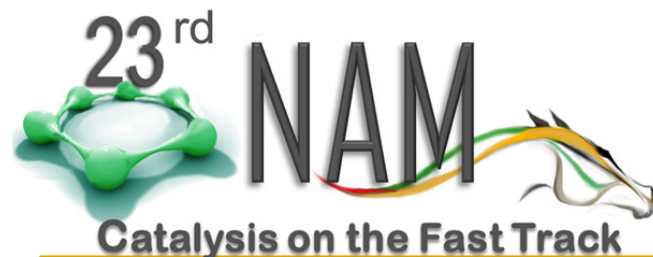


# NACS Newsletter

VOLUME XLVI, ISSUE 2  
WWW.NACATSOC.ORG



**23<sup>rd</sup> North American Catalysis  
Society Meeting  
2013**

June 2-7, 2013  
Louisville, Kentucky

[www.NAM23.org](http://www.NAM23.org)

NACS Awards and  
Process

Local Student Club  
Awards

Emmett Award  
Deadline  
30 September 2012

2012 Eni Awards

Update - 23<sup>rd</sup> NAM

NACS Membership  
and Dues

Boudart Award  
Deadline  
30 November 2012

17<sup>th</sup> IZC

Club News

Club Officers

Update - ICC Travel  
Grants

Precious Metals  
Award

ABC-7 Symposium

23<sup>rd</sup> NAM Brochure

## North American Catalysis Society Awards and Process

### Awards presented by the North American Catalysis Society

The North American Catalysis Society sponsors six prestigious awards and lectureships to recognize the accomplishments of catalysis scientists and to promote the advancement of catalysis science in North America and worldwide. These awards are described in the NACS web site ([http://www.nacatsoc.org/awards\\_desc.asp](http://www.nacatsoc.org/awards_desc.asp)).

Three of these awards include plenary lectures at NACS biannual meetings (Eugene J. Houdry Award in Applied Catalysis, Paul H. Emmett Award in Fundamental Catalysis, Michel Boudart Award for the Advancement of Catalysis, the latter jointly presented with the European Federation of Catalysis Societies). The F.G. Ciapetta and Robert Burwell Lectureships in Catalysis involve lectures at local club meetings and the presentation of the awards at the NACS meeting banquet. The NACS Award for Distinguished Service in the Advancement of Catalysis is the most recent recognition instituted by the Society. All of these awards are presented every two years and the nomination deadlines are listed in the NACS web site.

### Canvassing and Nomination Processes

NACS encourages all nominations for these awards and nominators and nominees need not be NACS members. The President instructs the Vice President to form a canvassing committee for each cycle of every award to ensure a full slate of outstanding candidates. This

committee is led by the NACS Vice-President and consists of previous award recipients and recognized experts within the catalysis community at-large. The committee identifies worthy candidates and its Chair seeks nominators for these candidates, but provides no specific guidance about the preparation of the nomination packages beyond that provided on the NACS web site. The Chair also instructs the Secretary to contact all NACS local representatives to request that they canvass for nominations within their local sections. All nomination deadlines and cycles are also announced in the quarterly NACS newsletter.

### Award Recipient Nomination Process

The jury that selects each NACS award recipient consists of scientists and engineers recognized as experts and representing industry, academia, and national labs. The members of this jury must have no affiliation with any of the nominees and are specifically asked to disclose any conflicts of interest and to disqualify themselves without prejudice when a conflict exists. The selection jury is appointed by the NACS President, who seeks guidance in selecting its members from the Vice President and from senior members of the catalysis community. The identity of the jury members is kept in the strictest confidence and known only to the President; the members are also required to keep their participation in these committees confidential.

The NACS President provides the jury with the nomination packages for all candidates within two weeks of the deadline; in the intervening time, potential jury members are asked about their willingness to serve. The members of the jury rank the candidates and provide specific details for their selection in the case of the top three candidates. In some cases, jury members are asked to again rank the top two candidates side-by-side, after considering their respective nomination packages once again.

The recipient of the Award and his/her nominators are informed of the decision of the jury, followed by notification of jury members and of nominators of the other candidates. A formal announcement, composed by the President in consultation with the recipient and the nominator, is published in the NACS web site and the NACS newsletter and soon thereafter in Chemical and Engineering News. The awards are all presented at the biennial NACS meeting, where the respective citations are read and the award winners receive a plaque.

The NACS community at-large deserves congratulations and thanks for the excellent cadre of nominees that it has put forth and chosen and for their dedication as nominators and as members of the jury.

Thanks.

*Enrique Iglesia*  
President

*Bruce Cook*  
Vice President

**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.

**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, IN-VISTA; **Pittsburgh-Cleveland** - Gotz Vesper, University of Pittsburgh; **Organic Reactions Catalysis Society** - Christopher W. Jones, Georgia Institute of Technology; **Tri-State** (Kentucky/Ohio/West Virginia) - Uschi Graham, University of Kentucky; **Southeast** - Steven H. Overbury, Oak Ridge National Laboratory; **Southwest** - Kerry Dooley, Louisiana State University; **Western States** - Will Medlin, University of Colorado at Boulder.

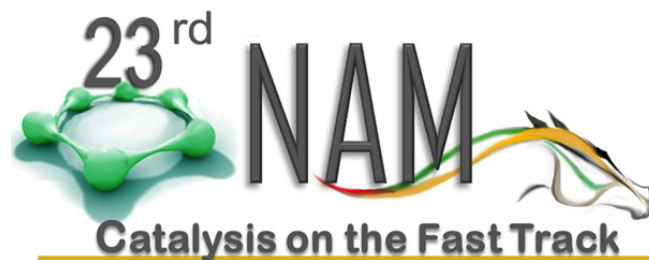
**Directors-at-Large:** Bruce Gates, University of California at Davis; Jingguang G. Chen, University of Delaware; Robert Davis, University of Virginia; Stuart Soled, Exxon Mobil Research and Engineering Co.

**Copyright © 2012 The North American Catalysis Society**

## Update: 23<sup>rd</sup> NAM

In preparation for the 23<sup>rd</sup> North American Catalysis Society Meeting in Louisville, Kentucky (2-7 June, 2013) the Tri-State Catalysis Society has organized several committees to work on the overall meeting agenda, and to shape the scope of the scientific program. The meeting theme for the 23<sup>rd</sup> NAM will be: "Catalysis on the Fast Track" and the meeting venue will take place at the historic Galt House Hotel which is located in the heart of Louisville. The opening reception of the 23<sup>rd</sup> NAM will take place at Churchill Downs, home of the Kentucky Derby. Important dates and a timeline for the 23<sup>rd</sup> NAM are listed in the meeting brochure (see enclosed brochure) and can also be downloaded by visiting: [www.NAM23.org](http://www.NAM23.org)

Online Abstract Submission has already started on August 10, 2012 and can be initiated by following the link on our website [www.NAM23.org](http://www.NAM23.org) to begin a submission. Abstract submission is encouraged in the following topic areas: ADVANCES IN CATALYTIC REACTION



## 23<sup>rd</sup> North American Catalysis Society Meeting 2013

June 2-7, 2013  
Louisville, Kentucky

[www.NAM23.org](http://www.NAM23.org)

ENGINEERING; CATALYSIS FOR ENERGY APPLICATIONS; CATALYSIS FOR FINE AND INDUSTRIAL CHEMICALS; CATALYSIS FOR SUSTAINABILITY; CATALYST DEACTIVATION AND REGENERATION; CATALYST DESIGN AND SYNTHESIS; COMPUTATIONAL CATALYSIS; EMERGING AND CROSS-CUTTING AREAS; FUNDAMENTALS OF CATALYSIS and NOVEL CATALYST CHARACTERIZATION TECHNIQUES. **All abstract submissions will be accepted until November 16, 2012.**

KOKES Award applications can also be submitted by following the Abstract Submission link on the 23<sup>rd</sup> NAM website and special instructions and guidelines for

students are provided. All abstract submissions (general and Kokes Award Applications) will be open until November 16, 2012. Notification of acceptance of oral and poster presentations, as well as notification of awarded Kokes grants are expected to be made in early February. Companies interested in exhibiting at 23<sup>rd</sup> NAM should contact the Exhibits Chair by going to the website.

