

NACS Newsletter

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Jeffrey T. Miller is the recipient of the NACS 2010 F.G. Ciapetta Lectureship in Catalysis



Dr. Jeffrey T. Miller, currently Heterogeneous Catalysis Group Leader at Argonne National Laboratory, is the recipient of the 2010 F.G. Ciapetta Lectureship in Catalysis Award sponsored by the Grace Davison operating segment of W.R. Grace & Co. and The North American Catalysis Society. The Award is presented biennially in even numbered years and consists of a plaque and

an honorarium of \$5,000. The award plaque will be presented at the closing banquet during the 2011 Meeting of the North American catalysis Society. Dr. Miller will present lectures at the regular meeting of the affiliated local clubs and society during 2010 and 2011.

Dr. Miller is being recognized for his contributions to the scientific literature and to the practice of catalysis. His dedication and intensity in the pursuit of knowledge has led to industrial applications of his inventions and to a large number of scientific papers. His excellent contributions have advanced our knowledge of fundamental catalytic phenomena, while his interactions with academia have enriched the educational experience of many graduate students.

His research at BP/Amoco led to the development of several refining and petrochemical catalysts that remain in use. These include catalysts and processes for upgrading of highly aromatic feeds, for toluene disproportionation and transalkylation reactions, and for conversion of waste chemicals to high-value aromatic chemicals and fuel components. Through his academic collaborations, he has contributed to our fundamental understanding of acid-catalyzed hydrocarbon cracking by zeolites and to the synthesis, characterization and function of metal and alloy nanoparticles. He is widely regarded as a leader in the application of X-ray absorption methods during catalysis to probe synthetic pathways, identify active sites, and determine the dynamics of specific elementary steps within complex catalytic sequences. Upon retirement from BP/Amoco, he joined Argonne National Laboratory, where he continues his research on future sources of energy and his pedagogical endeavors in the application of X-ray spectroscopic methods to the study of catalysts and catalytic chemistries.

National Officers: **PRESIDENT** - Enrique Iglesia, University of California-Berkeley; **VICE-PRESIDENT** - Bruce R. Cook, BP Products NA, Inc.; **SECRETARY** - Hong-Xin Li, Zeolyst International; **TREASURER** - C. Y. Chen, Chevron Energy Technology Co.; **LEAD TRUSTEE** - John W. Byrne, BASF Catalysts LLC; **COMMUNICATIONS DIRECTOR** - Edrick Morales, LyondellBasell Industries.

Club Representatives: **Canada** - Ajay K. Dalai, University of Saskatchewan; **Chicago** - Christopher L. Marshall, Argonne National Laboratory; **Mexico** - Jose Antonio de los Reyes, Universidad Autonoma Metropolitana, Campus Iztapalapa; **Michigan** - Galen B Fisher, University of Michigan; **New England** - William C. (Curt) Conner, University of Massachusetts; **New York** - Israel E. Wachs, Lehigh University; **Pacific Coast** - Alex Katz, University of California-Berkeley; **Philadelphia** - Anne M. Gaffney, Langmuir Research Institute; **Pittsburgh-Cleveland** - Gotz Vesper, University of Pittsburgh; **Organic Reactions Society** - Christopher W. Jones, Georgia Institute of Technology; **Tri-State** (Kentucky/Ohio/West Virginia) - Juergen Ladebeck, Sud-Chemie; **Southeast** - Steven H. Overbury, Oak Ridge National Laboratory; **Southwest** - Brendan D. Murray, Shell Chemical LP; **Western States** - Will Medlin, University of Colorado at Boulder.

Directors-at-Large: Bruce Gates, University of California at Davis; Jingguang G. Chen, University of Delaware; Robert Davis, University of Virginia; Stuart Soled, Exxon Mobil Research and Engineering Co.

Nicholas Delgass is the recipient of the NACS Award for Distinguished Service in the Advancement of Catalysis



Professor W. Nicholas Delgass (Department of Chemical Engineering, Purdue University) is the recipient of the inaugural NACS Award for Distinguished Service in the Advancement of Catalysis. This Award will be presented every two years to recognize an individual who has advanced catalytic chemistry or engineering through both significant service to the catalysis community and out-

standing technical accomplishments. The award includes an honorarium (\$5,000) and a plaque. The latter will be presented at the closing banquet during the 2011 NAM in Detroit.

The career of Professor Delgass, over its four decades, exemplifies this combination of pioneering contributions to the science of catalysis, dedication and rigor in the education of scientists and engineers, and service to others in the advancement of catalysis. His research achievements include the synthesis of novel catalytic materials, the development of modern spectroscopic methods for catalyst characterization, and the use of rigorous kinetic and spectroscopic methods to elucidate the mechanism of complex catalytic reactions on solids. He is leading a team that is developing and implementing model-based approaches for the design and efficient optimization of new catalysts. Professor Delgass has been a remarkably gifted and dedicated teacher, both in the classroom and in the research laboratory. He has been recognized with the most prestigious teaching honors on the Purdue campus. In his service to students and peers as Associate Head of the School of Chemical Engineering, he has shown a true commitment to mentor and educate the next generation of chemical engineers. His passion for mentoring graduate students and young faculty was recognized with the inaugural College of Engineering Mentoring Excellence Award. Many among our catalysis community, in academia and in industry, have been touched by his thought-

ful advice. For many years, he was the zealous guardian and gentle steward of the archives of our discipline, as Editor-in-Chief of Journal of Catalysis. He has dedicated his time and efforts to the organization of the 11th International Congress on Catalysis and of numerous symposia at AIChE, ACS and Catalysis Society meetings. It is a fitting gesture of thanks that our community has chosen to recognize the scholarship and dedication of Professor Delgass with this inaugural award for service.

Local Club Student Awards

A reminder that each local club can apply for annual student awards totaling a maximum of \$1,000 per calendar year. The amount can only be used for students and is intended to support their involvement in catalysis. To receive an award, the club must be current with respect to dues paid to the Treasurer, Cong-Yan Chen (cy-chen@chevron.com), and most recent members mailing list submitted to the Secretary, Hong-Xin Li (Hong.Li@pqcorp.com), with a copy to the Communications Director, Edrick Morales (edrick.morales@lyondellbasell.com). Both dues and lists are due May of each year. A proposal must be submitted to the President, Enrique Iglesia (Eiglesia@aol.com), which outlines the projected use of the money. Full accounting of the funds has to be provided by the local club to the Treasurer within three months of the awards given. This award is to be distinct from the Kokes Awards for the NAM meetings. This award is to be used to support student participation at local club meetings and symposia within one Gregorian calendar year. This can include, but not limited to, meals, travel, living expenses, poster awards and registration fees. Local clubs need to allow one additional month for preparation of the check.

Henrik Topsøe Selected as Winner for 2010 Distinguished Researcher Award, ACS Division of Petroleum Chemistry



The Petroleum Chemistry Division of American Chemical Society is pleased to announce that Dr. Henrik Topsøe has been selected as the winner of the 2010 Distinguished Researcher Award.

Henrik Topsøe is being recognized for his outstanding research contributions to the understanding of hydrotreating catalysts. Henrik Topsøe is Execu-

tive Vice President at Haldor Topsøe A/S in Lyngby, Denmark. He received his Ph.D. degree in Chemical Engineering in 1972 from Stanford University. After a postdoctoral stay at Stanford, he joined the Haldor Topsøe Research Laboratories in 1974. Here he started the fundamental catalysis group and he has also been the manager of the catalysis research department. Henrik Topsøe is adjunct professor at the Technical University of Denmark (DTH) and has for many years been president of the Danish and Nordic Catalysis Societies and he is on the editorial boards of several catalysis journals. His awards include UOP International lecturer, Ford Distinguished lectures, Mason lecturer and the 2003 Glenn Award from ACS Fuel Chemistry Division. He was the first industrial researcher to be awarded The Francois Gault Lectureship from the European Federation of Catalysis Societies (2000). In 2005, the North American Catalysis Society awarded Henrik Topsøe the Eugene J. Houdry Award in Applied Catalysis.

A central theme in the research of Henrik Topsøe has been the establishment of a molecular basis for the design and production of improved industrial catalysts. In order to achieve this goal, Henrik Topsøe and his colleagues have over the years developed many important novel multidisciplinary techniques and approaches. Particular emphasis has been placed on understanding and developing improved hydrotreating catalysts, but many studies were also devoted to ammonia synthesis, metha-

nol synthesis and DeNO_x catalysts. At the time Henrik Topsøe and his colleagues started their research on hydrotreating catalysts, the catalyst systems were poorly understood. Consequently, special efforts were devoted to the development of new tools and in situ approaches which could provide the necessary atomic and molecular insight under relevant conditions. The studies were the first ones to reveal the nature of the active structures, the so-called Co-Mo-S family of promoted structures. Later studies have provided additional atomic insight into these structures and have elucidated the factors governing their production and how their activity and selectivity may be enhanced based on the optimization of support interactions and other catalysts features. This insight has been used by the industry worldwide for the introduction of many improved generations of catalysts – the latest being the Topsøe BRIMTM technology for several critical refining services including the production of Ultra Low Sulfur Diesel (ULSD). Henrik Topsøe has co-authored 180 publications, 3 books and has given more than 140 invited lectures.

