico di Torino
• Edoardo Garrone, Politecnico di Torino

Synthesis of Gold Nanoparticles supported on TiO2 for the Photocatalytic Degradation of 4-Chlorophenol
• Socorro Oros-Ruiz, Centro de Investigacion y Estudios de Posgrado, Universidad Autonoma de San Luis Potosi
• Edgar Moctezuma, Universidad Autonoma de San Luis Potosi

CO2 Capture Using Amine-impregnated Mesoporous Silica
• Wha-Seung Ahn, Inha University

Hexaaluminates in the catalytic combustion of methane: effect of the deposition over alumina and the addition of palladium
• Soraia Teixeira Brandão, Universidade Federal da Bahia
• Milena Santana Santos, Universidade Federal da Bahia
• Genicleide de Sousa Estrela, Universidade Federal da Bahia

Selective hydrodechlorination of 1,2-dichloroethane over Pd-Pt catalysts
• Nancy Martin Guaregua, UAM-I
• Alejandro Lopez-Gaona, UAM-I
• Jose Antonio De los Reyes, UAM-I
• Julia Aguilar, UAM-A

Ortho-dichlorobenzene oxidation over Pd/Co-sulfated zirconia washcoated minimonoliths
• Beatriz Helena Aristizábal Zuluaga, Environmental Catalysis Group, Universidad de Antioquia
• Catalina Valderrama, Environmental Catalysis Group, Universidad de Antioquia
• Consuelo Montes de Correa, Environmental Catalysis Group, Universidad de Antioquia

Catalytic Combustion of Natural Gas Dehydrator Emissions
• Naeimeh J Naghashkar, University of Alberta
• Long Wu, University of Alberta
• Joe Mmbaga, University of Alberta
• Robert E Hayes, University of Alberta
• Sieg E Wanke, University of Alberta

Syngas Production by Oxy-CO2 Reforming of Methane over PdNi catalyst
• Usman Oemar, National University of Singapore
• Sibudjing Kawi, National University of Singapore
• Kus Hidajat, National University of Singapore

Nitrates Abatement With Pd,In Alumina Supported Catalysts Continuous Down Flow Reactor Studies
• Gustavo Mendow, INCAPE FIQ UNL CONICET
• F Albana Marchesini, INCAPE FIQ UNL CONICET
• Carlos A Querini, INCAPE FIQ UNL CONICET
• Eduardo E Miro, INCAPE FIQ UNL CONICET

Synthesis, Characterization, and Photocatalytic Properties of ZnO/(La,Sr)CoO3 Composite Nanorod Arrays
• WenJie Cai, University of Connecticut
• Dunliang Jian, University of Connecticut
• Christopher Brooks, Honda Research Institute
• Pu-Xian Gao, University of Connecticut

Development Of Visible Light Based Photocatalysts With Improved Band Gaps
• Venkata Bharat Ram Boppana, University of Delaware
• Raul F Lobo, University of Delaware

HDS of 4,6-DMDBT in the presence of carbazole over NiMoP(x)/SiO2-Al2O3 catalysts
• Angelica Chicas-Reyes, Facultad de Química, Universidad Nacional Autónoma de México
• A Gutierrez-Alejandre, Facultad de Química, Universidad Nacional Autónoma de México
• Jorge Ramirez, Facultad de Química, Universidad Nacional Autónoma de México

CO oxidation on gold nanoparticles supported over titanium oxide nanotubes
• Mario Méndez, Universidad Nacional Autónoma de México
• Jorge Ramírez, Universidad Nacional Autónoma de México
• Rodolfo Zanella, Universidad Nacional Autónoma de México

A Study of Reaction Parameters and Catalytic Properties in Photodecomposition of Acetaldehyde over In, P-doped TiO2
• Joon-Woo Kim, KyungHee University
• Hae-Ri Kim, KyungHee University
• Byung-Yong Lee, AJ Drexel Nanotechnology Institute
• Suk-Jin Choung, KyungHee University

Catalytic Hydrodechlorination of PCBs by Pd/SBA-15 under Mild Condition
• Chi-Feng Cheng, Chung Yuang Christian University
• Ya-Wen Cheng, Chung Yuang Christian University
• Cheng-Ming Chang, Chung Yuang Christian University

Photocatalytic properties of TiO2 supported on NaTaO3 and NaTaO3 doped with Sm and La: Effect of the synthesis route
• Arquímedes Cruz-Lopez, Universidad Autónoma de Nuevo León
• Odilón Vazquez Cuchillo, Universidad Autónoma de Nuevo León
• Leticia M Torres-Martínez, Universidad Autónoma de Nuevo León