**Abstract Submission  
Deadline is  
November 16, 2012**

## Travel Grants for Attendance at the International Congress on Catalysis

The Society gratefully acknowledged the financial support of DOE, NSF, BASF, BP, SüdChemie, and Dow for travel support for catalysis researchers from the United States, Canada and Mexico to attend the ICC meeting in Munich.

Travel assistance was provided to:

- Young faculty in a tenure-track position (Aditya Bahn, Cathy Chin, Phillip Christopher, Steven Crossley, Lars Grabow, Simon Podkolzin, Carsten Sievers, Yyriy Roman)
- Post-doctoral fellows (David Flaherty, Monica Garcia, Rajamani Gounder, Jan Kopyscinski, Alexander Okrut, Farnaz Sotoodeh, Aleksandra Vojvodic).
- Graduate students, all of whom received partial support from the industrial sponsor and carried a named fellowship designation:

- (i) BASF Fellows (Andrew Foster, Samia Ilias, Amber Janda, Matthew Montemore, Simon Pang, Natalie Ray, Di Wu)
- (ii) BP Fellows (Maria Teran and Victoria Whiffen)
- (iii) Dow Fellows (Matthew Boucher, John Copeland, Shannon Klaus, Wen-Sheng Lee, Michael Nigra, Jing Lu, and Dario Prieto).

The selection committee members were Jingguang Chen (Chair), Bruce Cook, Enrique Iglesia and Israel Wachs.

## Local Student Club Awards

A reminder that each local club can apply for annual student awards totaling a maximum of US\$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 will have to be current with (1) the annual membership dues, (2) the membership list and (3) the brief report of your previous local meeting which received the award. The annual membership dues are paid to the Treasurer, Cong-Yan Chen (cychen@chevron.com) and the most recent members mailing list submitted to the Secretary, Hong-Xin Li (Hong.Li@pq-corp.com), with a copy to the Communications Director, Edrick Morales (edrickmorales@live.com). Both dues and lists are due the end of each calendar year.

A proposal must be submitted to the President, Enrique Iglesia (Eiglesia@aol.com) prior to the local meeting and outline the projected use of the money. A brief report on the NACS funding for student participation at the local meeting has to be provided by the local club to the Treasurer within six weeks after the meeting.

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.

## NACS Membership and Dues

There are two ways for becoming a NACS member: (1) join the local catalysis club near you and pay your membership fee to the local club, which automatically makes you a member of the NACS, or (2) if you are not close enough to any local club or if it is not convenient for you to attend the local club meetings, you can choose to become a “Member-at-Large” of the NACS. If you want to become a Member-at-Large, send a check for the membership fee directly to the NACS Treasurer, C. Y. Chen.

The current annual membership dues are: US\$20 for regular members, US\$5 for students and retirees. A “retiree” is defined as one who has stopped full-time professional activities. The local clubs should make out the checks for the collected membership dues to “North American Catalysis Society” and sent it to the Treasurer at the following address:

*C.Y. Chen*  
NACS Treasurer  
Chevron Energy Technology Co.  
Room 10-2320  
100 Chevron Way  
Richmond, CA 94802, USA  
Phone: (510) 242-1860

## International Precious Metals Institute Henry J. Albert Award to Professor Fabio Ribeiro

Professor Fabio Ribeiro of the Department of Chemical Engineering at Purdue University has been named the recipient of the 2012 International Precious Metals Institute Henry J. Albert Award, sponsored by BASF Corporation, in recognition of his outstanding theoretical and experimental contributions to the science and technology of precious metals. His research group combines measurements on realistic dispersed clusters and flat model systems with precision and reliability at the state-of-the-art. He has provided the kinetic data set for water-gas shift that represents the standard used by others in benchmarking of other materials and of theoretical estimates. This work has also demonstrated the strong effects of supports in the activation of water in water-gas shift and that all exposed surface atoms are active on Pt clusters but only corner atoms with low coordination are active on Au clusters. His seminal studies of NO<sub>x</sub> reactions have unveiled the mechanism of NO oxidation and provided elegant examples of the use of spectroscopic and kinetic tools in unraveling the complex pathways in NO<sub>x</sub> trapping on Ba-promoted Pt/alumina systems. His group continues to expand the experimental frontiers with recent developments X-ray absorption spectroscopy during catalysis at high pressures in liquid and gaseous media, with infrared analysis of adsorbed species during isotopic transients, and with state-of-the-art environmental transmission electron microscopy. These successes build on his earlier studies of Pd catalysts which defined the reaction pathways involved in catalytic combustion of methane and in catalytic hydrodechlorination of a wide range of hydrochlorofluorocarbon molecules.

## 2012 Eni Awards

*San Donato Milanese (Milan), 16 May 2012* - Eni has announced the names of the winning researchers and scientists of the fifth edition of the Eni Awards, established in 2007 and now an international reference point for energy and environmental research.

The “New Frontiers of Hydrocarbons” prize (Upstream) was awarded to **Fabio Rocca**, professor emeritus of Telecommunications at the Politecnico of Milan, and **Alessandro Ferretti**, CEO of “Tele-Rilevamento Europa” (TRE) for the development of a new algorithm for processing data from satellite observation systems.

The “New Frontiers of Hydrocarbons” prize (Downstream) was awarded to **Enrique Iglesia**, Professor of Chemical Engineering at the University of California, Berkeley, for the development of hydrocarbon synthesis catalysts which improve process efficiency and reduce waste and energy use.

The “Renewable, non-conventional energy” prize was awarded to **Harry A. Atwater**, Professor of Applied Physics and Materials Science at the California Institute of Technology, and **Albert Polman**, Director and Scientific Group Leader of the FOM Institute AMOLF in Amsterdam, for creating a new generation of ultra-thin solar cells.

**Barbara Sherwood Lollar**, Professor of Geology at the University of Toronto, was awarded the “Environmental protection” prize for developing techniques for monitoring the presence and quantity of stable carbon isotopes in groundwater.

The two “Research Debut” awards, reserved for scientists under 30 years of age, were conferred to **Silvia Comba** and **Jijeesh Ravi Nair**, both from the Politecnico of Turin.

Source: [http://www.eni.com/en\\_IT/media/press-releases/2012/05/2012-05-17-Conferral-2012-Eni-Awards.shtml](http://www.eni.com/en_IT/media/press-releases/2012/05/2012-05-17-Conferral-2012-Eni-Awards.shtml)

## 17<sup>th</sup> IZC

The International Zeolite Association together with the Russian National Zeolite Association extend a cordial invitation to all colleagues in the field of zeolites and ordered porous materials to participate in the 17<sup>th</sup> International Zeolite Conference (17<sup>th</sup> IZC), which will be held from July 7 to July 12 2013 in Moscow, Russia. The Conference will cover all aspects of the science and technology associated with ordered porous materials – zeolites, zeotypes, mesostructured materials and porous hybrid solids (MOFs). The extremely high rate of the discovery of novel ordered porous nanomaterials, on the one hand, and the increasing demand in catalysts, adsorbents, membranes, sensors, etc. for new sustainable technologies, on the other hand, will set the concept of the conference:

*“Zeolites and ordered porous materials: bridging the gap between nanoscience and technology”*

The Conference will be preceded by an Intensive Summer School (July 5-6, 2013), which will be organized at the Educational Center of Moscow State University. A Post-Conference Field Trip is scheduled for July 13-15, 2013 in the beautiful area of Karelia very rich in minerals. Deadline for abstract submission is 1<sup>st</sup> December 2012.

For more information visit [www.izc17.com](http://www.izc17.com).

## Paul H. Emmett Award in Fundamental Catalysis

*Nominations are open,  
deadline is 30 September 2012*

The Paul H. Emmett Award in Fundamental Catalysis is sponsored by the Grace Davison operating segment of W.R. Grace & Co. 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 birth date of the nominee. [The next award is the 2013 Award year for this Emmett Award (**nominations due by 30 September, 2012**). Thus, nominees

should not yet be 46 on April 1, 2013.) 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 2013 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 30 September 2012.**

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

## 7th International Symposium on Acid-Base Catalysis (ABC-7)

On behalf of the organizing committee, I am pleased to announce the 7th International Symposium on Acid-Base Catalysis (ABC-7), which will be held from May 12 to May 15, 2013 at Shinagawa, Tokyo, Japan.

