

NACS Newsletter

JULY-DECEMBER 2011 • VOLUME XLV, ISSUE 3 • WWW.NACATSOC.ORG

Thomas Degnan named the 2012 F. G. Ciapetta Lecturer



I am pleased to announce that Dr. Thomas Degnan of ExxonMobil Research and Engineering is the recipient of the F.G. Ciapetta Lectureship in Catalysis, sponsored by the Grace Davison operating segment of W.R. Grace & Co. and the North American Catalysis Society. The Award

consists of a plaque and an honorarium. The plaque will be presented during the closing banquet ceremonies at the 2013 NAM in Louisville, KY. The recipient will present lectures at most of the affiliated Clubs/Societies during the two-year period covered by this Lectureship.

The Award is given in recognition of substantial contributions to one or more areas in the field of catalysis with emphasis on industrially significant catalysts and catalytic processes and the discovery of new catalytic reactions and systems of potential industrial importance.

Tom Degnan is an internationally-recognized leader in the chemistry and applications of zeolite catalysis. Through his publications and numerous lectures, he has provided many examples of the value of fundamental scientific concepts in the practical deployment of cata-

lytic processes. His record of scholarship stands alongside a remarkable list of more than 100 U.S. patents and his unique blend of creativity, leadership, and clarity of thought has made him not only a leading industrial inventor, but also an ambassador of industrial catalysis research in our community at large.

Tom is specifically recognized with the F. G. Ciapetta Lectureship for his contributions to the discovery, development, and commercialization of molecular sieves as catalysts and for his key role in developing their applications as catalysts in important large-scale industrial processes. Throughout his industrial career, he has made seminal contributions to the discovery and commercialization of more than ten catalytic processes for the production of high-performance lubricants, clean fuels, and petrochemicals. He led a research group that discovered how active sites at zeolite crystal surfaces show unique properties in the alkylation of aromatics and coined the term "surface pocket" catalysis to describe these inorganic enzyme-like catalytic structures. His fundamental studies of paraffin isomerization on bifunctional shape-selective catalysts demonstrated the essential interplay between diffusion and reaction processes and led to the discovery of several new catalysts for the synthesis of high-quality fuels and lubricants. His research vision and management leadership also led to catalytic processes with unprecedented selectivity for the production of p-xylenes.

I am delighted that the North American Catalysis Society has chosen to recognize the contributions of Dr. Thomas Degnan with this lectureship. I speak with the voice of our grateful community in also thanking the management of W.R. Grace & Co. for its continuing support of this lectureship.

Enrique Iglesia

President, North American Catalysis Society

NACS Newsletter

Highlights from the 22 nd North American Meeting.....	2
15th ICC	5
ACS National Awards	6
IACS Award Nominations	7
Club News	8
Club Officers Directory	12



At the opening reception of NAM 22 in the Henry Ford Museum, we find, from left to right, Charles Kresge (Honorary Chair), Galen Fisher (Meeting Chair), Johannes Schwank (Meeting Co-Chair), and NACS President, Enrique Iglesia.



At the symposium at NAM 22 honoring Haren Gandhi, we see Christine Lambert (Ford), Martyn Twigg (Johnson Matthey, ret.), and Bob McCabe (Ford), NAM 22 Program Co-Chair and organizer of the Gandhi Symposium.

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, INVISTA; **Pittsburgh-Cleveland** - Gotz Voser, 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** - 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.

Highlights from the 22nd North American Meeting, June 5-10, 2011

The Michigan Catalysis Society hosted this year's very successful NAM 22 meeting in Detroit. We thank all of those who came to Detroit and made it the largest NAM meeting so far. Galen Fisher (Chair) and Johannes Schwank (Co-Chair) of the University of Michigan presided over the meeting with Dr. Charlie Kresge of the Dow Chemical Company who served as the Honorary Chair. The meeting set several superlatives in numerical descriptions of the meeting, but the main success was that the attendees reported they had a great time in Detroit in the Marriott headquarters hotel on the Detroit River, enjoyed the Opening Reception at the Henry Ford Museum, were well-fed during the poster receptions with the exhibitors, and celebrated the meeting at the Closing Banquet. The official meeting attendance was 1251 and more than 65 others registered but were unable to attend the meeting. More than a quarter of the attendees were from outside North America.

We had great support from the corporate catalysis community. Our fund raising team was able to raise over \$250,000 that allowed us to have a meeting with sufficient hot food at our three poster sessions and other events. Our lead sponsor was The Dow Chemical Company. The names of all 31 sponsors and 45



exhibitors can still be seen on the meeting web site, www.22nam.org. In the current economic environment, we are especially grateful for this support which allowed for a significant net income to support future meetings. And with the help of the National Science Foundation, the Department of Energy, the NACS, and our local chapter, we were able to offer 106 Kokes Awards for graduate students to attend the meeting and enhance the future of catalysis research. The Kokes Awards were well administered by Fabio Ribeiro (Purdue University) and Suljo Linic (University of Michigan).