An ACS Symposium in Honor of Henrik Topsøe is being organized by Prof. Chunshan Song of Penn State on behalf of ACS Petroleum Chemistry Division at the ACS National Meeting in Boston during August 22-26, 2010.

Catalysis scientists elected Fellows of the American Chemical Society



The American Chemical Society has announced (pubs.acs.org/cen/fellows/) the election of 192 members to its 2010 ACS Fellows program for their outstanding achievements and contributions to the science, the profession, and service to the society.

The class of 2010 was presented by ACS President Joseph S. Francisco, “*Whether it’s making new materials, finding cures for disease, or developing energy alternatives, these fellows are scientific leaders, improving our lives through the transforming power of chemistry*”. They were honored at the society’s fall national meeting in Boston.

These fellows include the following members of our catalysis community:

- Galen B. Fisher, University of Michigan
- Cynthia M. Friend, Harvard University
- Anne M. Gaffney, AMG Chemistry & Catalysis Consulting
- Enrique Iglesias, University of California at Berkeley
- Bruce D. Kay, Pacific Northwest National Laboratory
- Robert J. Madix, Stanford University
- Chunshan Song, Pennsylvania State University
- Kathleen Taylor, General Motors (retired)
- Yong Wang, Pacific Northwest National Laboratory
- Joseph R. Zoeller, Eastman Chemical Company

CONGRATULATIONS!

Chunshan Song Selected as Winner for 2010 Henry H. Storch Award from ACS



Chunshan Song, distinguished professor of fuel science in the Department of Energy and Mineral Engineering and Director of EMS Energy Institute at Penn State, received the Henry H. Storch Award in Fuel Chemistry from American Chemical Society (ACS) at the 240th ACS national meeting held in Boston, MA, during Aug 21-26, 2010. He received this presti-

gious award in recognition of his outstanding contributions to fuel science especially in the areas of clean fuels, catalysis, and CO₂ capture and conversion research.

The Henry H. Storch Award, co-sponsored by the Division of Fuel Chemistry of the ACS and Elsevier Ltd., is given annually to recognize an individual in the field of fuel science for an exceptional contribution to the research on the chemistry and utilization of hydrocarbon fuels. Special consideration is given to innovation and novelty in the use of fuels, characterization of fuels, and advances in fuel chemistry that benefit the public welfare or the environment. The award is the highest honor for research awarded by the ACS Fuel Chemistry Division.

Song was recently named a Distinguished Professor of Fuel Science by Penn State's Office of the President. He is also professor of chemical engineering in the Department of Chemical Engineering and Associate Director of the Penn State Institutes of Energy and the Environment. He received a PhD in 1989 in applied chemistry from Osaka University, Japan. He worked at the Research Center of Osaka Gas Company in Japan prior to joining Penn State in Nov 1989.

Song is internationally recognized for his original and innovative contributions to clean fuels, catalysis and CO₂ capture and conversion research. His early research at Penn State on catalytic coal liquefaction and the effects of drying coal on

coal conversion at low temperatures led to a new way of preparing highly active dispersed catalysts using water and sulfide precursor. Based on this discovery, further fundamental studies using probe molecules resulted in two patents for inventions on nano-sized ultra-high-surface metal sulfide catalysts that have been licensed to industry. From his efforts, he has designed shape-selective alkylation catalysts for synthesis of precursors for advanced polymers and engineering materials from naphthalene, which have been patented and licensed to industry. He has made major contributions to the development of coal-based advanced thermally stable jet fuels through his work on fundamental chemistry concerning the effects of intrinsic fuel composition and structure on thermal degradation of jet fuels, and his work on model compounds studies related to stable bicyclic structures and hydroaromatics and their tailored production through catalysis. These developments were part of the large, 20 year, U.S. government-funded jet fuel project led by Harold Schobert at Penn State, which has been scaled up to pilot plant production. For ultra-clean fuels and fuel cells, Song and his group devised an innovative approach to selective adsorption for removing sulfur from liquid hydrocarbon fuels over solid surface without using hydrogen, which has also been licensed to industry and already used for making prototype systems.

A prolific author of many high-impact publications, Song has delivered 40 plenary or keynote lectures at international conferences and 190 invited lectures worldwide. He has 170 refereed journal articles (which received over 4400 citations), 6 refereed books, 25 book chapters, 11 special journal issues, 20 patents and patent applications, and over 280 conference papers. A Storch Award Symposium in Honor of Chunshan Song was held at ACS Fall 2010 National

Meeting in Boston during August 2010.

22nd North American Meeting

The 22nd biennial meeting of North American Catalysis Society will be held June 5-10, 2011 at the Detroit Marriott at the Renaissance Center along the shores of the Detroit River and its 5-mile long Riverfront Walk. The meeting rooms are very close together on two floors of the



Marriott. Exhibits, posters, and food/drink during breaks will all be available in one ballroom to encourage interaction between exhibitors, poster presenters, and attendees. All attendees, including students, will be accommodated in this 75-story hotel designed by John Portman with its large food court for breakfast and lunch, five restaurants, and stunning views of the Detroit River, its Riverfront Walk, downtown Detroit, and the city of Windsor, Ontario. The hotel is surrounded by the four buildings of the GM World Headquarters. Room rates will be \$175/night with special rates for students and government employees. Walking or taking the circular downtown aerial tram loop or "People Mover" makes it easy to visit more restaurants, live theatre, casinos, or downtown venues of the Detroit Tigers, Detroit Redwings, and the Detroit Lions. Hosting the Super Bowl, the Stanley Cup, the NCAA

Final Four, and the Detroit Grand Prix has improved all aspects of the downtown area.

The meeting is hosted by the Michigan Catalysis Society and co-chaired by Galen Fisher and Johannes Schwank (University of Michigan). Dr. Charlie Kresge (The



Dow Chemical Company) serves as the Honorary Chair for the meeting. The technical program will include a number of keynote lectures, oral presentations, and posters. Robert McCabe (Ford Motor Company), Eric Stangland (The Dow Chemical Company) and Levi Thompson (University of Michigan) serve as the Program Chairs. Bill Epling (University of Waterloo) and George Graham (University of Michigan) are organizing the poster sessions. The major themes of the meeting are catalysis, materials, and reaction engineering for:

- Environmental protection.
- Industrial chemicals production.
- Energy and Fuel production & utilization.
- Emerging issues in novel catalytic materials, theory, and experimental methods.

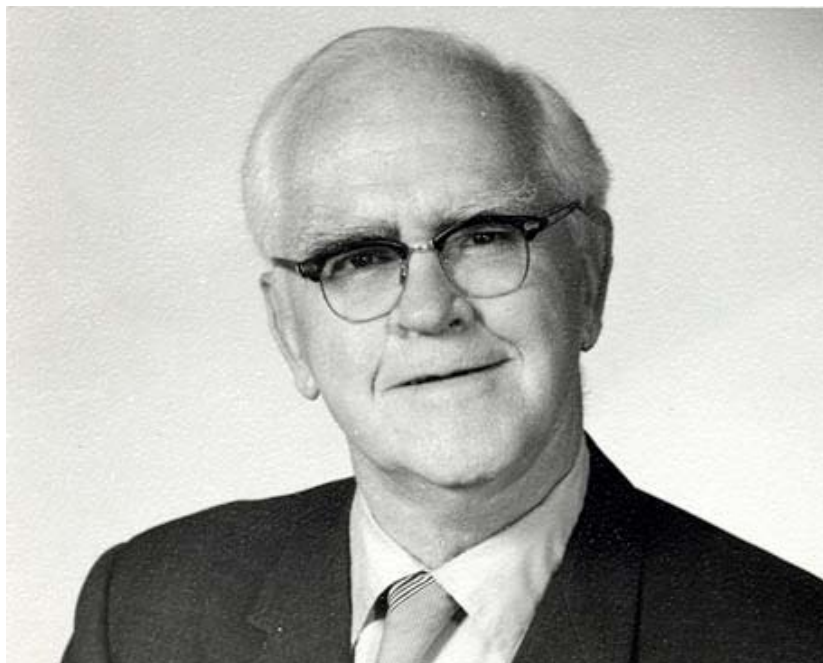
There will also be a special session in honor of Dr. Haren Gandhi of Ford Motor Company who passed away in late 2009.

Exhibits will showcase the latest innovations in instrumentation and process control technology from around the globe.