The ABC is a successful series of symposia. The 7th ABC will provide a forum for scientists and engineers from both academia and industry to discuss most recent developments and technological opportunities in this vibrant area of research as well as the past ABC symposia, promoting a global and interdisciplinary approach towards both fundamental science and industrial applications of acid-base catalysis. We hope many people engaging in the acid-base catalysis field participate in ABC-7.

The scientific activities of the symposium will be held at TKP Garden City Shinagawa, which is in front of Shinagawa Station in Tokyo. This area has good access to Narita International Airport (total time: 70~80 min.) and Haneda Airport (Tokyo International airport) (total time: 15~20 min.).

On detailed information on abstract submission, registration, access to the conference venue, and scientific programs, please visit our website: <http://www.shokubai.org/abc/index.html>.

Please note the deadline for abstract submission: November 16, 2012.

Now you can find the titles of Plenary and Keynote Lectures on the website.

We look forward to meeting you at the symposium.

Best regards,

*Takashi Tatsumi*  
Chairman of ABC-7

*Michikazu Hara*  
General secretary of ABC-7

## Michel Boudart Award for the Advancement of Catalysis

*An Award presented jointly by the North American Catalysis Society and the European Federation of Catalysis Societies.*

***Nominations are open, deadline is 30 November 2012***

The Michel Boudart Award for the Advancement of Catalysis is sponsored by the Haldor Topsøe Company, and is administered jointly by the North American Catalysis Society and the European Federation of Catalysis Societies. The Award will be presented biennially in odd numbered years. The recipient will give plenary lectures at the biannual meetings of the North American Catalysis Society (NAM) and the European Federation of Catalysis Societies (EFCATS) (EuropaCat). The award consists of a plaque or object of art and a prize of \$6,000. Up to an additional \$2,000 will be made available for otherwise non-reimbursed travel expenses.

The Award recognizes and encourages individual contributions to the elucidation of the mechanism and active sites involved in catalytic phenomena and to the development of new methods or concepts that advance the understanding and/or practice of heterogeneous catalysis. The Award selection process will emphasize accomplishments and contributions published within the five preceding years. Candidates may be nominated without any restriction of national origin, thus reflecting the international scope of the career and contributions of Michel Boudart.

The recipient of the Michel Boudart Award will be selected by a committee of renowned researchers appointed jointly by the Presidents of the North American Catalysis Society and the European Federation of Catalysis Societies. The selection shall be made without regard for age, sex, affiliation, or national origin. Recipients of

NACS Awards or Lectureships within the last 5 years are eligible for the Michel Boudart Award.

Nominations should clearly state the qualifications and accomplishments of the nominee and should also include a CV and no more than two supporting letters. 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. Each nomination is to be submitted as one complete package (nomination letter, CV, 2 supporting letters, and justification).

After September 2012, one complete electronic copy of the nomination packages for the 2013 Boudart Award should be sent to the President of The North American Catalysis Society (Enrique Iglesia; [iglesia@berkeley.edu](mailto:iglesia@berkeley.edu)) or the President of The European Federation of Catalysis Societies (Avelino Corma; [acorma@itq.upv.es](mailto:acorma@itq.upv.es)) by **30 November 2012**. Nominators should expect to receive email confirmation of their submission.

## 23<sup>rd</sup> NAM Timeline

**August 10, 2012** - Call for papers and Kokes applications

**September 1, 2012** - Early registration begins

**November 16, 2012** - Deadline for submission of abstracts and Kokes applications

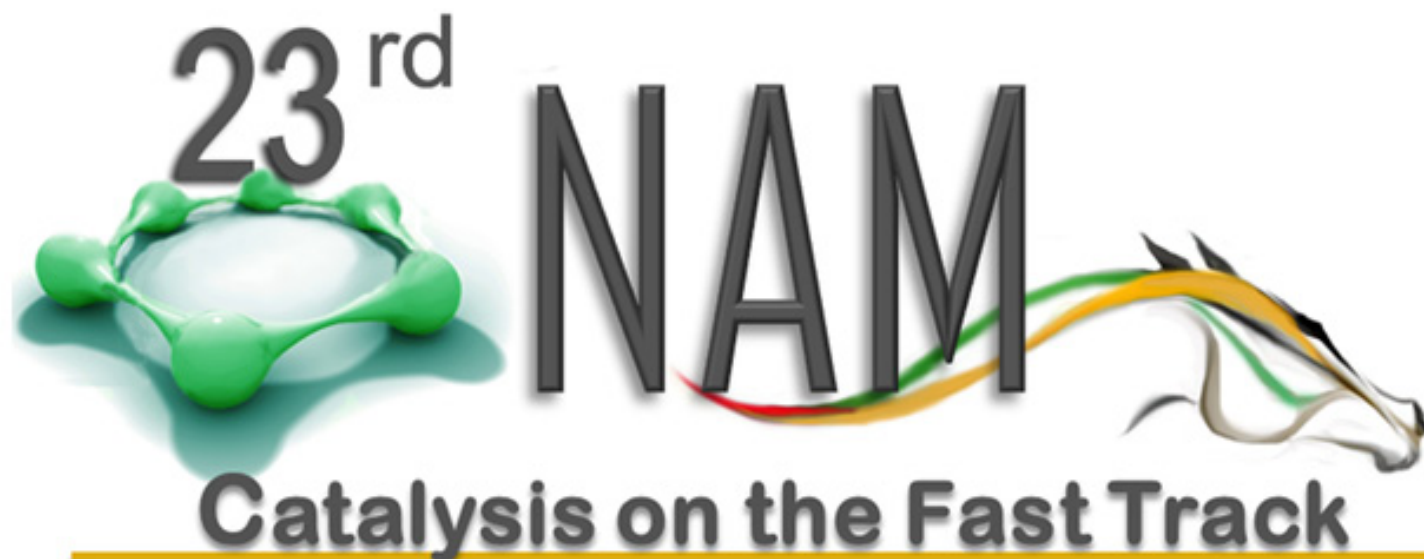
**February 15, 2013** - Notification of accepted abstracts (oral and posters) and awarded Kokes grants

**April 19, 2013** - Deadline for early Registration

**April 20 - May 30, 2013** - Open Registration

**June 2, 2013** - Opening Ceremony at Churchill Downs

**June 2-7, 2013** - On-Site Registration and Technical Program



**23<sup>rd</sup> North American Catalysis  
Society Meeting  
2013**

**June 2-7, 2013  
Louisville, Kentucky**

**[www.NAM23.org](http://www.NAM23.org)**

## Catalysis Club of Philadelphia

### Rostam Madon Awarded 2012 CCP Award

The Catalysis Club of Philadelphia is pleased to announce Dr. Rostam Madon as the recipient of the 2012 Catalysis Club of Philadelphia Award, in recognition of his outstanding contributions to the fields of Fischer-Tropsch and fluid catalytic cracking catalysts. Rostam obtained his PhD in chemical engineering from Stanford University. While at Stanford, Rostam helped develop the Madon-Boudart criterion for identifying mass-transfer, heat transfer, and poisoning effects on catalytic rates. The criterion is used today in academic and industrial laboratories worldwide. After post-doctoral research at the University of Wisconsin, Rostam started his industrial career at Exxon where he discovered the importance of support oxide structures in controlling the overall reaction rates for Fischer-Tropsch catalytic chemistry. This finding led to the development of a specific oxide support enabling Exxon's Advanced Gas Conversion 21th (AGC21) process and catalysts and was cited by Exxon's Corporate Research during its 30th Anniversary as a key development during that period. His work and collaborations on Fischer-Tropsch catalysts, also led to important contributions on the impact of sulfur on activity patterns and modeling chain growth reaction pathways. In 1986, Rostam transitioned to Engelhard (now BASF) and began to focus on fluid catalytic cracking

(FCC) catalysts. His study of FCC catalysts has led to many important insights. In particular, Rostam led the development of the Reduxion-Maxol® suite of catalysts which were the result of understanding the interplay between of the matrix and zeolite Y and have been used in over 100 refineries worldwide. Furthermore, he explained the role of ZSM-5 as a co-catalyst in FCC units and the role of rare earth oxides in increasing the rates of hydride transfer during hydrocarbon cracking reactions. Rostam has authored 43 technical papers and been awarded 9 US patents. Additionally in 2009, Rostam was awarded the AIChE Catalysis and Reaction Engineering Practice Award.