The response to the call for abstracts resulted in a record number of submissions leading to our largest number of accepted presentations, 948. Each abstract was peer reviewed by at least 3 reviewers. We thank the more than 330 catalyst researchers from all over the world who contributed their valuable time to the review process. With so many excellent contributions, the Technical Program Committee consisting of Robert McCabe (Ford Motor

Continue on page 4

Highlights from the 22nd North American Meeting

Company), Eric Stangland (Dow Chemical), and Levi Thompson (University of Michigan) along with Galen Fisher and Johannes Schwank set up six parallel sessions of oral presentations, in addition to three poster sessions. The final program had 444 contributed talks and about 480 poster presentations.

The program and the abstracts are still available at the NAM 22 website, www.22nam.org, and will be on line for at least the next two years.

NAM 22 was opened on June 6, by Galen Fisher, Meeting Chair, and Enrique Iglesia (UC Berkeley), NACS President. Three plenary lectures were delivered on successive days by the three NACS 2011 Award winners of the Eugene Houdry Award (James C. Stevens, Dow Chemical), Paul H. Emmett Award (Bert Weckhuysen, Utrecht University), and the Michel Boudart Award (James Dumesic, University of Wisconsin-Madison). The topical program areas were anchored by twenty four keynote lectures distributed through the week, so that no keynote lecture overlapped with any other. In addition, the one-day Haren Gandhi Memorial Symposium, organized by Robert McCabe, honored Haren Gandhi's long career in automotive catalysis at the Ford Motor Company. Bill Epling (University of Houston) and George Graham (University of Michigan) did an outstanding job organizing three well-attended and very successful poster sessions.

The NAM 22 meeting rooms for the six parallel oral sessions were located in close proximity to each other on two floors of the Marriott Hotel, making it easy to move from one session to another. Refreshments during breaks and appetizers and drinks during afternoon receptions were made available in the exhibit hall, in close proximity to the exhibits and the posters, leading to good interactions between the exhibitors, poster presenters, and the attendees. And free internet was available in the registration area and in the Marriott's hotel lobby. Our amazing Treasurer, Steve Schmieg (General Motors), Paul Fanson, and the team from Meeting Solutions, were able to make excellent and cost effective arrangements. Our Web Site Chair, Dave Barton (Dow Chemical), kept the site up in a timely fashion and set up a talk-by-talk personal scheduler for the first time. Our Publicity Chair, John Gohndrone (Dow Corning), our Fund Raising Chair, Simon Ng (Wayne State), and our Exhibits Chair, Paul Kester (Micromeritics), all did exemplary jobs. Many others listed on the web site made this meeting come off well.

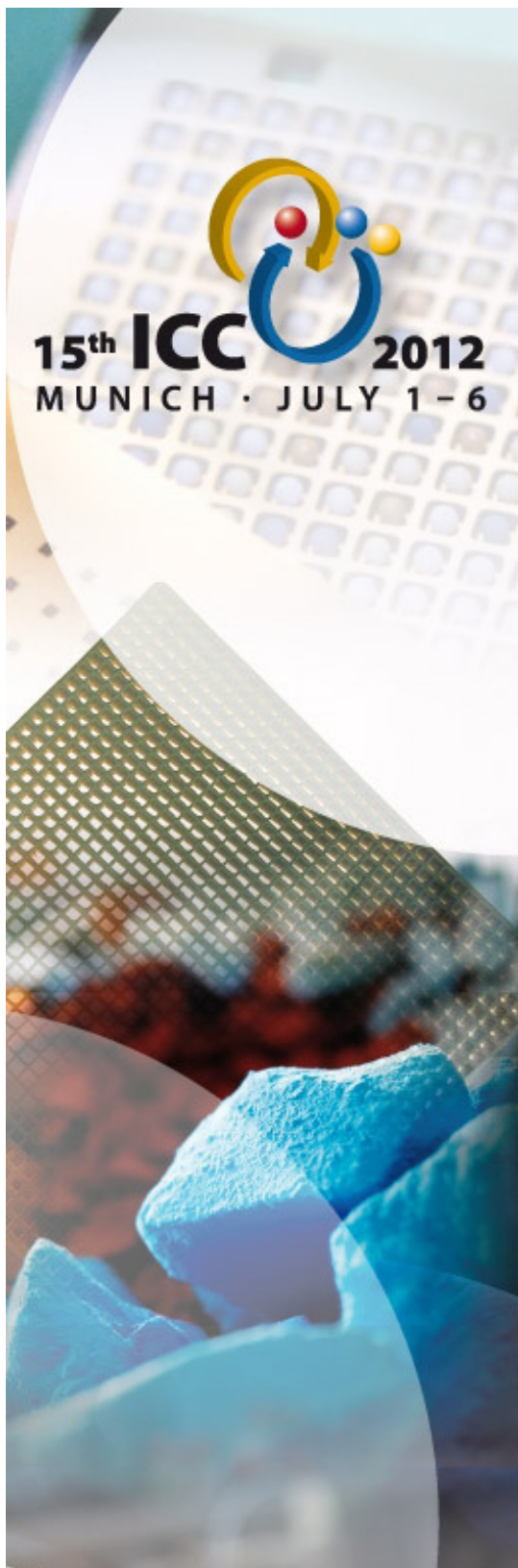
The local arrangements were highlighted by the Opening Reception for about 900 at the Henry Ford Museum in Dearborn on Sunday. This was a reprise of the site for the main reception of the 11th NAM hosted by the Michigan Catalysis Society in 1989. This year we moved the meeting to downtown Detroit where attendees could stroll