With the theme "Driving Catalysis Innovation" and with a good number of renowned keynote speakers and parallel technical sessions covering a wide range of contemporary topics in heterogeneous and homogeneous catalysis, this meeting is shaping up to be one you won't want to miss in 2011. We invite researchers from all countries to attend. For more information, please check out the website, www.22nam.org. The deadline for abstract and Kokes student travel award applications is **November 19, 2010**. We look forward to seeing you all at NAM 22 next June.

Nominations are Open for the Paul H. Emmett Award in Fundamental Catalysis



The Paul H. Emmett Award in Fundamental Catalysis is sponsored by the Davison Chemical Division of W.R. Grace and Company. It is administered by The Catalysis Society and is awarded biennially in odd numbered years, generally at the North American meeting of The Catalysis Society, where the awardee will be asked to give a plenary lecture. The award consists of a plaque and a prize of \$5,000. An additional \$500 is available for otherwise unreimbursed travel expenses.

The purpose of the Award is to recognize and encourage individual contributions in the field of catalysis with emphasis on discovery and understanding of catalytic phenomena, proposal of catalytic reaction

mechanisms and identification of and description of catalytic sites and species.

Selection of the Award winner will be made by a committee of renowned scientists and engineers appointed by the President of The North American Catalysis Society. Selection shall be made without regard for sex, nationality or affiliation. The award winner must not have turned 46 on April 1st of the award year, thus nomination documents should indicate the age and birthdate of the nominee. [The next award is the 2011 Award year for this Emmett Award (nominations due by 15 September 2010). Thus, nominees should not yet be 46 on April 1, 2011.] Posthumous awards will be made only when

knowledge of the awardee's death is received after announcement of the Award Committee's decision. Nominations for the Award should present the nominee's qualifications, accomplishments, birthdate, and biography. A critical evaluation of the significance of publications and patents should be made as well as a statement of the particular contribution(s) on which the nomination is based. Nomination documents should be submitted in one complete package to the President of the Society along with no more than two seconding letters.

Selection of the 2011 Emmett Award winner will be made by a committee of renowned scientists and engineers appointed by the President of The North American Catalysis Society. **Nomination packages for the Award must be received by 15 September 2010.**

All nomination packages (one ELECTRONIC COPY) for the Emmett Award should be sent to Enrique Iglesia, President, North American Catalysis Society; at iglesia@berkeley.edu. Receipt of any nomination, will be confirmed by an email message sent to the nominator.

Christopher Jones heads ACS Catalysis, new American Chemical Society journal

The American Chemical Society (ACS) Board of Directors announced the appointment of Christopher W. Jones, Ph.D., as Editor-in-Chief of ACS Catalysis, the newest journal in ACS's suite of highly cited, peer-reviewed journals.

ACS Catalysis will officially launch in January 2011 dedicated to publishing original research on and at the interfaces of heterogeneous catalysis, homogeneous catalysis and biocatalysis. Application coverage of ACS Catalysis will include life sciences, drug discovery & development, household products, polymer discovery & production, environmental protection and energy & fuels.

Darla Henderson, Ph.D., Assistant Director of Editorial Development in the ACS Journals Publishing Group expressed pleasure with having Jones on board as Editor-in Chief of ACS Catalysis. "Dr. Jones' vision for ACS Catalysis encompasses outreach to the catalysis community in a significant sense. Dr. Jones' research experience across several major research areas in the catalysis field overall, and collaborative work within the various aspects of catalysis provide a significant advantage to his service as the Inaugural Editor-in-Chief of ACS Catalysis."

"As both a catalysis scientist and as the Editor-in-Chief of ACS Catalysis, I am very excited about the potential of this new journal," Jones noted. "ACS Catalysis will offer a new forum for rapid and efficient dissemination of novel experimental or theoretical results in all areas of catalysis. The combination of breadth of topical coverage in catalysis, a fast and rigorous review of manuscripts, and the convenience and efficiency of the ACS Publications web platform uniquely position ACS Catalysis for success."

Jones is the Professor and J. Carl and Sheila Pirkle Faculty Fellow at the School of Chemical & Biomolecular Engineering and Adjunct Professor of Chemistry and Biochemistry at the Georgia Institute of Technology in Atlanta, Georgia.

His research interests are works in the broad areas of materials design and synthesis, catalysis and adsorption. His research group's work on the rational design of molecularly engineered materials draws from a number of different disciplines to enable the development of functional materials with applications in areas such as catalysis and separations.

Jones received his BSE in Chemical Engineering from the University of Michigan, his MS in Chemical Engineering from the California Institute of Technology, and his PhD in Chemical Engineering with a Minor in Chemistry from the California Institute of Technology. He is a member of the International Zeolite Association, the North American Catalysis Society, the Organic Reactions Catalysis Society, the American Society for Engineering Education, the American Institute of Chemical Engineers, and the American Chemical Society. He recently was awarded the 2010 Ipatieff Prize from ACS, recognizing outstanding chemical experimental work in the field of catalysis or high pressure, carried out by an individual of any nationality who is not over 40 years of age.



Venue: The University of Glasgow

It is the second oldest university in Scotland and the fourth oldest in the UK. Glasgow students walk in the footsteps of scientist Lord Kelvin, economist Adam Smith and pioneer of television John Logie Baird, among many others.

Founded in the fifteenth century, the University operated from Glasgow Cathedral during its fledgling years. Over the next 400 years it expanded in scope and size and was a centre of both the Industrial Revolution and the Scottish Enlightenment. The University relocated to its present home in the West End of the city in 1870.

The University has more than 6,000 staff, including 2,500 researchers, more than 15,000 undergraduate students, 4,900 postgraduate students and around 5,000 adult learners. It has been voted as having the best campus in Scotland and is a founder member of Universitas 21.

Accommodation

There are over 17,000 rooms in the Metropolitan Glasgow area. All are within easy reach of the conference venue. Choose from international 5 star resorts, attractive boutique style properties or budget and university accommodation.

Social Programme

An exciting programme is being planned. The conference will open in style with a welcome reception. This event is free to all delegates. Day tours can include visits to Stirling Castle, Loch Lomond and Edinburgh, as well as a city tour of Glasgow, featuring the Burrell Collection. A pre or post-congress tour can visit the Highlands and the Isle of Skye, taking in Loch Lomond, Glencoe, Loch Ness, the Spey Valley, distilleries.

Website

www.europacat.co.uk

KEY DATES

- Call for abstracts - 1st Nov 2010
- Deadline for submission - 28th Feb 2011
- Notification of Acceptance - 30th April 2011
- Registration Opens - 1st Jan 2011
- Conference - 28th August – 2nd Sept 2011

CONGRESS THEME

“Catalysis – Across the disciplines”

- Biocatalysis
- Chemical Engineering
- Homogeneous Catalysis
- Heterogeneous Catalysis
- Surface Science

GLASGOW

- Glasgow: Scotland’s cultural and shopping capital
- Access: Three international airports with direct flights from Europe, Middle East and North America
- Compact city: Easy to get around with a comprehensive public transport network
- Taste of Scotland: Over 800 restaurants and bars
- Gateway to Scotland: The Highlands, golf, distilleries and Loch Lomond, all within 35 minutes

THE CITY

At the heart of Scotland, Glasgow is undoubtedly one of Europe’s most dynamic cities: steeped in culture, rich in history, with its elegant streets, squares, parks and gardens. Glasgow has the finest civic arts collection in the UK, including the works of Botticelli, Degas, Van Gogh and Rembrandt to whet your appetite. All 27 museums are free. Glasgow, the first UK city to be a Cultural Capital of Europe, is home to Scottish Opera, Scottish Ballet and the Royal Scottish National Orchestra.

Neutrons for Catalysis: A Workshop on Neutron Scattering Techniques for Studies in Catalysis

The Office of Basic Energy Sciences Workshop report, Basic Research Needs: Catalysis for Energy, identifies catalysis as “the essential technology for accelerating and directing chemical transformation” and calls for “advanced experimental and theoretical methods ...to achieve deeper fundamental understanding, specifically for significantly enhanced temporal, spatial, and energy resolution of catalysts in the presence of complex reacting mixtures under realistic reaction conditions.” Neutron scattering methods are specifically identified in the report. To address this challenge a Workshop will be held September 16 and 17 at Oak Ridge National Laboratory (ORNL), the home of the Spallation Neutron Source (SNS) and the High Flux Isotope Reactor (HFIR). The goal of this workshop is to bring leaders in the catalysis and biocatalysis communities together with experts in neutron science to explore the use of neutron methods to address grand science challenges in catalysis.