### 2012 Spring Symposium

The Catalysis Club of Philadelphia held its annual Spring Symposium at the Doubletree Hotel in Wilmington, DE on May 17, 2012. It was a successful event with 87 attendees from industry and academia. The speakers presenting their work at the symposium were: Matt Neurock (University of Virginia), Enrique Iglesia (University of California, Berkeley), Raul Lobo (University of Delaware), David Johnson (Lucite International), Tewodros Asefa (Rutgers University), Istvan Halasz (PQ Corporation), Michael Janik (Pennsylvania State University), Alan Allgeier (DuPont) and Yadan Tang (Lehigh University).

### 2012-2013 Season

Dear Colleagues:

Welcome to the 64th season of the Catalysis Club of Philadelphia. Since the club was founded in 1949, we continue the tradition of holding meetings to stimulate discussions among the academic and industrial catalysis scientists in the greater Philadelphia area. We hope that you will join us by attending the broad range of talks that have been arranged for this season.

The speaker lineup for our monthly meetings has been coordinated by Yaritza Lopez of Johnson Matthey. As has been our recent tradition, the first meeting of the season will be the Catalysis Club of Philadelphia Award Lecture. We are pleased to have the 2012 Catalysis Club of Philadelphia Award winner Rostam Madon of BASF present his work on September 20, 2012. Below is the speaker schedule for the 2012-13 season along with any special event that will occur throughout the year.

9/20/12 Rostam Madon, BASF  
CCP Award Lecture  
10/18/12 Israel Wachs, Lehigh University  
11/15/12 To be announced  
1/17/13 Stuart Soled, ExxonMobil  
2/21/13 Anne Gaffney, INVISTA  
3/21/13 Jim Miller, Carnegie Mellon  
4/18/13 John Kitchin, Carnegie Mellon  
May '13 CCP Spring Symposium

Our annual student poster competition will take place in October and will be coordinated by Vladimiris Nikolakis of University of Delaware. The poster session provides a great opportunity for local graduate students to present their work to a broad catalysis audience and for companies to look for potential candidates. The nominations of CCP officers for the 2013-14 season will take place in February with elections scheduled for April. Carl Menning of DuPont will organize the CCP Spring Symposium in May. We will also continue to have a brief presentation by a local graduate student prior to the main lecture at some of the monthly meetings. The strength of our club has always revolved around our members and our monthly meetings. Please continue to support CCP by attending the meetings and by inviting your colleagues. I am looking forward to seeing you all on September 20 to start off another great season.

Please also feel free to contact me or the other officers throughout the season with any comments or suggestions for how we can improve the club.

Best regards,

*Bjorn Moden*  
Chair

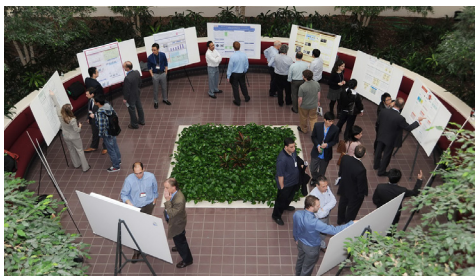
## Catalysis Society of Metropolitan New York

### Catalysis Society of Metropolitan New York

The Catalysis Society of Metropolitan New York held its Annual Symposium at ExxonMobil Research & Engineering Company in Annandale, New Jersey, on March 14, 2012. The Symposium featured nine invited oral presentations led by a keynote lecture by Prof. Philippe Sautet from the University of Lyon, France. The symposium was attended by more than 130 participants. The photo below shows the registration desk hosted by John Body, Society Treasurer.



Graduate students and postdoctoral researchers participated in a poster competition with 30 poster presentations. Some of the posters are shown in the photo below.



In the graduate student category, the posters with the highest scores produced a three-way 1st place tie, and each of the winning students received a cash award and a certificate. The winning students are pictured in the photo below with Prof.



Simon Podkolzin (far right) presenting the awards as the Chair-Elect of the Society.

The student winners were (from left to right):

- Qianying Guo “*Template-induced structuring and tunable polymorphism of three-dimensionally ordered mesoporous (3DOM) titania materials*”, advisor Mark Snyder, Lehigh University.
- Tao Chen “*Spectroscopic and computational study of BPE adsorption on Ag/SiO<sub>2</sub> as a function of silver oxidation and adsorbate coverage*”, advisor Simon Podkolzin, Stevens Institute of Technology.
- Brian Moreno “*Modeling sorbitol hydrodeoxygenation*”, advisor Michael Klein, University of Delaware.

In the postdoctoral researcher category, the first-place winner (an award certificate and cash prize) was Phuong Do with the poster presentation “*Bimetallic*

*effects in the hydrodeoxygenation of m-cresol on  $\gamma$ -Al<sub>2</sub>O<sub>3</sub> supported Pt-Ni and Pt-Co catalysts*”, advisor Raul Lobo, University of Delaware.

### 2012 Excellence in Catalysis Award

The 2012 Excellence in Catalysis Award was awarded to the *Merck Combinatorial Catalysis Team* of Shane Krska, Jeff Moore, Spencer Dreher, Matt Truppo, Matt Tudge and Wes Schafer of Merck Research Laboratories in Rahway, NJ. This Award recognized the team’s innovative integration of synthesis procedures for small organic molecules with the synthesis and evaluation of enzymatic catalysts using high throughput experimentation. The Award also recognized their success in utilizing this innovative approach to better understand enzymatic hydrolysis, ketone reduction and oxidation reactions. The practical application of this novel approach and gained fundamental understanding was exemplified by the development of a substantially improved new enzymatic transaminase-based process for manufacturing the drug Sitagliptin.

The Excellence in Catalysis Award dinner took place May 16, 2012 at the Somerset-Bridgewater Hotel, Somerset NJ. Dr. Gregory Hughes, Enabling Technologies Lead in Merck & Co.’s Process Chemistry Department, was presented a plaque and cash award on behalf of the team. The presenter was Dr. Guang Cao (at left in the picture below) of ExxonMobil, the sponsor of the Award. Dr. Hughes is

pictured on the right. The Award lecture entitled “*Leveraging Centers of Excellence in Catalysis and Analysis to Improve Phar-*



*maceutical Manufacturing*” was presented by Dr. Hughes. The following Merck Combinatorial Catalysis Team members were also present: Shane Krska, Spencer Dreher, Matt Truppo, Matthew Tudge, and Jeffrey Moore.

### Upcoming Fall Speakers Program\*

1. September 19, 2012: Professor Johannes Lercher, Technical University of Munich, (2011 Burwell Lecturer)
2. October 10, 2012: Professor Peter Stair, Northwestern University
3. November 14, 2012: Dr. Thomas Degnan, ExxonMobil R&E (2012 Ciapetta Lecturer.)

\*Meetings to be held at The Somerset-Bridgewater Hotel, Somerset, NJ

## Michigan Catalysis Society

The 33rd annual Spring Symposium of the Michigan Catalysis Society (MCS) was held at the Great Hall Banquet and Convention Center in Midland, Michigan on May 14th, 2012. The symposium was hosted by the Dow Chemical Company. Approximately 80 people attended the meeting, and there was a blend of representatives from industry and academic institutions. The represented companies included The Dow Chemical Company, Ford Motor Company, General Motors Company, Pacific Industrial Development Corporation (PIDC), and Toyota Motor Company. The represented academic institutions included University of Michigan, Michigan State University, Wayne State University, Purdue University, University of New Mexico and Tsinghua University (China). Eight corporate sponsors, including the Dow Chemical Company, Dow Corning, Eco Physics, Hiden Analytical, Micromeritics, MKS Instruments, Süd-Chemie/Clariant and Thermo Fisher Scientific contributed to the success of the meeting.

We are pleased to announce that Dr. Hung-Wen Jen, currently working at Ford Motor Company as a technical expert in the Chemical Engineering Department, was awarded the 2012 Michigan Catalysis Society Parravano Memorial Award for Excellence in Catalysis Research and Development. This was based on his 35-year career in catalysis, which included pioneering work on NO<sub>x</sub> emission control under lean engine conditions (diesel and

lean-burn gasoline), the oxygen storage of three-way gasoline catalysts, and deactivation and poisoning mechanisms of both lean-burn and three-way automotive catalysts. 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.