along the riverside walk. Paul Fanson (Toyota), our Local Arrangements Chair wrote a description of local restaurants and transportation (including the PeopleMover downtown loop monorail) that many found very useful. Approximately 800 attended the closing banquet at the Marriott on Thursday evening, at which time all of the 2010-11 NACS award winners were honored, recently departed notables in catalysis were recognized, and plans for both the 15th ICC (Munich, July 1-6, 2012) and the 23rd NAM (Louisville, June 2-7, 2013) were presented, respectively, by Johannes Lercher (Technical University of Munich) and Burt Davis (University of Kentucky). We are including here a few pictures from the meeting, but a web site will be set up soon where many more can be seen.

We thank all of those who made this meeting possible and those who attended and brought our catalysis community together again, as we look forward to upcoming NAM meetings in the future.

Galen Fisher
Chair, NAM 22

Johannes Schwank
Co-Chair, NAM 22



15th International Congress on Catalysis Munich, Germany

The 15th ICC is the catalysis event in 2012! More than 2,000 participants from all over the world will exchange new ideas and discuss developments in all areas of catalysis. Plenary and keynote speakers will present overviews of recent developments. The congress will be held at the International Congress Centre in Munich, a world-class facility offering the flexible infrastructure required to accommodate audiences of any size.

In four parallel oral sessions and two general poster sessions all relevant areas from fundamental understanding to catalyst design and novel processes will be covered. The sessions are complemented by cross-disciplinary sessions, organized to share exciting new results at the boundaries between established fields within catalysis. Poster presenters will be able to organize up to four parallel half-day workshops to maximize direct participation by the conference attendees and to stimulate discussions in more specialized areas.

A social program rich in various aspects of the local culture will give you the opportunity to meet your colleagues and friends in a more relaxed atmosphere.

On behalf of the Organizing Committee, I invite you to attend the 15th ICC in Munich. For more information please visit the congress website www.icc2012.org.

I all look forward to your contribution to the exiting scientific program of the 15th ICC and to meet you in 2012 in Munich.

Johannes A. Lercher
Chairman, Organizing Committee
15th International Congress on Catalysis

American Chemical Society National Awards for 2012

The North American Catalysis Society congratulates three of our members that have been recognized with significant American Chemical Society National Awards for 2012. The award recipients are **Dr. Thomas F. Degnan Jr.**, ExxonMobil, **Professor James A. Dumesic** University of Wisconsin, Madison, and **Professor Enrique Iglesia**, University of California, Berkeley. Dr. Degnan has been named as winner of the 2012 ACS

Award in Industrial Chemistry sponsored by the ACS Division of Business Development & Management and the ACS Division of Industrial and Engineering Chemistry. Professor Dumesic has been named winner of the 2012 George A. Olah Award in Hydrocarbon or Petroleum Chemistry sponsored by the George A. Olah Award Endowment. Professor Iglesia has been named winner of the 2012 Gabor A. Somorjai Award for Creative Research

in Catalysis sponsored by the Gabor A. and Judith K. Somorjai Endowment Fund. All three recipients will be honored at an Awards Ceremony on March 27, 2012 held in conjunction with the 243rd ACS National Meeting in San Diego, CA.

Bruce Cook
Vice President, North American Catalysis Society



Next National Meeting
Louisville, Kentucky
June 2-7, 2013



Catalysis on the Fast Track

June 2-7, 2013 • Louisville, Kentucky • www.23NAM.org

Call for IACS Award Nominations

IACS will present two awards at the 15th ICC in Munich – the ICC Award and the Heinz Heinemann Award. Please note that the deadline for nominations is January 15, 2012. All nominations should be submitted to the Secretary of the IACS by email to the following address: muhler@techem.rub.de. The recipients of these awards will be selected by the IACS Awards Committee, and it is planned to inform the recipients by March 15, 2012. Both recipients will be invited to present a plenary presentation at the ICC in Munich.