Effect of water on photocatalytic decomposition of tetrahydrofuran on TiO2
• Mogotu M Mogaka, University of Colorado, Boulder

Synthesis and Characterization of (ZrO2-TiO2)/Al2O3
• Josè Escobar, Instituto Mexicano del Petroleo
• Florentino Murrieta, Instituto Mexicano del Petroleo
• Marìa C Barrera, Instituto Mexicano del Petroleo
• Josè A De Los Reyes, Universidad Autonoma Metropolitana-Iztapalapa
• Carlos A Ulìn, Universidad Autonoma Metropolitana-Iztapalapa
• Armando Vàzquez, Universidad Autonoma Metropolitana-Iztapalapa

Poster Session 3 (Preliminary)

Low-Temperature Hydrocarbon/CO Oxidation Catalysis Supporting HCCI Emissions
• Kenneth G Rappé, Pacific Northwest National Laboratory
• Liyu Li, Pacific Northwest National Laboratory
• Jonathan Male, Pacific Northwest National Laboratory

Synthesis, Characterization and Photocatalytic Activity of M-TiO2
• Odilon Vazquez, Universidad Autónoma de Nuevo León

Reduction of Al-Cr Dehydrogenation Catalyst Selectivity as a Result of its Deactivation
• Vladimir Fridman, Sud-Chemie
• Elizabeth Romaine- Schmidt, Sud-Chemie

Olefin production by a two-step oxidative dehydrogenation in a novel perovskite hollow fiber membrane reactor
• Oliver Czuprat, Lebniz Universität Hannover
• Thomas Schiestel, Fraunhofer Institute for Interfacial Engineering and Biotechnology (IGB)
• Steffen Werth, Uhde GmbH
• Jürgen Caro, Lebniz Universität Hannover

Liquid phase degradation of dioxins over Pd/Al2O3
• Martha Cobo, University of Antioquia

Effect of Sulfur on Precious Metal Steam Reforming Catalysts
• S David Jackson, University of Glasgow
• Claire Gillan, University of Glasgow
• Martin Fowles, Johnson Matthey plc
• Sam French, Johnson Matthey plc

New Three-Phase Catalytic Reactors based on Carbon Nanotubes Grown over Structured Metallic Supports
• Antonio Monzon, University of Zaragoza
• Vanesa Martinez-Hansen, University of Zaragoza
• Nieves Latorre, University of Zaragoza
• José Ignacio Villacampa, University of Zaragoza
• Carlos Royo, University of Zaragoza
• Eva Romeo, University of Zaragoza
• Enrique Garcia-Bordeje, CSIC

Nanocrystalline Mesoporous Titania Catalysts for the selective oxidation of benzyl alcohol to benzaldehyde
• María L Carreon, Universidad Michoacana de San Nicolás de Hidalgo

Recycling and Utilization of Spent Hydroprocessing Catalysts
• Meena Marafi, Kuwait Institute for Scientific Research
• Antony Stanislaus, Kuwait Institute for Scientific Research

Extending Catalyst Life: Laboratory Aging Tests as
• Michael A Urbancic, Sud-Chemie Inc

Characteristics of Coke Formation over Pt/Al2O3 Catalysts in Propane Dehydrogenation
• Jinsoon Choi, Hyosung R&DB Labs
• Won-Il Kim, Hyosung R&DB Labs
• Hyong Lim Koh, Hyosung R&DB Labs
• Young Kyo Choi, Hyosung R&DB Labs

Kinetic Parameters Estimation for a Tubular Fischer-Tropsch Synthesis Reactor
• Du-Yeong Hwang, Ajou University
• Yun-Ha Kim, Ajou University
• Eun Duck Park, Ajou University
• Ho-Jung Chae, Korea Research Institute of Chemical Technology
• Sang-Bong Lee, Korea Research Institute of Chemical Technology
• Myung-June Park, Ajou University

Plasma Modification of Catalysts Using a Dielectric Barrier Discharge
• David T Lundie, Hiden Analytical Ltd
• Ja Rees, Hiden Analytical Ltd

An assessment of the industrial behavior of Cu-Cr/ñ-Al2O3 catalysts for combustion of exhaust gases
• Krasimir Ivanov, Agricultural University

Detailed Kinetic Analysis of NH3NO/NO2 SCR Chemistry over Fe- and Cu-zeolite Catalysts
• Antonio Grossale, Politecnico di Milano
• Isabella Nova, Politecnico di Milano
• Enrico Tronconi, Politecnico di Milano