The morning session of the symposium was initiated by the invited lecturer, Dr. Enrique Iglesia, the Theodore Vermeulen Chair Professor in the Department of Chemical and Biomolecular Engineering at the University of California at Berkeley and a Faculty Senior Scientist in the E.O. Lawrence Berkeley National Laboratory, who presented his work on confinement effects and catalysis by acid sites and metal clusters. Other presentations in the morning session included talks on understanding and optimizing the kinetic behavior of oxygen reduction reaction, water-gas shift kinetics over supported Pt and Pt-Mo catalysts, CO oxidation on Pd/Al<sub>2</sub>O<sub>3</sub> and Fischer-Tropsch synthesis using potassium-promoted Mo<sub>2</sub>C supported metal catalysts. The afternoon session

was initiated by Dr. Jen who gave the Parravano award lecture titled "Detection of Ultra-Low Platinum Contamination on Automotive Catalysts and Study in Minimizing Pt-Negative Effect on SCR of Nitrogen Oxides". Talks were also given on NH<sub>3</sub> selective catalytic reduction of NO<sub>x</sub> using Cu/SAPO-34, adatom emission from nanoparticles, mapping of cerium valence in ceria-zirconia-supported Pd model planar catalysts, ethylene oxide catalysis using a small scale high throughput CSTR reactor, and the catalytic conversion of bioethanol to 1-butanol and higher alcohols.

The 2012 Outstanding Student Presentation Award was awarded to Lei Wang from Tsinghua University for her talk on "Nature of the Active Sites in Cu/SAPO-34 for NH<sub>3</sub> Selective Catalytic Reduction of NO<sub>x</sub>: Effect of Cu Species and Hydrothermal Treatment", while the Student Poster Presentation Award was given to Shane A. Bates from Purdue University for his poster on "The Redox Nature of the Cu Active Site in Cu/SSZ-13 Catalysts for Selective Catalytic Reduction of NO<sub>x</sub> by NH<sub>3</sub>".

The society elected the following new officers for 2012-2013 year during the Symposium business meeting:

President: **Joseph R. Theis**, Ford Motor Company

Vice President: **Chang H. Kim**, General Motors Company

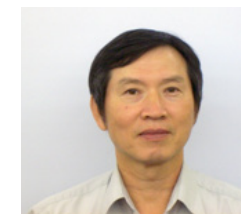
Secretary/Treasurer: **Eranda Nikolla**, Wayne State University

Directors:

**Robert W. McCabe**, Ford Motor Company  
**Beata A. Kilos**, The Dow Chemical Company

**David G. Barton**, The Dow Chemical Company.

**Galen B. Fisher** remains as the MCS representative to the North American Catalysis Society (NACS). The 2012-2013 monthly dinner meeting series of the Michigan Catalysis Society will begin in September.



**2012 Parravano Memorial Award for Excellence in Catalysis Research and Development:** Award winner **Hung-Wen Jen** who is currently working at Ford

Motor Company as a Technical Expert in the Chemical Engineering Department.

## Organic Reactions Catalysis Society

The Organic Reactions Catalysis Society successfully completed its 24th Biennial Conference on the Catalysis of Organic Reactions April 15-19, 2012 in Annapolis, MD, USA.

The 24th ORCS conference was co-chaired by Drs. Johnathan Holladay and Karl Albrecht of Pacific Northwest National Laboratory. The 24th ORCS Conference was a forum for discussion of catalysis applied to the preparation of organic compounds. The conference consisted of a single session over three-and-a-half days. Conference topics and keynote speakers in each topical area included:

- C-H Activation for Coupling Reactions
  - o Prof. Alex Bell, University of California, Berkeley
- Olefin Metathesis
  - o Dr. Andrew Nickel, Materia, Inc.
- Hydrogenation
  - o Dr. Charles Sumner, Eastman Chemical Company
- Catalytic Structures and Supports
  - o Prof. Israel Wachs, Lehigh University
- Homogeneous Catalysis and Chemical Synthesis
  - o Prof. Raghunath V. Chaudhari, University of Kansas
- Biomass and Renewable Chemicals

Two plenary addresses were delivered at the 24th ORCS Conference. The 2011 Paul N. Rylander Awardee, Dr. Thomas A. Puckette of the Eastman Chemical Company, delivered a plenary address. The 2012 Paul N. Rylander Awardee, Prof. Melanie S. Sanford of the University of Michigan, also delivered a plenary lecture. The Paul N. Rylander Award is sponsored by BASF and is awarded annually to researchers who have made significant contributions in the application of catalysis in organic reactions.

Michael Prunier of Eli Lilly was recognized at the 24th Conference as the 2012 Russell Malz Awardee for exceptional service to the Organic Reactions Catalysis Society. In addition to being an active member in ORCS for more than two decades, Mike has chaired or co-chaired two ORCS Conferences (1994 and 2008) and was instrumental in leading the effort to transition ORCS to an incorporated entity.

A short course on practical catalytic oxidation was also presented at the 24th ORCS Conference. The short course topics and presenters included:

- An Introduction to Oxidation Catalysis
  - o Prof. John Gleaves, Washington University
- Homogeneous Catalysis for Oxidation
  - o Dr. Paul Alsters, DSM
- Oxidation Catalysts - Structure and Reactivity
  - o Dr. Dorit Wolf, Evonik Degussa Corporation
- Reaction Engineering and Safety
  - o Dr. Jan Lerou, Consultant

A poster session featuring more than 30 presentations was featured at the 24th Conference.

The proceedings of the 24th ORCS Conference have been published in the Springer journal Topics in Catalysis (2012, 55 (7-10), 419-687).

### Elections

The new members of the ORCS Executive Committee elected in 2012 include:

- a. The Chair-Elect (and Chair of the 2016 ORCS Conference) is Prof. Flora Ng of the University of Waterloo
- b. Dr. Karl Albrecht of Pacific Northwest National Laboratory was re-elected for a second term as the ORCS Secretary/Treasurer
- c. Professor Bert Chandler of Trinity University and Dr. Roman Davis of Glaxo-SmithKline are new additions to the ORCS Board of Directors

d. Dr. Dan Ostgard of Evonik Degussa is the new Non-North American Director

e. Prof. Chris Jones of Georgia Tech will continue as the ORCS Representative to the NACS

f. The ORCS members also voted to realign the term of the ORCS representative to NACS with the ORCS Board Members, instead of the current alignment with the NACS Board Members.

The 25th ORCS Conference will be held in Tucson, AZ in the spring of 2014. The chair will be Prof. Susannah Scott of the University of California Santa Barbara.

## Pacific Coast Catalysis Society

The Pacific Coast Catalysis Society will hold its next annual meeting on Monday, September 24th, 2012. The meeting will be held on the beautiful campus of the University of California at Santa Barbara. Invited speakers for the meeting will include the current NACS Burwell Lecturer, Johannes Lercher, Ciapetta Lecturer, Tom Degnan, Joy Andrews from the Stanford Synchrotron Radiation Laboratory, Baron Peters from UCSB, and Jenny Yang from the Joint Center for Artificial Photosynthesis at Cal Tech. Additional details will be sent to PCCS members as they become available. In the meantime, information about the meeting and the PCCS can be obtained from the current PCCS Chair, Chuck Peden ([chuck.peden@pnnl.gov](mailto:chuck.peden@pnnl.gov)).

## Pittsburgh-Cleveland Catalysis Society

The Pittsburgh-Cleveland Catalysis Annual Symposium will be held September 17-18 at the Holiday Inn, Pittsburgh-Airport. Confirmed invited speakers include Johannes Lercher (Technical University of Munich) and Rongchao Jin (Carnegie Mellon). Additional invited speakers will be confirmed at a later date. The meeting will begin with dinner and a keynote talk on the night of Sept 17 and run the full day on Sept 18th. Abstracts for contributed talks will be accepted, and should be submitted to Michael Janik ([mjanik@psu.edu](mailto:mjanik@psu.edu)) by 8/24 (1 page or less).