International Catalysis Award

The International Catalysis Award will be given to recognise and encourage individual contributions by a young person in the field of catalysis, such as the discovery of the significant improvement of a catalytic process, or an important contribution to the understanding of catalytic phenomena. The recipient must not have passed her/his 45th

birthday by May 1 of the award year. The Award consists of a plaque and a check for \$5,000.

Heinz Heinemann Award in Catalysis Science and Technology

The Heinz Heinemann Award in Catalysis will be given to an individual or a group for significant contributions to catalyst science and technology achieved between January 1, 2007, and December 31, 2011. The Award consists of a plaque and a check for \$5,000.

Nomination Procedure

Nomination of the award should be made before January 15 in the year of an International Congress on Catalysis (i.e. January 15, 2012, for the awards made at the 15th ICC), and should include a critical evaluation of the significance of the nominee's published work, as well as a statement about the particular contribution on which the nomination is based. Nominations should also include the nominee's qualifications, accomplishments and biography. Nomination documents,

along with no more than four letters of support, should be submitted electronically as a single PDF file to the Secretary of the International Association of Catalysis Societies (muhler@techem.rub.de). The recipient will be required to give a lecture on her/his research as part of the International Congress on Catalysis at which the award is conferred (i.e. 15th ICC, July 1-6, 2012 in Munich, Germany).

Selection of Award Recipients

Selection of the award recipients will be made by an International Committee composed of renowned scientists or engineers. This Committee will be appointed by the President of the International Association of Catalysis Societies, subsequent to proposals from the Executive Committee of the International Association of Catalysis Societies. Posthumous awards will be made only when knowledge of the winner's death is received after the announcement of the International Committee's decision.



Clubs & Societies News

Report form the Canadian Catalysis Division

Professor Iglesia of the University of Berkeley is the winner of the 2010 Cross-Canada Lecture Tour award. He visited six Universities in Canada in June 2011 and gave lectures in wide range of topics related to catalysis. The interactions have been quite effective. Professor Cathleen Crudden, Winner of the Canadian Catalysis Lectureship Award in 2010 has visited four Universities in Eastern Canada and and two Universities in Western Canada. Her tour has generated lots of interests in the catalysis field especially among young researchers. On the behalf of my executive, the Canadian Catalysis Society members, and myself, I congratulate Professors Iglesia and Crudden for the awards and for taking time to meet the catalysis community members in Canada and present their work.

The Catalysis Award, sponsored by the Canadian Catalysis Foundation, is given biannually. The Colleagues in Canada are requested to nominate their fellow Colleagues in writing to the Awards Manager by October 3, 2011 using the CIC nomination form found at www.cheminst.ca/awards.

Professor Kaliaguine will Chair the organizing committee for the 22nd Canadian Catalysis Symposium, to be held in Québec City in May 2012. I invite you to attend and present your work at this important

symposium. There are several catalysis experts already identified to give keynote address at this symposium.

A number of Professors, Industry leaders and students from Canada had attended North American Catalysis Society Meeting in Detroit in June 5-11, 2011. A number of students from Canada were given student travel award by the Canadian Catalysis Foundation to attend the meeting in Detroit. Also, the Division Executive Meeting was held at Andiamo's at the Renaissance Center in Detroit on Monday June 6.

As a final note, the division is doing extremely well and can do better with the active participation of our Canadian members.

Ajay Dalai
Chair

Catalysis Club of Chicago Herman Pines Award

The Catalysis Club of Chicago is soliciting nominations for the Herman Pines Award for outstanding research in the field of catalysis. The Award will be presented at the 2012 Catalysis Club of Chicago Spring Symposium and consists of a plaque, a cash award of \$1,000 and reimbursement for travel and lodging as a plenary speaker at the Spring Symposium.

(All the details about this award is on: <http://www.cheminst.ca/awards>.)

[ca~talysisclubchicago.org/Pines_Award/2012PinesAwardCall.pdf](http://www.cheminst.ca/~catalysisclubchicago.org/Pines_Award/2012PinesAwardCall.pdf))

Can you please share this nomination announcement with your club members?

The nominee must meet the following criteria:

- Great achievements of catalysis research in the past five years.
- For year 2012, the award will be given to an Industrial researcher.
- Active member in catalysis community
- A resident of North America.

Deadline for nomination is February 29, 2012. Nomination should describe the specific work for which the nominee should be recognized. Complete curriculum vitae with letters of support for the nominee must be included in the nomination, together with the description of work.