Vanadium leaching from V2O5-SiO2 spent catalysts
• Lina-Maria Gonzalez-Rodriguez, Universidad de Antioquia
• Consuelo Montes de C, Universidad de Antioquia
• Iran-David Charry, Universidad de Antioquia

The Effect of Steam Oxidation on the Activity of Ceria-Praseodymia Mixed Catalysts in the Water-Gas-Shift Reaction
• Kevin Bakhmutsky, University of Pennsylvania
• Gong Zhou, University of Pennsylvania
• Steven Timothy, University of Pennsylvania
• Raymond J Gorte, University of Pennsylvania

Development of Efficient and Robust Nitro Reduction Process: Catalyst Selection and Thermo-kinetic Understanding
• Jale Muslehiddinoglu, Bristol Myers Squibb
• Nicolas Cuniere, Bristol Myers Squibb
• Tummala Srinivas, Bristol Myers Squibb
• Rossano Lucius, Bristol Myers Squibb

Investigation of pH Effect on Hydrogenation Reaction of Dextrose to Sorbitol using a Mo-promoted Sponge Ni catalyst
• J Matt Farmer, Johnson Matthey Catalyst
• Steven L McMahon, Johnson Matthey Catalyst
• Bruce M Lacey, Johnson Matthey Catalyst

Catalytic oxidative conversion of ñ1-ñ4 alkanes over supported catalysts on the base of 12 series heteropoly compounds
• Svetlana Tungatarova, DV Sokolsky Institute of Organic Catalysis and Electrochemistry

Deactivation and Regeneration of Chromia and Vanadia Catalysts in Alkane Dehydrogenation
• S David Jackson, University of Glasgow
• Sreekala Rugmini, University of Glasgow
• Madurani Edussuriya, University of Glasgow

Deactivation studies of NO oxidatio over commercial diesel oxidation catalyst by SO2, H2O, C3H6, Particulate Matter
• Joon-Woo Kim, KyungHee University
• Won-Mi Lim, KyungHee University
• Woong-Jae Lee, KyungHee University
• Jin Woo Choung, Hyundai-Kia Motors
• Suk-Jin Choung, KyungHee University

Electrooxidation over Ti/SnO2-Sb2O5 anodes for water condensates recovery in shuttle orbiters
• Luigi Rutigliano, Politecnico di Torino
• Debora Fino, Politecnico di Torino
• Guido Saracco, Politecnico di Torino
• Vito Specchia, Politecnico di Torino
• Paolo Spinelli, Politecnico di Torino
• Lucia Grizzaffi, Thales Alenia Space Torino

Structured catalysts for Intensified Integration of kW scale Auto-Thermal Reforming and Water Gas Shift Reactors
• Paolo Ciambelli, University of Salerno ITALY
• Vincenzo Palma, University of Salerno ITALY
• Emma Palo, University of Salerno ITALY
• Gaetano Iaquaniello, Technip KTI SpA

Coupling of Heck and Hydrogenation Reactions In a Continuous Compact Reactor
• Alexei Lapkin, University of Bath
• Xiaolei Fan, University of Bath
• Pawel Plucinski, University of Bath

Highly Selective Oxidation of Lactose to Lactobionic Acid over Low-Loading Pd-Bi/SBA-15 Catalyst under Microaerial Conditions
• Khaled Belkacemi, Université Laval
• Mirella Cristea Vlad, Université Laval
• Safia Hamoudi, Université Laval

Bimetallic Catalysts for Production of Narrow Diameter Distribution Single Wall Carbon Nanotubes (SWNT)
• Codruta M Zoican - Loebick, Yale University
• Salim Derrouiche, Yale University
• Lisa D Pfefferle, Yale University