Please share this information with others you expect might be interested, and especially with new students in catalysis!

## Second Announcement 11th Annual Symposium of the Southeastern Catalysis Society

September 30th & October 1st 2012

Crowne Plaza Resort Asheville  
Asheville, North Carolina

### Program

The meeting will begin with a poster session and cash bar at 5:00 p.m. on Sunday, September 30th followed by dinner at 7:00 p.m. The after-dinner seminar will be given by Professor Johannes Lercher who is the recipient of the Robert Burwell Lectureship in Catalysis from the North American Catalysis Society. This honor, sponsored by Johnson Matthey, recognizes outstanding contributions in catalysis research. Professor Johannes Lercher is the Director of Pacific Northwest National Laboratory's Institute for Integrated Catalysis and is a Professor in the Department of Chemistry at the Technische Universität München in Munich, Germany. He recently served as the chair of the 15th International Congress on Catalysis, has nearly 400 publications and 10 patents, and is the Editor-in-Chief of Journal of Catalysis.

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 solicited from industrial and academic scientists and engineers (including post-docs and graduate students) working in basic and applied 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 John Kuhn ([jnkuhn@usf.edu](mailto:jnkuhn@usf.edu)) no later than 5 pm on Friday, September 14, 2012. Please use the accompanying template to prepare your abstract and indicate with the abstract submission your preference for an oral talk or a poster.

### Accommodations

Participants requiring overnight accommodations should make their reservations directly with the Crowne

Plaza Asheville Resort ([www.ashevillecp.com](http://www.ashevillecp.com)) by calling (800)733-3211. Refer to the Southeastern Catalysis Society when making reservations in order to receive the SECS meeting rate. Only a limited number of rooms are available, so make your reservations as soon as possible! The deadline for room reservations is September 8, 2012.

### Meeting Registration

All participants (students and professionals) must register for the meeting. The registration includes dinner on Sunday evening, lunch on Monday, and a meeting abstract book. The registration fee is \$100 if received by September 14, 2012 and \$120 after September 15, 2012. To register, please fill out the attached registration form and email it to [jnkuhn@usf.edu](mailto:jnkuhn@usf.edu) (pay onsite) or mail it with your payment by check to John Kuhn, 4202 E. Fowler Ave., ENB 118, Tampa FL 33620.

### Exhibit Registration

Representatives of vendors of catalysis-related products are welcome to attend and may bring an exhibit. Each display is limited to a single 2.5'x 6' table. These will be located adjacent to the conference room and will be available for viewing during the poster session and during coffee breaks on Monday. An exhibitor fee of \$250 includes one complimentary meeting registration (dinner, lunch, coffee break and entry to all sessions) and an exhibit table.

### SECS Officers

Christopher Williams (University of South Carolina), David Mullins (Oak Ridge National Laboratory), Carsten Sievers (Georgia Institute of Technology), John Kuhn (University of South Florida), Todd Toops (Oak Ridge National Laboratory), and Steven Overbury (Oak Ridge National Laboratory).

---

**Canadian Catalysis Division**

Chair  
Garry Rempel  
University of Waterloo  
grempel@cape.uwaterloo.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  
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 Ying Zheng  
University of New Brunswick  
yzheng@unb.ca  
Newsletter Editor  
Josephine Hill  
Associate Editor  
Serge Kaliaguine  
Representative to NACS  
Ajay K. Dalai  
University of Saskatchewan  
Ajay.dalai@usask.ca

---

**Catalysis Club of Chicago**

Web site: catalysisclubchicago.org  
President  
Dr. Rafael Alcala  
BP America  
Rafael.Alcala@bp.com  
Vice President and Program Chair  
Dr. Neng Guo  
BP America  
Neng.Guo@bp.com  
Secretary  
Dr. Yu Lei  
Argonne National Laboratory  
ylei@anl.gov  
Treasurer  
Dr. Wolfgang A. Spieker  
UOP LLC  
Wolfgang.Spieker@uop.com  
Director (Through September 2013):  
Dr. Feng Xu  
UOP LLC  
Feng.xu@uop.com  
Director (Through September 2014):  
Dr. Alak Bhattacharyya  
UOP LLC  
Alak.bhattacharyya@uop.com  
Director (Through September 2013):  
Professor Peter C. Stair  
Northwestern University  
pstair@northwestern.edu  
Representative to NACS  
Dr. Christopher L. Marshall  
Argonne National Laboratory  
Marshall@anl.gov

---

**Catalysis Club of Philadelphia**

Web site: catalysisclubphilly.org  
Chair  
Bjorn Moden  
Zeolyst International  
bjorn.moden@pqcorp.com  
Chair-Elect  
Carl Menning  
DuPont  
carl.a.menning@usa.dupont.com

---

Past Chair  
Joe Fedeyko  
Johnson Matthey  
fedeyjm@jmusa.com  
Treasurer  
Haiying Chen  
Johnson Matthey  
chenh@jmusa.com  
Secretary  
Anton Petushkov  
Zeolyst International  
anton.petushkov@pqcorp.com  
Program Chair  
Yaritza Lopez  
Johnson Matthey  
lopezym@jmusa.com  
Arrangements Chair  
Jacob Weiner  
University of Delaware  
jlweiner@UDel.Edu  
Director (Sponsorship)  
Charles Coe  
Villanova University  
charles.coe@villanova.edu  
Director (Membership)  
Parag Shah  
PQ Corporation  
Parag.Shah@pqcorp.com  
Director (Poster Session)  
Vladimir Nikolakis  
University of Delaware  
vlad@UDel.Edu  
Webmaster  
Edrick Morales  
edrickmorales@live.com  
Representative to NACS  
Anne Gaffney  
INVISTA  
anne.gaffney@INVISTA.com

---

**Catalysis Society of Metropolitan New York**

Web site: nycsweb.org  
Chair  
Simon Podkolzin  
Stevens Institute of Tech.  
Simon.Podkolzin@Stevens.edu  
Past Chair  
Marco Castaldi  
Columbia University  
mc2352@columbia.edu  
Chair Elect  
Lucas Dorazio  
BASF Corporation  
lucas.dorazio@basf.com  
Secretary  
Xiaoming Wang  
BASF Corporation  
xiaoming.wang@basf.com  
Treasurer  
John Brody  
ExxonMobil  
john.f.brody@exxonmobil.com  
Webmaster  
Robert McGuire  
BASF Corporation  
robert.mcguire@basf.com  
Director  
John Byrne  
BASF Corporation  
john.byrne@basf.com  
Director  
David Harris  
BASF Corporation  
david.harris@basf.com  
Director  
Partha Nandi  
ExxonMobil  
partha.nandi@exxonmobil.com  
NACS Representative  
Israel Wachs  
Lehigh University  
iew0@lehigh.edu

---

**Mexican Academy of Catalysis**

Web site: [acat.org.mx/](http://acat.org.mx/)  
President  
Nancy Coromoto Martin Guaregua  
Universidad Autonoma Metropolitana-  
Iztapalapa  
[mgnc@xanum.uam.mx](mailto:mgnc@xanum.uam.mx)  
Vice-Presidents  
Luis Cedeño Caero  
Universidad Nacional Autonoma de  
Mexico  
[caero@servidor.unam.mx](mailto:caero@servidor.unam.mx)  
Secretary  
Esthela Ramos Ramírez  
Universidad de Guanajuato  
[ramosre@ugto.mx](mailto:ramosre@ugto.mx)  
Treasurer  
Julia Aguilar Pliego  
Universidad Autonoma Metropolitana-  
Azcapotzalco  
[apj@correo.azc.uam.mx](mailto:apj@correo.azc.uam.mx)  
Director  
Antonio Gómez Cortés  
Universidad Nacional Autonoma de  
Mexico  
[gomez@fisica.unam.mx](mailto:gomez@fisica.unam.mx)  
Director  
Martha Leticia Hernández Pichardo  
Instituto Politecnico Nacional  
[mhernandez@ipn.mx](mailto:mhernandez@ipn.mx)  
Director  
Edgar Moctezuma  
Universidad Autonoma de San Luis Po-  
tosi  
[edgar@uaslp.mx](mailto:edgar@uaslp.mx)  
Representative to NACS  
José Antonio de los Reyes  
Universidad Autonoma Metropolitana-  
Iztapalapa  
[jarh@xanum.uam.mx](mailto:jarh@xanum.uam.mx)