The meeting will discuss five principle topics in five sessions:

- Meeting Grand Science Challenges in catalysis through neutron scattering techniques
- Structural characterization of catalysts and catalytic materials
- Probing dynamics of molecules in catalysts systems by inelastic neutron scattering
- Probing biocatalysis by neutron scattering methods

- Modeling of Catalysts, Catalysis and Neutron Experiments; A crosscutting activity

Speakers include:

- Peter Stair, Northwestern
- Eugene Mamontov, ORNL
- Jeroen A. van Bokhoven, ETH Zurich
- David Sholl, Georgia Tech
- Robert Blankenship, Washington University
- A. J. Ramirez-Cuesta, ISIS
- Juergen Eckert, UCSB and LANL
- Bruce Gates, UC Davis
- Peter Albers, AQura
- Thomas Proffen, LANL
- Paul Langan, LANL

Subsequent breakout sessions will be held to further explore the possibilities and potential for using neutron scattering methods for catalysis. Presentations are intended to mix experts in catalysis and experts in the use of neutron scattering methods for probing catalysis or catalytically relevant materials. Sessions will include extensive discussion and Q&A session. Breakout sessions will allow all participants an opportunity to explore how they might apply neutron methods to address the challenges in their catalysis research. By the end of the Workshop, the attendees should have the vision and knowledge to prepare

their own beamline proposal for performing experiments at the HFIR, SNS or other neutron science center

The planned output of this action-oriented workshop is:

- A dedicated issue of Topics in Catalysis including contributed and invited articles related to the use of neutrons to probe catalysis and catalytic materials
- A multi-author journal article that highlights and summarizes strategic areas, identified in the Workshop, where catalysis science could be advanced by neutron science.
- Identification of proof of principle catalysis experiments using neutrons that would be awarded beamtime in 2011, and
- Planning for a dedicated session at future American Chemical Society annual meeting.

For more information, see the Web site at : <http://neutrons.ornl.gov/conf/NandC2010/index.shtml> or contact Steven H. Overbury, Oak Ridge TN 865-574-5040; overburysh@ornl.gov.

Clubs & Societies News

Catalysis Club of Chicago

Herman Pines Award

Dr. James E. Rekoske, currently the manager of catalysis applications group within Honeywell's Speciality Materials UOP business unit, is the recipient of 2010 Herman Pines Award sponsored by UOP. The Award is presented annually to recognize an individual who has made significant contribution to catalysis in either fundamental research or industrial processes. The award includes a plaque, an honorarium of \$1000 and reimbursement for travel and lodging as a plenary speaker at 2010 Catalysis Club of Chicago Spring Symposium. The plaque was presented during the symposium at BP Naperville Research Center on May 19, 2010.

Jim is being recognized for his achievements in both fundamental and applied catalysis. His recently work at UOP includes breakthrough new process technology for the production of aromatics: a new adsorbent for the production of p-xylene, two new catalysts for the isomerization and trans-alkylation of xylenes, and a novel oxidation catalyst for the production of vinyl acetate monomer. Jim led the development of a novel Parex adsorbent (ADS-37) for simulated moving bed p-xylene purification. This adsorbent has been successfully commercialized in over 15 p-xylene complexes in the last three years and now accounts for

15% of the world's p-xylene production. Jim also invented and led the development of breakthrough high yield petrochemical catalysts in aromatics trans-alkylation and aromatic xylene isomerization. The new TA-20 HP trans-alkylation catalyst and the new aromatic isomerization catalyst have been major commercial successes in the last two years for UOP. Jim was a key contributor to the novel UOP MX SorbexTM process for recovering m-xylene from mixed xylene streams. This process revolutionized the manufacture of m-xylene and displaced all previous technology based on BF₃-complexation. This work received the 1999 Kirkpatrick Chemical Engineering Award. Jim is an inventor and key contributor for a novel oxidation catalyst for the selective oxidative acetoxylation of ethylene to produce vinylacetate monomer. This catalyst is commercialized and is being expanded around the world. Jim's technological breakthrough inventions has brought him 19 patents in the last three years and made significant contribution to higher utilization of one of the world's most precious resources, crude oil.

Jim's pioneer work of using microkinetics to elucidate reaction mechanism of heterogeneous catalysis in the 90's sparked the field of microkinetics modeling by showing how to incorporate kinetic parameters from fundamental experi-

mental and theoretical studies into first-principles kinetic models. The seminal book, *The Microkinetics of Heterogeneous Catalysis*, coauthored by Prof. Dumestic, Jim and two other authors, has been widely used as guiding resources for catalysis research.

Catalysis Club of Philadelphia

Spring Symposium

The Spring CCP symposium was held at Villanova University on May 13, 2010. The symposium focused on energy and environmental issues and brought together a mix of academic and industrial perspectives. Topics discussed include energy needs and efficiency, renewable chemicals, biomass production, electrocatalysis, fuel cells, materials for renewables, and emission control. The symposium was well attended with nearly 90 attendees. More details can be found at <http://www.catalysisclubphilly.org/symp10.php>. Thanks to all the presenters and attendees, Mike Smith for being an excellent local host, Alan Stottlemeyer (meeting coordinator and ad hoc treasurer) and Marguerite Mahoney of UD for organizing registration and other meeting logistics.

Clubs & Societies News

2010 Catalysis Club of Philadelphia Award



The catalysis club of Philadelphia is pleased to announce Dr. Chuck Coe as the recipient of the 2010 Catalysis Club of Philadelphia Award, in recognition of his outstanding contribution to adsorption science, catalysis, and applications of catalysts for organic syntheses.

Chuck joined the Chemical Additives division of Air Products and Chemicals after he obtained his PhD in inorganic chemistry from Carnegie Mellon University. While at Air Products, Chuck developed a commercial catalyst for accelerating the cure of polyester sheet molded plastics. This product is still being sold some 30 years later. Early in Chuck's career, he transferred to the Corporate research group at the Company headquarters and developed an extensive expertise in molecular sieve science, allowing him to contribute to a number of important successful commercially improved products and process offerings. For

many years, he teamed with project leaders across business units to enable the development of improved adsorbents and catalysts based on building structure/property relationships targeted initially at specific applications. He led the team that created improved adsorbents for the non-cryogenic production of oxygen and was a major contributor to improvements in carbon molecular sieves that allowed the production of high purity nitrogen. His greatest commercial success involved the modification of an adsorbent used to purify nitrogen trifluoride that is used in the production of integrated circuits.

Chuck was also instrumental in developing new analytical methods and instrumentation to obtain fundamental information on small experimental samples. In this area, his most notable accomplishment has been establishing an advanced high pressure microbalance system that operates up to 100 atm in the presence of up to 50 vol% steam that supports carbon dioxide capture, hydrogen production, and integrated fuel/energy processes. Chuck was also a key member of the DOE Center of Excellence on Carbon-centered Hydrogen Storage Materials and created a unique differential volumetric adsorption apparatus for measuring high pressure hydrogen isotherms on 50 mg samples, enabling the development of advanced hydrogen storage materials. Before retiring from Air Products, Chuck was named a strategic technologist

for the Corporation and provided internal consultation for a broad range of materials characterization issues involving catalysts, adsorbents, and membranes. His accomplishments have led to 34 issued US patents, 29 peer-reviewed publications, and numerous invited lectures.

Since retiring, Chuck has joined the Chemical Engineering faculty at Villanova and is sharing his knowledge with the next generation of scientists.

Please join us in congratulating Chuck on receiving the 2010 Catalysis Club of Philadelphia award.

Graduate Student Poster Competition

This is the first call for posters for the Catalysis Club of Philadelphia's annual Student Poster Contest to be held **Thursday, October 21, 2010** at the Wilmington Holiday Inn, Naamans Rd and I-95 at 5 PM.

To enter, please submit a short abstract of your proposed entry before October 7, 2010 to Elizabeth Ross-Medgaarden (elizabeth.ross-medgaarden@lyondellbasell.com)

The competition is restricted to graduate students. Post-docs are welcome to present their posters but are not eligible for prizes. All poster presenters should be listed as the first author, and will be guests of the Catalysis Club for the evening. Catalysis Club members and guests will cast their votes for favorite poster; then a select panel of industrial judges will select the 5 best post-

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ers from the top 10 posters. A total prize award of \$550 will be distributed between the winners; \$150 will go to the overall winner and \$100 each to the 4 other winners. The overall winner will be invited to present his or her work at the Catalysis Club's annual symposium in May 2011.

The Catalysis Club of Philadelphia is very proud of this event and views it as one of the region's premier opportunities for graduate students to showcase their work with the local chemical industry professionals. All graduate students whose work is either directly or indirectly related to catalysis science and technology are encouraged to submit entries.

Michigan Catalysis Society

After a strong series of invited lectures was completed in the fall of 2009, The Michigan Catalysis Society continued its 2009-2010 season with three additional dinner meetings in early 2010. The 2009-2010 season resumed on February 16th with a presentation from Professor Alex Katz of the University of California at Berkeley. Professor Katz presented some of his current work on synthesis of new organic-inorganic interfaces and demonstrated the use of grafted calixarenes as persistent surface ligands to study the effect of environment on Ti(IV) Lewis acid-catalyzed heterogeneous epoxidation catalysis. The MCS

was visited on March 10th by Dr. Jeff Miller from Argonne National Laboratory. Dr. Miller presented his work on X-ray spectroscopy in catalysis research and its application to Au catalysts. The MCS closed its 2009-2010 dinner meeting season on April 21st with a presentation from Professor Bruce Gates of the University of California at Davis as a 2010 Burwell Lecture. Dr. Gates gave an interesting presentation on "Restocking Burwell's Organometallic Zoo: Supported Metal Complexes and Metal Clusters with Well-Defined Structures".