Letters of nomination and supporting documentation must be sent by February 29, 2012 as a single PDF document to:

Feng Xu
President – The Catalysis Club of Chicago (2011-2012)
UOP LLC, A Honeywell Company
Des Plaines, IL 60017
feng.xu@uop.com

2011 Spring Symposium Student Poster Competition

The Catalysis Club of Chicago held its annual student poster competition during the Spring

Clubs & Societies News

Symposium on May 19, 2011 at BP Research Center in Naperville, IL. The meeting was very well attended with 35 student poster presentations, 24 postdoc and professional posters, covering a wide range of research topics and representing fourteen institutes in the neighboring states. Poster judges had a hard time to pare down strong competitions to three final winners. They are Wen-Sheng Lee (Purdue University, West Lafayette, IN) with "Probing the Gold Active Sites in Au/TS-1 for Gas Phase Epoxidation of Propylene in the Presence of Hydrogen", Natalie Ray (Northwestern University, Evanston, IL) with her poster on "Synthesis Strategy for Protected Catalytic Palladium Nanoparticles", and Abraham M. Shultz (Northwestern University, Evanston, IL) with the poster "Post-Synthesis Methods for the Incorporation of Coordinatively Unsaturated Metal sites in Metal-organic Framework Materials".

Catalysis Club of Philadelphia Annual Graduate Student Poster Competition

The Catalysis Club of Philadelphia held its annual graduate student poster session November 17, 2011 at the DoubleTree Hotel, 4727 Concord Pike (Rt. 202) in Wilmington DE. There was an outstanding collection of 28 entries from University of Pennsylvania, Lehigh University, University of Delaware, Princeton University and Villanova

University. Top honors were awarded to Vicky Doan-Nguyen from the Christopher Murray's group at the University of Pennsylvania, with her poster titled "Group VIII Metal Nanocrystals for Catalytic Energy Conversion". The four runners-up were Andrew Foster (University of Delaware), Rainer Küngas (University of Pennsylvania), Yadan Tang (Lehigh University) and Tim D. Courtney (University of Delaware). Vicky will be presenting her work at the club's Annual Spring Symposium May 17, 2012. Our thanks go out to all who presented, and congratulations to the winners!

Michigan Catalysis Society

Michigan Catalysis Society hosted the memorable 22nd North American Meeting (NAM) in Detroit. Prior to the NAM meeting, the season grand finale of the MCS 2010-2011 dinner meeting series was held on April 19 with a featured presentation by Professor Aditya Bhan from the University of Minnesota. Professor Bhan presented his latest work on the catalytic consequences of spatial constraints in acidic zeolites. His findings show that confinement in zeolite channels influences rate and selectivity of hydrocarbon reactions more fundamentally than simple considerations of size and shape.

The Michigan Catalysis Society elected the following new officers for 2011-2012 year at the last din-

ner meeting as the annual Spring Symposium was cancelled due to the 22 NAM meeting:

- President: Beata A. Kilos (The Dow Chemical Company)
- Vice President: Joseph R. Theis (Ford Motor Company)
- Secretary/Treasurer: Chang H. Kim (General Motors Company)
- Directors:
 - George Graham (University of Michigan)
 - David Barton (The Dow Chemical Company)
 - Steven J. Schmieg (General Motors Company)

Galen Fischer remains as the MCS representative to the North American Catalysis Society (NACS).

2011 Giuseppe Parravano Award Lecture at 22nd NAM

Professor Jens Nørskov of the Chemical Engineering Department at Stanford University, the winner of the 2011 Michigan Catalysis Society Giuseppe Parravano Memorial Award for Excellence in Catalysis Research, gave his Parravano award lecture at the 22nd NAM meeting. In his lecture, he introduced availability of suitable catalysts as the key to provide an efficient transformation of solar energy to a chemical form, a fuel, and also discussed some of the challenges to catalyst discovery, the associated challenges to science as well as some approaches to molecular

Clubs & Societies News

level catalyst design for applications in sustainable energy. The Parravano award was presented to Dr. Nørskov at the Banquet on Thursday, June 9th, 2011.

Organic Reactions Catalysis Society



The Organic Reactions Catalysis Society announces its 24th Conference to be held April 15-19, 2012 in Annapolis,

MD at The Westin Annapolis. The theme of the conference will be "Directions in Applied Catalysis." Online registration is now open at this link (<http://www.cvent.com/events/the-24th-biennial-organic-reactions-catalysis-society-conference/event-summary-7025836b77e-a4edbb4738a2a5dfdfa4.aspx>) or www.orcs.org.