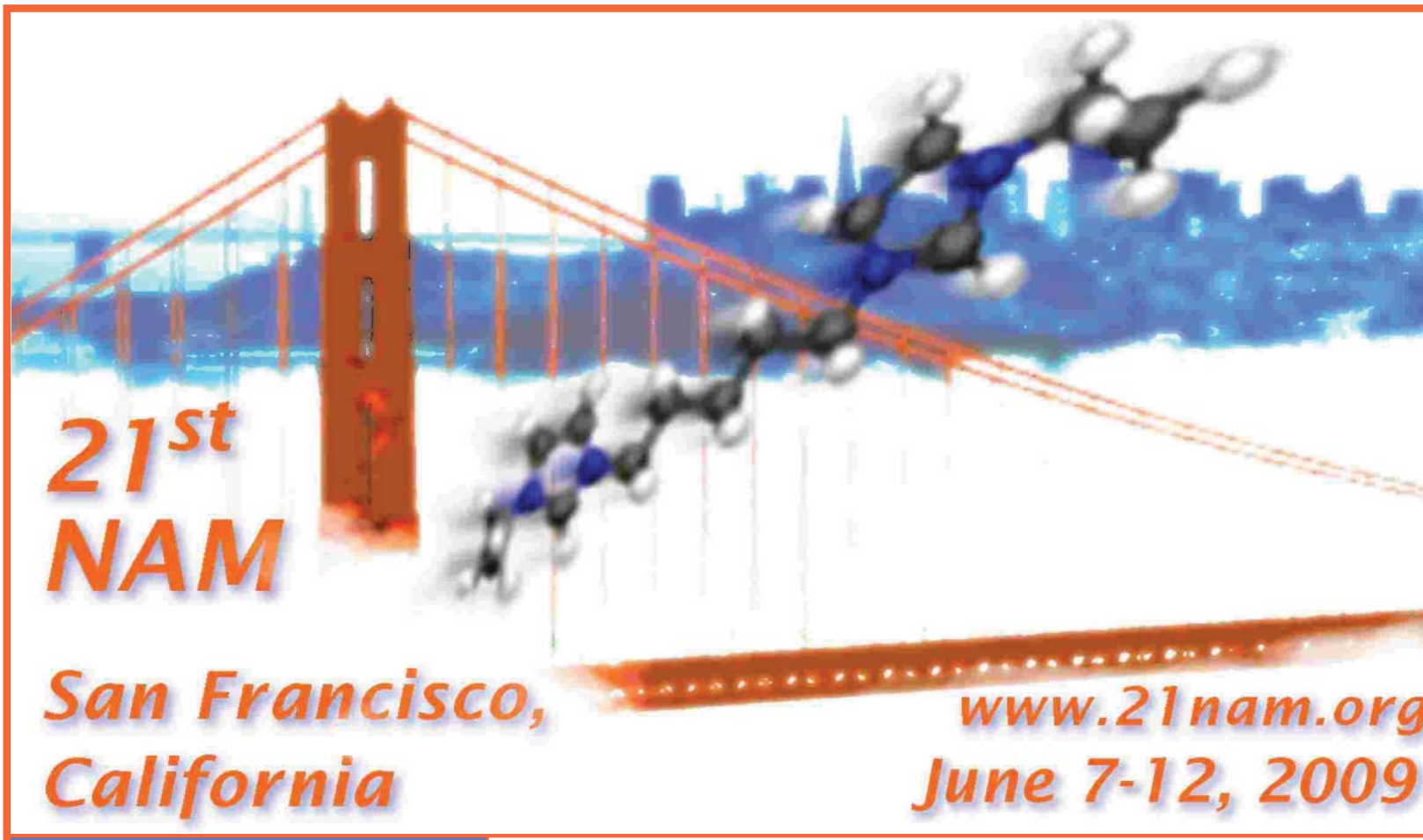
Application of Ba05Sr05Co08Fe02Ox Asymmetric Oxygen Permeable Membranes for Hydrocarbon Conversion Reactions
• Qiying Jiang, University of Kansas
• Sedigheh Faraji, University of Kansas
• Karen J Nordheden, University of Kansas
• Susan M Stagg-Williams, University of Kansas

Kinetic studies of nopol production over Sn-MCM-41 synthesized by impregnation
• Edwin A, Alarcón, Universidad de Antioquia
• Luis F Correa, Universidad de Antioquia
• Aída Luz Villa, Universidad de Antioquia
• Consuelo Montes de Correa, Universidad de Antioquia

NO and C oxidation with Pt recovered from spent catalytic converters
• Josè Carlos Caroca, Politecnico di Torino
• Nunzio Russo, Politecnico di Torino
• Debora Fino, Politecnico di Torino
• Guido Saracco, Politecnico di Torino
• Vito Specchia, Politecnico di Torino

Catalyst Supports for Selective Catalytic Reactions: Wire Mesh Screens vs Monoliths
• Federico Barrai, Columbia University
• Marco J Castaldi, Columbia University

An advanced gas-solid UV LEDs photocatalytic reactor for organic syntheses and environmental applications
• Paolo Ciambelli, University of Salerno ITALY
• Diana Sannino, University of Salerno ITALY
• Vincenzo Palma, University of Salerno ITALY
• Vincenzo Vaiano, University of Salerno ITALY
• Roberto S Mazzei, University of Salerno ITALY



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