Spring Symposium

The 32nd annual Spring Symposium of the Michigan Catalysis Society (MCS) was held at Washtenaw Community College in Ypsilanti, Michigan on May 13, 2010. Approximately 80 people attended the meeting, and there was a blend of representatives from industry and academic institutions. The represented companies included Delphi Corporation, The Dow Chemical Company, Ford Motor Company, and General Motors Company. The represented academic institutions included the University of Michigan, Michigan State University, the University of Notre Dame, Purdue University, the University of Toledo, and the University of Waterloo. Eight corporate sponsors, including the Dow Chemical Company, Toyota Motor Engineering & Manufacturing of North America, Eco Physics,

Hidden Analytical, Micromeritics, MKS Instruments, Thermo Fisher Scientific, and Umicore Automotive Catalysts, contributed to the great success of the meeting.

We are pleased to report that Dr. Guo-Shuh (John) Lee, retired from the Dow Chemical Company and currently working at the Pacific Northwest National Laboratory, was awarded the 2010 Michigan Catalysis Society Parravano Memorial Award for Excellence in Catalysis Research and Development. This was based on his 30-year career in chemical process development, which included pioneering work on the use of H-mordenite zeolite catalysts to produce several important chemical products such as 4,4'-dihydroxybiphenyl, ethylbenzene, and cumene. The Parravano Award for Excellence in Catalysis Research and Development is given biennially in even-numbered years to a researcher from the greater Michigan area to formally recognize outstanding contributions to catalysis research and technology development. The Parravano Awards are sponsored by the Memorial Trust Fund for Professor Giuseppe Parravano, which has been established by the Department of Chemical Engineering at the University of Michigan and administered by the Michigan Catalysis Society.

Dr. Lee gave the Parravano award lecture entitled "The Zeolite Mordenite Story" at the Symposium. Other presentations in the morning session included talks

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on Fischer-Tropsch synthesis using carbide and nitride catalysts, production of syngas and Fischer-Tropsch liquids from greenhouse gases, perovskite-based lean NO_x traps, characterization of precious metal-containing perovskite catalysts, and the chemical reactivity of alloy catalysts. The afternoon session was initiated by the invited lecturer, Dr. Dennis Miller from Michigan State University, who spoke on heterogeneous catalysts for biorefineries. Talks were also given on catalysts for hydrogen production from bio-ethanol, the electrocatalytic hydrogenation of triglycerides, dual SCR catalysts for lean NO_x aftertreatment, carbonate/carboxylate formation on lean NO_x traps, non-homogeneous thermal aging of diesel oxidation catalysts, and the reforming of iso-octane over Ni/CZO catalysts.

There were also several poster presentations regarding glycerol reformation on a Pt-Mo/C catalyst, catalysts for soot oxidation, Lewis acid catalysis in high temperature water, and Au-rutile catalysts for the water-gas-shift reaction. Michael Katz from the University of Michigan won the 2010 Outstanding Student Presentation Award for his talk on "*Structural and Chemical Characterization of Perovskite-Supported Precious Metal Catalysts by Atomic-Resolution Transmission Electron Microscopy*", and Paul Dietrich from Purdue University won the Student Poster Presentation Award for his poster on "*Liquid Phase Operando X-ray Absorption Spectroscopy (XAS): Glycerol Reforming over a Pt-Mo/C Catalyst*".

The society elected the following officers for 2010-2011 year during the Symposium business meeting: President - **Steven J. Schmieg**, General Motors Company; Vice President - **Beata A. Kilos**, The Dow Chemical Company; Secretary/Treasurer - **Joseph R. Theis**, Ford Motor Company; Directors - **George Graham**, University of Michigan; **Eric Stangland**, The Dow Chemical Company; and **Paul Fanson**, Toyota Motor Engineering & Manufacturing, North America.

Galen Fischer remains as the MCS representative to the North American Catalysis Society (NACS). The 2010-2011 monthly dinner meeting series of the Michigan Catalysis Society will begin in September. In the meantime, work is underway to prepare for the 22nd North American Catalysis Society Meeting in Detroit on June 5-10, 2011. The meeting will be held at the Detroit Marriot Hotel at the Renaissance Center. For more information, go to www.22nam.org.

Call for 2011 Parravano Memorial Award Nominations



Paul Fanson, 2009-2010 MCS president (left) and award winner Guo-Shuh (John) Lee, Dow Chemical (retired) and PNNL

We seek nominations for the 2011 Michigan Catalysis Society Giuseppe Parravano Memorial Award for Excellence in Catalysis Research. The Award will be presented at one of the dinner meetings of the Michigan Catalysis Society in the spring of 2011. The award winner will be invited to present an award address at the dinner.

The award is given biennially in odd numbered years to an individual from North America to formally recognize outstanding contributions to catalytic science and technology. A committee that is appointed by the officers of the Michigan Catalysis Society will select the recipient of the award. The award consists of a medal and a monetary prize of \$500. The award is sponsored by the Memorial Trust Fund for Professor Giuseppe Parravano and administered by the Michigan Catalysis Society.

An e-mail of intent to nominate should be sent to BAKilos@dow.com by **October 22, 2010**.

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Full nomination package must include the following:

1. Name, occupational address, phone, fax, and e-mail of the nominator.
2. Name, occupational address, phone, fax, and e-mail of the nominee.
3. Nominee's curriculum vitae and bibliography of significant publications.
4. A proposed citation - limit to 1 or 2 sentences.
5. A narrative statement describing the Nominee's award qualifications.
6. One confidential letter of support requested by the nominator.

Letters of nomination and supporting documentation must be received by **November 19, 2010**. It should be sent (electronic communication preferred) to:

Beata A. Kilos

The Dow Chemical Company
Applied Catalysis & Materials
Group, Core R&D
1776 Building, office B-16C
Midland, MI 48674
(989)-638-8290 (phone)
(989)-638-6225 (fax)
BAKilos@dow.com

It is the intent of the Michigan Catalysis Society to notify the Award winner by December 17, 2010.

Organic Reactions Catalysis Society

23rd Conference

The 23rd Conference on the Catalysis of Organic Reactions was held March 14-18, 2010 in Monterey, CA. Chaired by Dr. Alan Allgeier of Amgen, Inc. the conference featured technical sessions on Catalysis on Biorenewable Feedstocks, Coupling Catalysis in Organic Chemistry, Heterogeneous Catalysis for Hydrogenation, Chemo- and Enantioselective Homogeneous Catalysis and Novel Technologies in Catalysis. The conference attracted 162 participants just slightly more than 2008 conference, suggesting the health of the field in spite of difficult economic times.

At the conference the 2009 Paul Rylander Award was bestowed on Dr. Hans Ulrich Blaser of Solvias, AG in recognition of his many career accomplishments in practical chemoselective and enantioselective catalysis. Prof. Matthias Beller of the Leibniz Institute for Catalysis at the University of Rostock was awarded the 2010 Paul Rylander Award for his outstanding contributions, enabling new and practical synthetic methodology via homogeneous catalysis. The Murray Raney Award is granted to a scientist demonstrating excellence in the development of activated base metal catalysts; Dr. Steve Schmidt of W.R. Grace is the 2010 awardee

and noted for developments in noble metal modifications to Raney(R) catalysts.

ORCS is grateful for the efforts of many volunteers who made the 23rd conference a success, including members of the society's Board of Directors and Editorial Board, whose names are listed at www.orcs.org.

The Society will publish the proceedings of the 23rd conference through a special volume of Topics in Catalysis. The move to journal publication over the historical publication in a book supports efforts to improve the visibility and electronic accessibility of the proceedings. Keeping with tradition, attendees will receive a hard bound volume of the proceedings for their personal libraries.

Following recent elections, the leadership of ORCS transferred to a new administration led by Chair, Dr. John Holladay of Pacific Northwest National Laboratory. Prof. Susanah Scott of the University of California - Santa Barbara was elected Chair-Elect and will lead the society beginning in 2012. Other newly elected officers and directors are listed at www.orcs.org and the Club Directory in this newsletter.

Organic Reactions Catalysis Society Awards

The Organic Reactions Catalysis Society is pleased to announce its award winners, who will be honored at the 23rd ORCS Conference

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March 14-18, 2010 in Monterey, CA USA.