---

**Michigan Catalysis Society**

President  
Joseph R. Theis  
Ford Research Laboratory  
[jtheis@ford.com](mailto:jtheis@ford.com)  
Vice President  
Chang H. Kim  
GM Global R&D  
[chang.h.kim@gm.com](mailto:chang.h.kim@gm.com)  
Secretary-Treasurer  
Eranda Nikolla  
Wayne State University  
[erandan@wayne.edu](mailto:erandan@wayne.edu)  
Director  
Beata A. Kilos  
The Dow Chemical Company  
[BAKilos@dow.com](mailto:BAKilos@dow.com)  
Director  
Robert W. McCabe  
Ford Research Laboratory  
[rmccabe@ford.com](mailto:rmccabe@ford.com)  
Director  
David G. Barton  
The Dow Chemical Company  
[dgbarton@dow.com](mailto:dgbarton@dow.com)  
Representative to NACS  
Galen B. Fisher  
University of Michigan  
[gbfisher@umich.edu](mailto:gbfisher@umich.edu)

---

**New England Catalysis Society**

President  
Therese Campbell  
United Technologies Research Center  
[campbeta@utrc.utc.com](mailto:campbeta@utrc.utc.com)  
Vice-President  
Ravi Datta  
Worcester Polytechnic Inst.  
[rdatta@wpi.edu](mailto:rdatta@wpi.edu)  
Secretary  
Eric Altman  
Yale University  
[eric.altman@yale.edu](mailto:eric.altman@yale.edu)  
Treasurer  
George Huber  
University of Massachusetts  
[huber@ecs.umass.edu](mailto:huber@ecs.umass.edu)

---

Representative to NACS  
William Curtis Conner  
University of Massachusetts  
[wconner@ecs.umass.edu](mailto:wconner@ecs.umass.edu)

---

**Organic Reactions Catalysis Society**

Web site: [www.orcs.org](http://www.orcs.org)  
Chair  
Susannah Scott  
University of California Santa Barbara  
[sscott@engineering.ucsb.edu](mailto:sscott@engineering.ucsb.edu)  
Past Chair  
John Holladay  
Pacific Northwest National Laboratory  
[John.holladay@pnnl.gov](mailto:John.holladay@pnnl.gov)  
Chair-Elect  
Flora Ng  
University of Waterloo  
[fttng@uwaterloo.ca](mailto:fttng@uwaterloo.ca)  
Secretary/Treasurer  
Karl Albrecht  
Pacific Northwest National Laboratory  
[Karl.albrecht@pnnl.gov](mailto:Karl.albrecht@pnnl.gov)  
Director  
Venu Arunajatesan  
Evonik Degussa Corporation  
[venu.a@evonik.com](mailto:venu.a@evonik.com)  
Director  
Brian Conway  
Pfizer Inc  
[brian.g.conway@pfizer.com](mailto:brian.g.conway@pfizer.com)  
Director  
Bala Subramanian  
University of Kansas  
[bsubramaniam@ku.edu](mailto:bsubramaniam@ku.edu)  
Director  
Bert Chandler  
Trinity University  
[Bert.chandler@trinity.edu](mailto:Bert.chandler@trinity.edu)  
Director  
Roman Davis  
GlaxoSmithKline  
[Roman.d.davis@gsk.com](mailto:Roman.d.davis@gsk.com)  
Non-North American Director  
Dan Ostgard  
Evonik Industries AG  
[Dan.ostgard@evonik.com](mailto:Dan.ostgard@evonik.com)

---

Representative to NACS  
Christopher W. Jones  
Georgia Institute of Technology  
[cjones@chbe.gatech.edu](mailto:cjones@chbe.gatech.edu)

---

**Pacific Coast Catalysis Society**

Chair  
Chuck Peden  
Pacific Northwest National Laboratory  
[chuck.peden@pnl.gov](mailto:chuck.peden@pnl.gov)  
Vice-Chair  
Susannah Scott  
University of California, Santa Barbara  
[sscott@engineering.ucsb.edu](mailto:sscott@engineering.ucsb.edu)  
Treasurer  
Kaidong Chen  
Chevron Technology and Marketing  
[kaic@chevron.com](mailto:kaic@chevron.com)  
Secretary  
Richard Brutchey  
University of Southern California  
[brutchey@usc.edu](mailto:brutchey@usc.edu)  
Representative to NACS  
Alex Katz  
University of California, Berkeley  
[askatz@berkeley.edu](mailto:askatz@berkeley.edu)

---

**Pittsburgh–Cleveland  
Catalysis Society**

Web site: [pitt.edu/~gveser/pccs](http://pitt.edu/~gveser/pccs)  
President  
Michael Janik  
Pennsylvania State University  
[mjanik@engr.psu.edu](mailto:mjanik@engr.psu.edu)  
President-Elect  
Bryan Morreale  
DOE-NETL  
[bryan.morreale@netl.doe.gov](mailto:bryan.morreale@netl.doe.gov)  
Secretary  
Edwin Kugler  
West Virginia University  
[Edwin.Kugler@mail.wvu.edu](mailto:Edwin.Kugler@mail.wvu.edu)  
Treasurer  
Rob Rioux  
Pennsylvania State University  
[rioux@engr.psu.edu](mailto:rioux@engr.psu.edu)  
Director/ Representative to  
Götz Vesper  
University of Pittsburgh  
[gveser@pitt.edu](mailto:gveser@pitt.edu)

---

**Southeastern Catalysis  
Society**

Past President/Chairman  
Christopher T. Williams  
University of South Carolina  
[willia84@engr.sc.edu](mailto:willia84@engr.sc.edu)  
President/Chairman  
David Mullins  
Oak Ridge National Laboratory  
[mullinsdr@ornl.gov](mailto:mullinsdr@ornl.gov)  
Vice-President/President-Elect  
Carsten Sievers  
Georgia Institute of Technology  
[carsten.sievers@chbe.gatech.edu](mailto:carsten.sievers@chbe.gatech.edu)  
Secretary  
John N. Kuhn  
University of South Florida  
[jnkuhn@usf.edu](mailto:jnkuhn@usf.edu)  
Treasurer  
Todd J. Toops  
Oak Ridge National Laboratory  
[toopstj@ornl.gov](mailto:toopstj@ornl.gov)  
Director/ Representative to NACS  
Dr. Steven H. Overbury  
Oak Ridge National Laboratory  
[overburysh@ornl.gov](mailto:overburysh@ornl.gov)

---

**Southwest Catalysis Society**

Chair  
George G. Stanley  
Louisiana State University  
[gstanley@lsu.edu](mailto:gstanley@lsu.edu)  
Chair-Elect  
Andy Moreland  
Valero Energy Corporation  
[andrew.moreland@valero.com](mailto:andrew.moreland@valero.com)  
Past-Chair  
Michael A. Reynolds  
Shell Chemical, Westhollow  
[mike.reynolds@shell.com](mailto:mike.reynolds@shell.com)  
Secretary  
Daniel Shantz  
Texas A&M University  
[shantz@mail.che.tamu.edu](mailto:shantz@mail.che.tamu.edu)  
Treasurer  
John W. Novak, Jr.  
BASF Catalysts, LLC  
[john.novak@basf.com](mailto:john.novak@basf.com)  
Director  
Bert Chandler  
Trinity University  
[bert.chandler@trinity.edu](mailto:bert.chandler@trinity.edu)  
Director  
Lin Luo  
Dow Chemical Co.  
[LLuo2@dow.com](mailto:LLuo2@dow.com)  
Director  
Connie Zhang  
Celanese  
[connie.zhang@celanese.com](mailto:connie.zhang@celanese.com)  
NACS Representative  
Kerry Dooley  
Louisiana State University  
[dooley@lsu.edu](mailto:dooley@lsu.edu)

---

**Tri-State Catalysis Society**

President  
Uschi Graham  
Center for Applied Energy Research  
[graham@caer.uky.edu](mailto:graham@caer.uky.edu)  
Secretary-Treasurer  
Helge Toufar  
Clariant  
[helge.toufar@clariant.com](mailto:helge.toufar@clariant.com)  
Representative to NACS  
Uschi Graham  
University of Kentucky  
[graham@caer.uky.edu](mailto:graham@caer.uky.edu)

---

**Western States Club**

President  
Ryan M. Richards,  
Colorado School of Mines  
[rriichard@mines.edu](mailto:rriichard@mines.edu)  
Secretary-Treasurer  
Morris Argyle  
University of Wyoming  
[mdargyle@uwyo.edu](mailto:mdargyle@uwyo.edu)  
Representative to NACS  
Will Medlin  
University of Colorado at Boulder  
[will.medlin@colorado.edu](mailto:will.medlin@colorado.edu)

# Organizing Committee

## Honorary Chair

BURTRON H. DAVIS, University of Kentucky

## Meeting Chairs

MADAN M. BHASIN, Mid-Atlantic Techn. Res. & Innov. Ctr.