ORCS is pleased to announce the following award winners that will be honored at the 24th Conference:

- Dr. Thomas A. Puckette of the Eastman Chemical Company is the recipient of the 2011 Paul N. Rylander Award
- Prof. Melanie S. Sanford, the Arthur F. Thurnau Professor of Chemistry at the University of Michigan, is the recipient of the 2012 Paul N. Rylander Award
- Michael Prunier of Eli Lilly and Company is the recipient of the 2012 Russell Malz Award for exceptional service to ORCS.
- Catalytic Structures and Supports
- Biomass and Renewable Chemicals
- Homogeneous Catalysis and Chemical Synthesis
 - » Prof. Raghunath V. Chaudhari, University of Kansas

A half-day (3.5 hr) short course on oxidation will also be presented during the 24th ORCS Conference on the afternoon of Tuesday April 17, 2012. The short course on oxidation should be particularly valuable to industrial and academic scientists beginning work in this field and will be taught by leading scientists from academia and the chemical industry. The short course topics and presenters will include:

The Paul N. Rylander is sponsored by BASF and is awarded annually to researchers who have made significant contributions in the application of catalysis in organic reactions. Dr. Puckette and Prof. Sanford will deliver plenary addresses at the 24th ORCS Conference.

Special topics to be covered at the 24th Conference in April with keynote speakers in each area confirmed to date include:

- C-H Activation for Coupling Reactions
 - » Prof. Alexis Bell, University of California, Berkeley
- Olefin Metathesis
 - » Dr. Andrew Nickel, Materia, Inc.
- Hydrogenation
 - » Dr. Charles Sumner, Eastman Chemical Company

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

Clubs & Societies News

More information regarding ORCS as well as online registration for the 24th Conference can be found at www.orcs.org.

Pittsburgh-Cleveland Catalysis Society

The 2011 PCCS meeting took place on May 16th & 17th at the University of Pittsburgh's

Alumni Hall. The meeting was very well attended, and featured three excellent invited keynotes (by this year's NACS Ciapetta lecturer, Dr. Jeff Miller from Argonne National Labs, Dr. Donhai Wang from Penn State University, and Dr. Aravind Asthagiri from Ohio State University) and eight student presentations from Carnegie Mellon University, the National Energy Technology Laboratory, Penn State University,

the State University of New York at Buffalo, and the University of Pittsburgh, respectively.

Congratulations to this year's student award winners, Rick Alesi (CMU, first place), and Kuan-Yu Yeh (Penn State, second place)!



Next National Meeting

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



Catalysis on the Fast Track

June 2-7, 2013 • Louisville, Kentucky • www.23NAM.org

2011–2012 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
 ftnng@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
 Feng Xu
 UOP LLC
 Vice President and Program
 Chair:
 Rafael Alcala
 BP America
 Secretary
 Neng Guo
 BP America
 Treasurer
 Wolfgang A. Spieker
 UOP LLC
 Director (Through September 2012)
 Siddhesh Shevade
 BP America
 Director (Through September 2012)
 Alak Bhattacharyya
 Director (Through September 2013)
 Peter C. Stair
 Northwestern University
 Representative to NACS
 Chris Marshall
 Argonne National Laboratory
Catalysis Club of Philadelphia
 Web site: catalysisclubphilly.org
 Chair
 Joseph Fedeyko
 Johnson Matthey
 fedeyjm@jmus.com

Chair-Elect
 Bjorn Moden
 Zeolyst International
 bjorn.moden@pqcorp.com
 Past Chair
 Dion Vlachos
 University of Delaware
 vlachos@udel.edu
 Treasurer
 Roger Grey
 LyondellBasell Industries
 roger.grey@lyondellbasell.com
 Secretary
 Parag Shah
 PQ Corporation
 parag.shah@pqcorp.com
 Program Chair
 Carl Menning
 carl.a.menning@usa.dupont.com
 Arrangements Chair
 Kevin Bakhmutsky
 kbakh@seas.upenn.edu
 Director, Membership
 Agnes
 Air Products
 derecsa@airproducts.com
 Director, Student Poster
 Michael A. Smith
 Villanova University
 michael.a.smith@villanova.edu
 Director, Sponsorship
 Charles Coe
 charles.coe@villanova.edu
 Director
 Ivan Baldychev

2011–2012 Club Officers Directory

Webmaster
Edrick Morales
LyondellBasell Industries
edrick.morales@lyondellbasell.com
Representative to NACS
Anne Gaffney
INVISTA
anne.gaffney@INVISTA.com
**Catalysis Society of
Metropolitan New York**
Web site: nycsweb.org
Chairman
Marco J. Castaldi
University of Columbia
mc2352@columbia.edu
Secretary
Luca Dorazio
BASF Corporation
Lucas.Dorazio@basf.com
Treasurer
John Brody
ExxonMobil, Clinton
john.f.brody@exxonmobil.com
Chairman-Elect
Simon Podkolzin
Stevens Institute of Technology
Simon.Podkolzin@Stevens.edu
Past Chairman
Wolfgang Ruettinger
BASF Corporation
wolfgang.ruettinger@basf.com
Director
John Byrne
BASF Catalysts LLC
john.byrne@basf.com
Director
Colin Beswick
ExxonMobil Research & Engineering
Colin.Beswick@ExxonMobil.com