Dr. Hans-Ulrich Blaser is the recipient of the 2009 Paul Rylander Award. Dr Blaser is currently Chief Technology Officer at Solvias AG, having spent 25+ years at Solvias and predecessor organizations (Novartis, Ciba-Geigy). His main scientific contributions are in the development of chemoselective and stereoselective hydrogenation reactions, both heterogeneous and homogeneous reactions. He is the co-author of more than 175 research papers in the field of catalysis, as well as numerous review articles and book chapters. Two examples of his accomplishments are: the Blaser variant of the Heck reaction using aryl chlorides instead of aryl bromides, and the technical realization of a catalyst for the enantioselective synthesis of (S)- Metolachlor, in which his team achieved a catalytic hydrogenation process with and unprecedented 2 million turnovers. As a scientist and manager, Dr. Blaser

has consistently been a leader in bridging academia and industry.



Dr. Stephen R. Schmidt is the 2010 Raney Award winner. He received his B.S. in Chemistry from Benedictine University in 1978 and his Ph.D. in Physical Chemistry from Iowa State University in 1985. In 1987 he joined the research staff at Grace-Davison where remains to this day. Steve was very recently promoted to Research Fellow, the highest technical level within W.R. Grace.

In his 22 years at Grace Steve has made significant contributions to the Raney catalyst technology. The most far-reaching of which was the development of the platinum group metal promoted Raney nickel catalysts, materials which showed improved activity and stability in the hydrogenation of functional groups such as the triple bond and the aromatic nitro group. The importance of this work is not only the presence

of the Pt or Pd in the nickel catalyst but also the detailed development of the catalyst for each specific purpose.



Professor Matthias Beller is the 2010 Recipient of the Paul Rylander Award. Prof. Beller is currently the Director of the Leibnitz Institute for Catalysis. Prof. Beller has published nearly 400 original publications and is co-author on more than 80 patent applications. Over the last twenty years he has devoted his efforts to the development of catalytic methods for the functionalization of aryl halogenides, enantioselective oxidation reactions, metal catalyzed telomerization, hydroformylation, amination and carbonylation. He has been especially successful in his research on palladium catalyzed cross coupling reactions. His work has opened the way to new concepts in construction of complex molecules. He has received many awards including the Leibnitz Prize, the most important scientific award in Germany.

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Professor Emeritus Robert Augustine of Seton Hall University and Director of the Center for Applied Catalysis is the recipient of the 2010 Malz Award for exceptional service to the Organic Reactions Catalysis Society. He has been associated with the ORCS from its first meeting in 1966 and during the first thirty years he was actively involved in the organization and governance of the society. Bob Augustine was also a member of the group which was responsible for the formation of ORCS and was active in developing the Constitution and By-Laws of the Society. He has been a member of the Executive Committee from 1975 through 1996 in various capacities, including Chair of the 1986 conference. Beyond formal involvement in the Society, Bob has also offered enthusiastic support and advice to numerous ORCS Chairs.

Pacific Coast Catalysis Society

The Pacific Coast Catalysis Society (PCCS) successfully hosted the 21st Meeting of the North American Catalysis Society in June of last year. Subsequently, new elections were held and the following are the current officers: Chuck Peden, Chair; Susannah Scott, Vice-Chair; Kaidong Chen, Treasurer; Richard Brutchey, Secretary; and Alex Katz, NACS Representative.

The 2010 Annual Meeting of the Pacific Coast Catalysis Society was held on March 19 – 20, 2010 in the Waterfront Activity Center at the University of Washington's Seattle, WA campus. Do Heui Kim and Chuck Peden co-organized the symposium. Highlights of the two day meeting included the Ciapetta lecture by Dr. Robert Farrauto (BASF), Burwell lecture by Prof. Bruce Gates (UC Davis), and three invited speakers (Prof. Harold Kung, Northwestern; Prof. Annabella Selloni, Princeton; and Dr. Mike Henderson, PNNL). The meeting covered a variety of topics including surface science, photo-catalysis, catalytic steam reforming, hydrotreating for desulfurization, and environmental catalysis.

The annual meeting included participants from 5 universities and 2 national laboratories, and attendees enjoyed the unseasonably warm spring weather on the edge of Seattle's beautiful Lake Washington. Financial support for the meeting was provided by the Institute

for Interfacial Catalysis at Pacific Northwest National Laboratory, and by the Elsevier journal, Surface Science. In addition, the NACS generously provided funding that enabled student participation at reduced cost and student presentation awards. 1st and 2nd prizes for this student presentation competition went to Ms. Wanda Lew and Mr. Jason Sellers (both from University of Washington), respectively.

Southeastern Catalysis Society

Ninth Annual Symposium

The symposium is scheduled for September 26th and 27th, 2010 at the Crowne Plaza Resort, Asheville, North Carolina. Pre-registration deadline is September 17, 2010. Please look at the back cover for a copy of the registration form.

Program

The meeting will begin with a poster session and cash bar at 5:00 p.m. on Sunday, September 26th followed by dinner at 7:00 p.m. Our after-dinner lecture on Sunday evening will be given by Dr. Jeff Miller from the Argonne National Lab, who is the winner of the 2010 Ciapetta lectureship of the North American Catalysis Society.

Contributed oral presentations will be scheduled for Monday morning beginning at 8:30 am. The meeting will adjourn around 3 pm.

Abstract Submission

Oral and poster presentations are

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solicited from industrial and academic scientists and engineers (including post-docs and graduate students) working in basic and applied heterogeneous catalysis research. The SECS Eastman Chemical Award will be given for the best student poster presentation. Brief abstracts (1-page maximum) should be e-mailed to Dr. Steve Xiao (steve.xiao@srnl.doe.gov) no later than 5 pm on Friday, September 17, 2010.

Please use the guidelines below to prepare your one page abstract (If you prefer oral/poster, please let me know):

- Title (centered, bold).
- Author(s) with Affiliation(s) (centered).
- Body (text): Body Single Space, double space in between paragraphs, don't indent the paragraphs.
- References/footnotes: 1' margins using Times New Roman font in 12 points.

Accommodations

Participants requiring overnight accommodations should make their reservations directly with the Crowne Plaza Asheville Resort (www.ashevillecp.com) by calling (800)733-3211. Refer to the Southeastern Catalysis Society when making reservations in order to receive the SCS meeting rate of \$119/night. Only a limited number of rooms are available, so make your reservations as soon as possible! The deadline for room reservations at the guaranteed rate is September 5, 2010.

Registration

All participants (students and professionals) must register for the meeting. The registration fee is \$85 which includes dinner on Sunday evening, lunch on Monday, and a meeting abstract book. Please fill out the attached registration form and mail it with your payment. Pre-registration is preferred although participants will be able to register on-site. If you plan to register at the meeting, please let us know in advance that you plan to attend, (by email to steve.xiao@srnl.doe.gov), so that we can arrange an appropriate number of meals.

Tri-State Catalysis Society

Computational Catalysis Workshop & Annual Symposium



Dr. Juergen Ladebeck was presented with the Tri-State Catalysis Society Founders award and with the 'Kentucky Colonel'.

The Tri-State Catalysis Society (KY, OH, and WV) organized a one day workshop on computational catalysis, named 'The Juergen Ladebeck Workshop' in honor of Sud-Chemie Inc.'s recently retired R&D Director and former Tri-State President. The workshop was held on March 16th at the Galt House hotel in Louisville, Kentucky, and future workshops are planned once a year in Dr. Ladebeck's honor. The invited Key Note Speakers were Dr. Larry Curtiss from Argonne National Lab, Dr. James Muckerman from Brookhaven National Lab, Dr. Ye Xu from Oak Ridge National Lab and Dr. Jerry Spivey from Louisiana State University. The topics of discussion included computational studies of catalysts

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at sub-nanometer levels, photosynthesis, hydrogenolysis of small oxygenates, and atomic level design of catalysts. During this workshop Dr. Ladebeck was presented with the Tri-State Catalysis Society's Founders' award and Sud-Chemie Inc. presented Dr. Ladebeck with the 'Kentucky Colonel', an honorary title bestowed upon individuals by approval of the governor of Kentucky.



Dr. Burton Davis was awarded the first Synfuels Award of the Tri-State Catalysis Society.

The Tri-State Catalysis Society also held its Annual Spring Symposium on April 26th, 2010 at the Cincinnati Rivercenter Embassy Suites Hotel in Covington, KY. The Symposium's Key Note Speakers included Dr. Bruce Gates (Burwell Lecturer) from the University of California, Davis and Dr. David Stern from Exxon Mobil Research & Engineering Co. The Symposium covered a variety of topics on catalysis using both oral and poster presentations: Water-gas shift, NO_x trap, zeolites, hydrocarbon ammoxidation and dehydrogenation, Solid Oxide Fuel Cells, and DFT studies. The Symposium had a wide participation from both Industry and Academia (Süd-Chemie Inc., Cummins, University of Kentucky, University of Cincinnati, University of Louisville and Ohio State University). The winning student poster was selected by a panel of judges and was awarded to graduate student Preshit Gawade and his co-authors (Burcu Mirkelamoglu and Dr. Umit Ozkan) of the Ohio State University for his poster titled "Water Gas Shift over Cu/CeO₂ nanocrystals: Effect of morphology, impregnation medium, reduction temperature and Cu content".