USCHI M. GRAHAM, University of Kentucky and Topasol

UMIT S. OZKAN, The Ohio State University

## Secretary

VADIM GULIANTS, University of Cincinnati

## Treasurer

HELGE TOUFAR, Clariant.

## Technical Program Chairs

MARTIN ABRAHAM, Youngstown State University

ARAVIND ASTHAGIRI, The Ohio State University

DADY DADYBURJOR, West Virginia University

## Fund-Raising Chairs

THORSTEN BAUER, Clariant

FRANCES LOCKWOOD, Ashland Chemicals Company

## Local Arrangements Chairs

JILL PARMAN, Clariant

MAHENDRA SUNKARA, University of Louisville

## Publications Chairs

BURCU BAYRAM, BASF

PAUL MATTER, pH Matter, LLC

## Web Site Chairs

JEFFREY ELKS, BP

JOHN SELEGUE, University of Kentucky

## Kokes Awards Chairs

RODNEY ANDREWS, University of Kentucky

GARY JACOBS, University of Kentucky

PANAGIOTIS SMIRNIOTIS, University of Cincinnati

## Poster Program Chairs

JOHN KUHN, University of South Florida

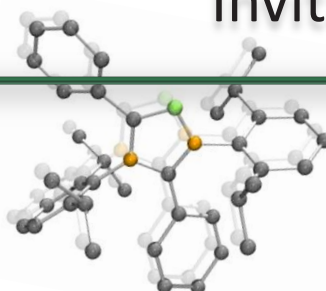
JAN LEROU, Jan Lerou Consulting, LLC

ALEXEY YEZERETS, Cummins, Inc.

## Exhibits Chair

PAUL KESTER, Micromeritics Instrument Corp.

# Invitation



23<sup>rd</sup>  
NAM

We invite you to join us at the 23<sup>rd</sup> North American Catalysis Society Meeting to be held from June 2-7, 2013 in Louisville, Kentucky at the historic Galt House Hotel. This meeting is the premier scientific event in the field of catalysis research and development in 2013. Technological challenges, breakthrough discoveries and state-of-the-art academic and industrial research will be featured.

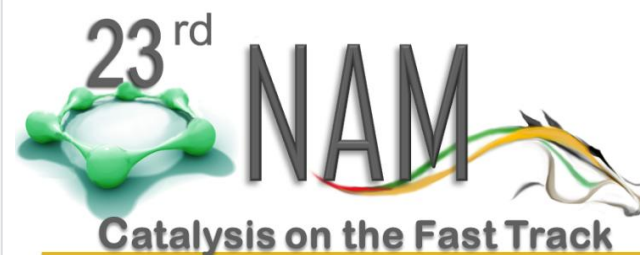
The opening reception of the 23<sup>rd</sup> NAM will take place at Churchill Downs, home of the Kentucky Derby.

## Catalysis on the Fast Track



[www.NAM23.org](http://www.NAM23.org)

# 23<sup>rd</sup> North American Catalysis Society Meeting



Louisville, Kentucky  
June 2-7, 2013



Galt House Hotel - The Heart of Louisville

# Timeline

23<sup>rd</sup>  
NAM

## August 10, 2012

Call for papers and Kokes applications

## November 16, 2012

Deadline for submission of abstracts and Kokes applications

## February 15, 2013

Notification of accepted abstracts (oral and posters) and awarded Kokes grants

## April 19, 2013

Deadline for early Registration

## April 20 – May 30, 2013

Open Registration

## June 2-7, 2013

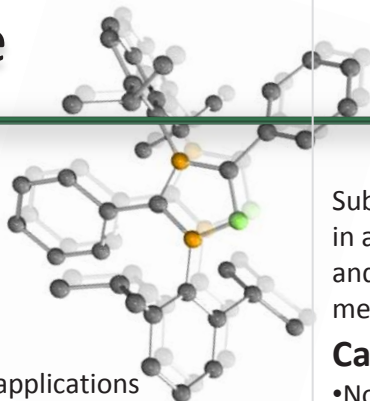
On-Site Registration

## June 2, 2013

Opening Ceremony at Churchill Downs

## June 2-7, 2013

Technical Program



# Scope of the Meeting

Submission of abstracts describing original research in all areas of heterogeneous/ homogeneous catalysis and electrocatalysis is invited. The scope of the meeting includes, but is not limited to the following:

## Catalyst Design and Synthesis

- Novel catalytic materials and synthesis techniques
- Catalyst design guided by theory
- Bio-mimetic catalysis

## Novel Catalyst Characterization Techniques

- Ex-situ, in-situ and operando techniques

## Advances in Catalytic Reaction Engineering

- Novel contacting methods; Catalysis and mass transfer
- Reactions in non-conventional media

## Catalysis for Energy Applications

- Hydrogen production; Catalytic production of clean fuels
- Fuel cells, batteries and electrocatalysis
- Fischer-Tropsch synthesis and gas to liquids
- Photo-catalysis

## Catalysis for Sustainability

- Emission control; CO<sub>2</sub> capture and conversion
- Catalytic combustion
- Catalytic conversion of biomass
- Green catalytic processes

## Catalysis for Fine and Industrial Chemicals

- Acid-base catalysis, chiral catalysis; Polymerization
- Partial oxidation, oxidative dehydrogenation

## Catalyst Deactivation and Regeneration

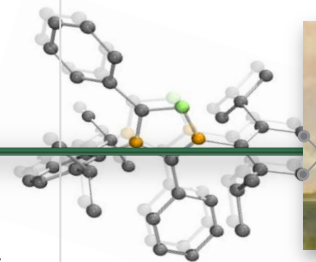
Deactivation mechanisms and regeneration schemes

## Computational Catalysis

- First-principles-based catalyst screening
- Multi-scale modeling; Reactive force fields

## Fundamentals of Catalysis

## Emerging and Cross-cutting Areas



## Scientific Program

The scientific program will include:

- Plenary Lectures
- EUGENE HOUDRY Award Lecture
- PAUL EMMETT Award Lecture
- MICHEL BOUDART Award Lecture
- Select Keynote presentations
- Parallel oral sessions
- Poster sessions

## Exhibition

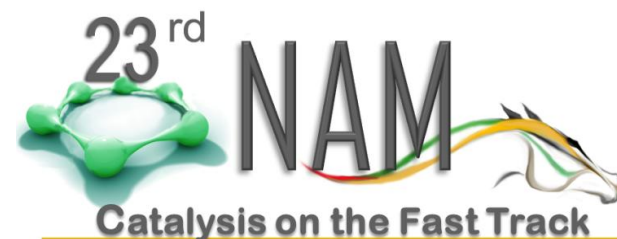
An exhibition of the latest instruments, products, and services in the field of catalysis research and development will be held during the 23<sup>rd</sup> NAM. Interested participants should consult the website for additional details.

## Abstract Submission

All abstracts must be submitted through the website: [www.NAM23.org](http://www.NAM23.org)

## Kokes Travel Awards

Richard J. Kokes Student Travel Awards will provide financial assistance to a limited number of eligible full-time students actively engaged in a relevant field of research. All applications must be submitted concurrently with the corresponding abstract through our website.



[www.NAM23.org](http://www.NAM23.org)

Inquiries can be sent to:

Jennifer Whiting

[jennifer@meetingsolutionsinc.com](mailto:jennifer@meetingsolutionsinc.com)

On-Line Registration: [www.NAM23.org](http://www.NAM23.org)