Director
Dave Harris
BASF Catalysts LLC, Iselin, NJ
david.h.harris@basf.com
Webmaster
Jennifer Wade
BASF
jennifer.wade@basf.com
Representative to NACS
Israel Wachs
Lehigh University
iew0@Lehigh.EDU
**Mexican Academy of
Catalysis**
Web site: acat.org.mx/
President
Nancy Coromoto Martin Guaregua
Universidad Autonoma Metropolitana-Iztapalapa
mgnc@xanum.uam.mx
Vice-Presidents
Luis Cedeño Caero
Universidad Nacional Autonoma de Mexico
caero@servidor.unam.mx
Secretary
Esthela Ramos Ramírez
Universidad de Guanajuato
ramosre@ugto.mx
Treasurer
Julia Aguilar Pliego
Universidad Autonoma Metropolitana-Azcapotzalco
apj@correo.azc.uam.mx
Director
Antonio Gómez Cortés
Universidad Nacional Autonoma de Mexico
gomez@fisica.unam.mx

Director
Martha Leticia Hernández Pichardo
Instituto Politecnico Nacional
mhernandez@ipn.mx
Director
Edgar Moctezuma
Universidad Autonoma de San Luis Potosi
edgar@uaslp.mx
Representative to NACS
José Antonio de los Reyes
Universidad Autonoma Metropolitana-Iztapalapa
jarh@xanum.uam.mx
Michigan Catalysis Society
President
Beata Kilos
Dow Chemical Company
BAKilos@dow.com
Vice-President
Joe Theis
Ford Research Laboratory
jtheis@ford.com
Secretary/Treasurer
Chang H. Kim
General Motors Global R&D
chang.h.kim@gm.com
Board of Directors
David Barton
Dow Chemical Company
DGBarton@dow.com
George Graham
University of Michigan
gwgraham@umich.edu
Steve Schmiege
General Motors Global R&D
steven.j.schmiege@gm.com

2011–2012 Club Officers Directory

Representative to NACS

Galen B. Fisher
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
sscott@engineering.ucsb.edu

Past Chair

Alan M. Allgeier
DuPont
Alan.M.Allgeier@usa.dupont.com
Secretary-Treasurer

Karl Albrecht

Pacific Northwest National Laboratory

Karl.albrecht@pnl.gov

treasurer@orcs.org

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

sperry@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

Secretary

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

Michael Janik

Pennsylvania State University

President-Elect

Bryan Morreale

U.S. D.O.E. National Energy

Technology Laboratory

Secretary

Edwin Kugler

West Virginia University

2011–2012 Club Officers Directory

Treasurer
Rob Rioux
Pennsylvania State University
Director
Götz Vesper
University of Pittsburgh
Past President
Faiz Pourarian
Carnegie Mellon University
Director/Representative to NACS
Götz Vesper
University of Pittsburgh
gveser@engr.pitt.edu

Southeastern Catalysis Society

Past President/Chairman
Christopher T. Williams
University of South Carolina
willia84@engr.sc.edu
President/Chairman
David Mullins
Oak Ridge National Laboratory
mullinsdr@ornl.gov
Vice-President/President-Elect
Carsten Sievers
Georgia Institute of Technology
carsten.sievers@chbe.gatech.edu
Secretary
John N. Kuhn
University of South Florida
Tampa, FL 33620
jnkuhn@usf.edu
Treasurer
Todd Toops
Oak Ridge National Laboratory
toopstj@ornl.gov
Director/ Representative to NACS
Steven H. Overbury
Oak Ridge National Laboratory
overburysh@ornl.gov

Southwest Catalysis Society

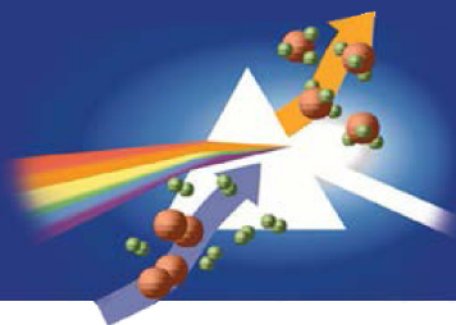
Chair
Michael Wong
Rice University
mswong@rice.edu
Chair-Elect
Michael Reynolds
Shell Global Solution
mike.reynolds@shell.com
Secretary
Andy Moreland
Valero
andy.moreland@valero.com
Treasurer
George Stanley
LSU, Dept. of Chemistry
gstanley@lsu.edu
Director
Scott Mitchell
Sabic Americas Inc.
smitchell@sabicus.com
Director
John Novak
BASF
john.novak@basf.com
Director
Bert Chandler
Trinity University
Bert.Chandler@Trinity.edu
Representative to NACS
Brendan Murray
Shell Chemical Lp
brendan.murray@shell.com