During the Tri-State Annual Symposium, Dr. Burtron H. Davis was awarded the first SYNFUELS AWARD of the

Tri-State Catalysis Society. The SYNFUELS AWARD will be presented every three years to a laudable recipient for his/her significant contribution to further the advancement of synthetic fuels development. The next award recipient will be announced at the 2013 North American Catalysis Society meeting, which will be hosted by the Tri-State Catalysis Society at the Galt House hotel in Louisville, Kentucky.

Western States Catalysis Club

Ninth Annual Symposium

The Western States Catalysis Club held its 2010 meeting on February 26 in Provo, Utah. All of the participants, judges and the Keynote Speaker (Robert Burwell lecturer Bruce Gates) really made the event a success with their presentations of leading edge catalysis research. Additionally, a great deal of thanks goes to the NACS that allocated \$1000 to us for the meeting, allowing us to help with the registrations for 16 students. In all, there were 15 technical presentations and more than 50 attendees.

The business meeting included selecting Will Medlin as the club representative to the national organization and Morris Argyle to continue as treasurer. A great deal of thanks should also be directed to Will, Jim and Morris for their service to the club. Finally, it was also decided during the business meeting that the 2011 meeting would be in New Mexico.

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Catalysis Society of Metropolitan New York

2011 Award for Excellence in Catalysis: Request for Nominations

The Catalysis Society of Metropolitan New York is seeking nominations for its thirtieth annual "Award for Excellence in Catalysis." The award, sponsored by Exxon-Mobil Research and Engineering Company, consists of a plaque and a \$1,500 gift. It is granted to an individual or a research team from North America to recognize outstanding contributions in either applied or basic research in either homogeneous or heterogeneous catalysis. Particular effort is made to identify worthy individuals or teams who have not received sufficient recognition for their work.

This award will bring due recognition to the recipient(s), and we appreciate your help in seeking first-rate candidates. We especially need to fortify our active nomination list! Nominations are solicited from anyone who is currently, or has been previously, active in the field of catalysis. Nominations previously submitted as well as new ones will remain active for a period of three years.

Those wishing to submit a nomination should write a letter of recommendation for the individual nominee or team, including pertinent biographical information and

a specific description of the impact of the nominee's achievements in catalysis. The maximum length of the letter should be no more than two pages. It may be accompanied by copies of no more than two items presenting important documentation, such as papers or patents.

Deadline for receipt of nominations is **January 31, 2011**. Nominations for consideration should be sent to:

Changkun Liu

Headwaters Technology Innovation Group
1501 New York Ave.
Lawrenceville, NJ 08648
cliu@headwaters.com

Past Recipients of the Award

1982 J.A. Rabo (Union Carbide)
1983 K. Klier (Lehigh)
1984 W. Kaeding, et al (Mobil)
1985 A. Vannice (U. of Pennsylvania)
1986 J. Lunsford (Texas A&M)
1987 F.J. Karol, et al (Union Carbide)
1988 S.J. Tauster (Engelhard)
1989 Bruce C. Gates (Delaware)
1990 W. Keith Hall (Pittsburgh)
1991 N.Y. Chen (Mobil)
1992 H.S. Gandhi (Ford)
1993 Gary L. Haller (Yale)
1994 James A. Dumesic (Wisconsin)
1995 Gary McVicker (Exxon)
1996 Israel Wachs (Lehigh)
1997 John Newsam (Molecular Simulations)
1998 Terry Baker (Northeastern)
1999 Shun Fung (Exxon)
2000 Henry C. Foley (Delaware)
2001 J.F. Brazdil, et al (BP Chemical)
2002 Amir H. Hoveyda (Boston College)
2003 Stu Soled (ExxonMobil)
2004 Ralph Dalla Betta (Catalytica)
2005 Fabio Ribeiro (Purdue)
2006 W. Nicholas Delgass (Purdue)
2007 Terry Collins (Carnegie-Mellon)
2008 Jingguang Chen (Delaware)
2009 Jeffrey T. Miller (Argonne / BP)
2010 Charles Dismukes (Rutgers University)

Clubs & Societies News

2010 - 2011 Meeting Program

The list below is the most current (as of 9/9/10) list of speakers for the 2010-2011 Seminar series of the Catalysis Society of Metropolitan New York. Dinner meetings are held at the Somerset – Bridgewater Crowne Plaza, 110 Davidson Ave., Somerset, NJ 08873 (732-560-0500).

Meeting Schedule

September 15th

- » Bill Lonergan, University of Delaware - 2010 Spring Symposium Poster winner
- » Miguel Banares, Madrid, Spain

October 20th

- » Federico Barrai, Columbia - 2010 Spring Symposium Poster winner
- » Suljo Linic, University of Michigan

November 17th

- » Christopher Marshall, Argonne Labs

January 19th

TBD

February 16th

Maria Giordana-Parvano, Madrid, Spain

March

- » Spring Symposium
- » Keynote - Jeffrey T. Miller, NACS 2010 F.G. Ciapetta Lectureship
- » Time & Place TBD

April 20th

Chris Jones - 2010 ACS Ipatieff Award winner

ACS Division of Catalysis Science and Technology Off to A Good Start

AMERICAN CHEMICAL SOCIETY
Catalysis and Science and Technology Division (CATL)



The new ACS Division of Catalysis Science and Technology (CATL) had tremendous attendance, standing room only for many of the sessions, at the recent annual spring ACS San Francisco meeting. The CATL Division sponsored the following sessions: From Surface Science to Heterogeneous Catalysis (ACS Symposia in honor of the Gabor A. Somorjai Award to Robert J. Madix and the ACS George A. Olah Award in Hydrocarbon or Petroleum Chemistry to Peter C. Stair). Ipatieff Prize Symposium in honor of Christopher W. Jones, Supported Molecular Catalysis and Catalysis for Sustainability (Photocatalysis for Fuel Synthesis, Catalysis for Biorenewable Energy Applications, CO₂ Conversion and Utilization, and Fuel Cells). At the ACS meeting in Boston the following sessions were sponsored by the CATL Division: Operando and In Situ Spectroscopy, Surface Science of Catalysis, Catalysts for Energy Storage and a General Catalysis session. In addition, CATL also cosponsored a symposium on Heterogeneous Catalysis for Environmental and Sustainable Energy Applications with the Division of Environmental Chemistry.

The ACS CATL Division, however, is still has ACS probationary status since it currently has 200 members and 250 members are

required to establish a new ACS division. We hope that you will join the ACS CATL Division and help make it a permanent fixture at ACS meetings where the latest topics can be presented and discussed in a timely manner twice a year. Membership in the ACS CATL Division is only \$10.00/year. For the academics, please also encourage your students to join the new ACS CATL Division. Additional information can be obtained on the web at www.catl.sites.acs.org.

2010–2011 Club Officers Directory

Canadian Catalysis Division

Chair

Ajay K. Dalai

University of Saskatchewan

Ajay.dalai@usask.ca

Vice-Chair

Bill Epling

University of Waterloo

wepling@cape.uwaterloo.ca

Secretary/Treasurer

Tom Baker

University of Ottawa

rbaker@uottawa.ca

Past Chair

Flora Ng

University of Waterloo

fttng@cape.uwaterloo.ca

Members-at-Large

Steve Brown

Nova Chemicals

brownsj1@NOVAChem.com

Kunal Karan

Queens University

karan@chee.queensu.ca

Alan Nelson

The Dow Chemical Company

aenelson@dow.com

Gregory Patience

Polytechnique Montreal

Gregory-s.patience@polymtl.ca

Natalia Semagina

University of Alberta

semagina@ualberta.ca

Kunal Karan

University of New Brunswick

yzheng@unb.ca

Representative to NACS

Ajay K. Dalai

University of Saskatchewan

Ajay.dalai@usask.ca

Catalysis Club of Chicago

Web site: catalysisclubchicago.org

President

Siddhesh Shevade

BP America

Siddhesh.Shevade@BP.com

Vice President and Program

Chair

Dr. Feng Xu

UOP LLC

Feng.xu@uop.com

Secretary

Rafael Alcala

BP America

rafael.alcala@bp.com

Treasurer

Dr. Wolfgang A. Spieker

UOP

wolfgang.spieker@uop.com

Director

Guanghui Zhu

UOP LLC

Guanghui.Zhu@uop.com

Director

Professor Peter C. Stair

Northwestern University

pstair@northwestern.edu

Director

Alak Bhattacharyya

UOP LLC

Alak.bhattacharyya@uop.com

Representative to NACS

Dr. Christopher L. Marshall

Argonne National Laboratory

Marshall@anl.gov

Catalysis Club of Philadelphia

Web site: catalysisclubphilly.org

Chair

Dion Vlachos

University of Delaware

vlachos@udel.edu

Chair-Elect

Joseph Fedeyko

Johnson Matthey

fedeyjm@jmsusa.com

Past Chair

Michael Smith

Villanova University

michael.a.smith@villanova.edu

Treasurer

Steve H. Harris

LyondellBasell Industries

stephen.harris@lyondellbasell.com

Secretary

Parag Shah

PQ Corporation

parag.shah@pqcorp.com

Program Chair

Robert Cochran

rcochrandfac@gmail.com

Arrangements Chair

Kevin Bakhmutsky

University of Pennsylvania

kbakh@seas.upenn.edu

Director Membership

Wei Huang

Air Liquide

wei.huang@airliquide.com

Director Poster Competition

Elizabeth Ross-Medgaarden

LyondellBasell Industries

Elizabeth.Ross-Medgaarden@lyondellbasell.com

2010–2011 Club Officers Directory

Director Sponsorship
Bjorn Moden
Zeolyst International
bjorn.moden@pqcorp.com
Webmaster
Edrick Morales
LyondellBasell Industries
edrick.morales@lyondellbasell.com
Representative to NACS
Anne Gaffney
Langmuir Research Institute
annemgaffney@comcast.net
**Catalysis Society of
Metropolitan New York**
Web site: nycsweb.org
Chairman
Marco J. Castaldi
University of Columbia
mc2352@columbia.edu
Secretary
Amanda Josey
BASF
amanda.josey@basf.com
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John Brody
ExxonMobil, Clinton
john.f.brody@exxonmobil.com
Chairman-Elect
Changkun Liu
Heatwaters
cliu@headwaters.com
Past Chairman
Ruma Ghosh
Lummus Technology a CB& I Co.
rghosh@cbi.com
Director
John Byrne
BASF Catalysts LLC
john.byrne@basf.com

Director
Jeff Yang
BASF
jeff.yang@basf.com
Director
Dave Harris
BASF Catalysts LLC, Iselin, NJ
david.h.harris@basf.com
Webmaster
Jennifer Wade
BASF
jennifer.wade@basf.com
Past-Chairman
Wolfgang Reuttinger
BASF Catalysts LLC, Iselin, NJ
wolfgang.ruettinger@basf.com
Representative to NACS
Israel Wachs
Lehigh University
iew0@Lehigh.EDU
**Mexican Academy of
Catalysis**
Web site: acat.org.mx/
President
Alfredo Aguilar Elguezabal
Centro de Investigacion en Ma-
teriales Avanzados
alfredo.aguilar@cimav.edu.mx
Vice President
Nancy Martin Guaregua
Universidad Autonoma Metro-
politana, Campus Iztapalapa
mgnc@xanum.uam.mx
Treasurer
Julia Aguilar Pliego
Universidad Autonoma Metro-
politana, Campus Azcapotzalco
apj@correo.azc.uam.mx
Secretary
Amelia Olivas Sarabia
Universidad Nacional Autonoma
de Mexico, CNyN
aolivas@cnyunam.mx

Director
Alfredo Guevara Lara
Universidad Autonoma del Es-
tado de Hidalgo
guevaraa@uaeh.edu.mx
Director
Mirella Gutierrez
Universidad Autonoma Metro-
politana, Campus Azcapotzalco
gam@correo.azc.uam.mx
Director
Esthela Ramos Ramirez
Universidad Autonoma de Gua-
najuato
ramosre@quijote.ugto.mx
Representative to NACS
Jose Antonio de los Reyes
Universidad Autonoma Metro-
politana, Campus Iztapalapa
jarh@xanum.uam.mx
Michigan Catalysis Society
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Steven J. Schmieg
General Motors Company
steven.j.schmieg@gm.com
Vice President
Beata A. Kilos
The Dow Chemical Company
BAKilos@dow.com
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Toyota Motor Engineering &
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paul.fanson@tema.toyota.com
George Graham
University of Michigan
gwgraham@umich.edu

2010–2011 Club Officers Directory

Eric Stangland
The Dow Chemical Company
EESangland@dow.com
Representative to NACS
Galen B. Fisher
Delphi Corporation (retired)
University of Michigan
gbfisher@umich.edu
New England Catalysis Society
President
Therese Campbell
United Technologies Research Center
campbeta@utrc.utc.com
Vice-President
Ravi Datta
Worcester Polytechnic Inst.
rdatta@wpi.edu
Secretary
Eric Altman
Yale University
eric.altman@yale.edu
Treasurer
George Huber
University of Massachusetts
huber@ecs.umass.edu
Representative to NACS
William Curtis Conner
University of Massachusetts
wconner@ecs.umass.edu
Organic Reactions Catalysis Society
Web site: orcs.org
Chair, 2012
John Holladay
Pacific Northwest National Laboratory
John.holladay@pnl.gov
Chair@orcs.org

Chair Elect
Susannah Scott
University of California - Santa Barbara
Email: sscott@engineering.ucsb.edu
Past Chair
Alan M. Allgeier
Amgen
allgeier@amgen.com
Secretary-Treasurer
Karl Albrecht
Pacific Northwest National Laboratory
Karl.albrecht@pnl.gov
treasurer@orcs.org
Webmaster
Setrak Tanielyan
Seton Hall University
tanielse@shu.edu
webmaster@orcs.org
Assistance from Phillip Prunier
(cessnan704jq@sbcglobal.net)
Non-North American Director
Johannes G. de Vries
DSM
Hans-JG.Vries-de@dsm.com
Directors to 2014
Brian G. Conway
Pfizer, Inc.
brian.g.conway@pfizer.com
Venu Arunjatesan
Evonik Degussa
venu.arunajatesan@evonik.com
Bala Subramaniam
University of Kansas
bsubramaniam@ku.edu
Directors to 2012
Michael A McGuire
GSK Pharmaceuticals
michael_a_mcguire@gsk.com

Steve Perri
Eastman Chemical Company
sperri@eastman.com
Representative to NACS
Christopher W. Jones
Georgia Institute of Technology
cjones@chbe.gatech.edu
Pacific Coast Catalysis Society
Chair
Chuck Peden
Pacific Northwest National Laboratory
chuck.peden@pnl.gov
Vice-Chair
Susannah Scott
University of California, Santa Barbara
sscott@engineering.ucsb.edu
Treasurer
Kaidong Chen
Chevron Technology and Marketing
kaic@chevron.com
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Richard Brutchey
University of Southern California
brutchey@usc.edu
Representative to NACS
Alex Katz
University of California, Berkeley
askatz@berkeley.edu
Pittsburgh–Cleveland Catalysis Society
Web site: pitt.edu/~gveser/pccs/index.html
President
Faiz Pourarian
Carnegie Mellon University
fp23@andrew.cmu.edu

2010–2011 Club Officers Directory

President-Elect
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Pennsylvania State University
mjanik@psu.edu
Treasurer
Robert Rioux
Pennsylvania State University
rioux@engr.psu.edu
Secretary
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U.S. D.O.E. National Energy
Technology Laboratory
pccs07@gmail.com
Director/Representative to NACS
Götz Vesper
University of Pittsburgh
gveser@engr.pitt.edu
Past President
Jim Miller
Carnegie Mellon University
pccatalysis@comcast.net
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University of South Carolina
willia84@engr.sc.edu
Vice President/President-Elect
David Mullins
Oak Ridge National Laboratory
mullinsdr@ornl.gov
Past President/Chairman
H. Henry Lamb
North Carolina State University
lamb@ncsu.edu
Secretary
Steve Xiao
Savannah River National Labora-
tory
steve.xiao@srnl.doe.gov

Treasurer
David A. Bruce
Clemson University
dbruce@clemson.edu
Director/ Representative to
NACS
Steven H. Overbury
Oak Ridge National Laboratory
overburysh@ornl.gov
**Southwest Catalysis
Society**
Chair
Michael Wong
Rice University
mswong@rice.edu
Chair-Elect
Michael Reynolds
Shell Global Solution
mike.reynolds@shell.com
Secretary
Andy Moreland
Valero
andy.moreland@valero.com
Treasurer
George Stanley
LSU, Dept. of Chemistry
gstanley@lsu.edu
Director
Scott Mitchell
Sabic Americas Inc.
smitchell@sabicus.com
Director
John Novak
BASF
john.novak@basf.com
Director
Bert Chandler
Trinity University
Bert.Chandler@Trinity.edu

Representative to NACS
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Shell Chemical Lp
brendan.murray@shell.com
Tri-State Catalysis Society
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Center of Applied Energy Center
graham@caer.uky.edu
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Rajesh Khatri
Center of Applied Energy Center
Khatri@caer.uky.edu
Representative to NACS
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Sud-Chemie
juergen.ladebeck@sud-chemie.
com
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Ryan M. Richards,
Colorado School of Mines
rrichard@mines.edu
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mdargyle@uwyo.edu
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will.medlin@colorado.edu

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September 26th & September 27th, 2010

Crowne Plaza Asheville Resort

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