Tri-State Catalysis Society

President
Uschi Graham
Center of Applied Energy Center
graham@caer.uky.edu
Secretary-Treasurer
Rajesh Khatri
Center of Applied Energy Center
Khatri@caer.uky.edu
Representative to NACS
Uschi Graham
University of Kentucky
graham@caer.uky.edu

Western States Club

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



Operando IV

Recent Developments and Future Perspectives in Spectroscopy of Working Catalysts

April 29 - May 3, 2012
Brookhaven National Laboratory
Upton, NY, USA

<http://operandoiv.nsls.bnl.gov>

Invitation to Operando IV

The study of catalysts in their working state, the *operando* approach, has become a well-established and critical research area in catalysis. In this methodology, the behavior of working catalysts is probed using physico-chemical methods while simultaneously measuring the catalytic activity and selectivity. The *operando* approach is an excellent one to assess structure-activity relationships at the molecular level since structural and catalytic parameters are determined together.

We invite you to attend and contribute to the Fourth International Congress on Operando Spectroscopy, to be held at Brookhaven National Laboratory April 29 – May 3, 2012. This congress follows on to the prior conferences in 2003 (Lunteren), 2006 (Toledo), and 2009 (Rostock).

Program Scope

This conference will cover all aspects of *operando* spectroscopy of catalysts: both heterogeneous and homogeneous catalysis, application of theory, new experimental approaches and techniques, time and spatial resolution, and combination of techniques. It is anticipated that there will be an emphasis on fuel cells, electro-catalysis, and catalysis related to the production of biofuels, and other energy-related areas where catalysis is playing a major role in renewable energy.

The program will comprise plenary lectures, invited keynote lectures, and contributed oral and poster presentations covering the whole field of catalysis. An exhibition of commercial products and equipment related to catalyst characterization will be held during the meeting.

Plenary Speakers

Prof. Angelika Brueckner, Leibniz Institute for Catalysis, Rostock, Germany: "Coupling of Vibrational and Electronic Spectroscopies - Effective Tools for Exploring Mechanisms of Catalytic Redox Processes"

Prof. Peng Chen, Department of Chemistry and Chemical Biology, Cornell University, Ithaca, NY: "Single-molecule Sub-diffraction Imaging of Nanocatalysis"

Prof. Marco Daturi, Laboratoire Catalyse et Spectrochimie, CNRS, Caen, France: "From the Monitoring of a Real Catalyst to the Catalyst Design"

Prof. Jan-Dierk Grunwaldt, Institute of Chemical Technology and Polymer Chemistry, Karlsruhe Institute of Technology, Germany: "Understanding Real World Catalysts: A Challenge for Spectroscopy and Engineering"

Prof. Bert Weckhuysen, Department of Inorganic Chemistry and Catalysis, Utrecht University, Utrecht, The Netherlands: "Chemical Imaging of Heterogeneous Catalysts: New Insights in Catalyst Preparation and Functioning"

Session Topics

- Electrocatalysis: Fuel Cells and Related Technologies
- Catalytic Bio-conversion Technologies
- Homogeneous/Liquid Phase Catalysis
- Bridging the Gap Between Model and Technical Conditions
- Multi-technique Approach to Operando Spectroscopy
- Combining Operando Spectroscopy and Theoretical Studies
- New Advances in Reaction Cells Including Improved Time and Spatial Resolution

Key Dates

April 29, 2011	2nd circular and call for abstracts
October 1, 2011	Registration opens
November 30, 2011	Abstract submission deadline
December 3, 2011	Notification of acceptance
March 2, 2012	Registration deadline
April 29, 2012	Submission of manuscripts
April 29 - May 3, 2012	Conference

Please add the conference dates to your calendar now, and join us at Brookhaven National Laboratory April 29 – May 3, 2012.

Registration Fees

\$350 – Early Bird (until March 2, 2012)
\$400 – March 2 – April 15
\$450 – At the Conference

Abstract Submission and Publication

Abstract submission deadline is November 30, 2011. The program committee will select oral or poster presentations on the basis of the abstracts. The submission process is detailed on the conference website.

Vendor Exhibition

An exhibition of commercial products and equipment related to *in situ* and *operando* spectroscopy will be held during the meeting.

Companies wishing to exhibit their products at the meeting should contact Ms. Gretchen Cisco at cisco@bnl.gov.

Further Information

Full information about the Congress can be found at:
<http://operandoIV.nsls.bnl.gov>