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Jim Dumesic is the 2007 Robert Burwell Lecturer

The North American Catalysis Society is pleased to announce that Professor James A. Dumesic is the recipient of the 2007 Robert Burwell Lectureship in Catalysis. Jim is the Steenbock Professor of Chemical and Biological Engineering at the University of Wisconsin, in Madison, Wisconsin. This award is sponsored by Johnson Matthey Catalysts Company and administered by the Society. The award consists of a plaque and an honorarium as well as a travel award to provide the recipient with funds for visiting any of the 14 local clubs comprising the Society. The award is given in recognition of substantial contributions to one or more areas in the field of catalysis with emphasis on discovery and understanding of catalytic phenomena, catalytic reaction mechanisms and identification and description of catalytic sites and species.

Bob Burwell was a catalytic explorer who used

a combination of chemical knowledge and insatiable curiosity to dramatically expand the understanding of catalysis. It is a hard act to emulate, but Jim Dumesic's excellence, leadership, and succession of important contributions to heterogeneous catalysis make him an ideal recipient for this prestigious award. He set the bar high in his graduate work extending the use of Mössbauer spectroscopy to relate magnetic properties of small particles to their structure and using that and other surface-specific measurements to explain the structure sensitivity of iron ammonia synthesis catalysts. Early in his career at Wisconsin he continued to combine spectroscopic and adsorption methods to a widening variety of problems, adding IR to the spectroscopic analysis and pioneering the use of calorimetry to gain new information on the energetics of adsorption and the energetic heterogeneity of surface sites. His development of

microkinetic analysis in the early 90's set a new standard for the modeling of the kinetic behavior of catalytic systems, combining knowledge of gas/solid behavior over a wide range of conditions and extending that knowledge with quantum computations to produce self consistent, robust quantitative predictions of performance. One of many examples of the power of the method is his elegant dissection of the kinetics of catalytic cracking. This superb body of work helped to earn him the Colburn and Wilhelm Awards of AIChE, the Emmett Award, and Election to the National Academy of Engineering in 1998. Remarkably, over the past five years he revolutionized the field of catalysis yet again by opening new directions for the generation of chemicals and fuels from biomass. He is quoted at the end of a feature Science article on his biomass work as saying "...no matter how

Continue on page 2

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Jim Dumesic is the 2007 Robert Burwell Lecturer

Dumesic, from page 1

technologies for biofuels and biorefining evolve, catalysis is sure to be an important part of the mix". The picture of Jim's contributions to catalysis would not be complete without mention of his service to the catalysis community and his teaching. He was the Editor of the Journal of Molecular Catalysis and until recently Associate Editor of the

Journal of Catalysis. His teaching contributions were recognized by the Polygon Award and the Benjamin Smith Reynolds Award of the University of Wisconsin. His lectures in technical meetings are known for the clarity and the amusing vignettes he always adds. He has over 300 publications in collaboration with more than 40 PhD students who

occupy prominent positions in academia and industry.

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



Professor James A. Dumesic
University of Wisconsin, Madison, Wisconsin

Image source: <http://jamesadumesic.che.wisc.edu/members/dumesic.htm>

Previous Burwell Award Winners

- 1983 Robert L. Burwell
- 1985 Wolfgang M. H. Sachtler
- 1987 John B. Peri
- 1989 Jack H. Lunsford
- 1991 Kamil Klier
- 1993 Werner O. Haag
- 1995 Gary Haller
- 1997 Wayne Goodman
- 1999 Harold Kung
- 2001 Tobin Marks
- 2003 Alexis T. Bell
- 2005 Enrique Iglesia

The Catalysis Club of Chicago

Herman Pines Award in Catalysis

Spring Symposium

7:30	Registration Opens
8:25	Welcoming Remarks: Randall Meyer
8:30	Jeffrey Elam, Argonne National Laboratory "Development of Highly Selective Oxidation Catalysts by Atomic Layer Deposition"
8:55	Stephanie Mucherie, Argonne National Laboratory "Oxidative Dehydrogenation of Propane over Nanostructured Membrane Catalysts"
9:20	Alexis T. Bell, University of California at Berkeley, "Effects of Dispersion and Support Composition on the Activity and Selectivity of Cu-Based Catalysts for Methanol Synthesis, Oxidation, Oxidative Carbonylation, and Steam Reforming"
10:05	Coffee break
10:25	Eric Weitz, Northwestern University, "The Mechanism for NOx Reduction with Oxygenate Additives over Zeolite and Ag/ γ -Al ₂ O ₃ Catalysts"
10:50	William Schneider, University of Notre Dame "First Principles Insights into the Composition and Reactivity of Heterogeneous Catalysts in Realistic Environments"
11:15	Galen Fisher, Delphi Corporation, "On-Board Hydrogen Generation and Future Vehicle Emission Control Technologies: Spatially Resolved Species and Temperature Profiles along a Reformer Catalyst"
12:00	Lunch
1:15	Pines Award: Chris Marshall
1:20	Chunshan Song, Pennsylvania State University, "Challenges in Developing Catalysts and Sorbents for Liquid Fuel Processing for Fuel Cells"
2:15	Gregory Yablonsky, Washington University, "High Throughput Catalysis: Non-Steady-State Catalytic Activity Characteristics using TAP-studies"
2:40	Posters (37 submissions)
3:55	Announcement of prizes and club officers : Jeremy Kropf
4:05	Ajay Joshi, Purdue University "A QM/MM Study of Potential Steps in Direct Propylene Epoxidation Using H ₂ and O ₂ on Au/TS-1 Catalysts"
4:30	Al Sattelberger, Argonne National Laboratory, "Supported Organoiridium Catalysts for Alkane Dehydrogenation"
4:55	Randall thanks everyone for coming-goodbye!

The **2007 Catalysis Club of Chicago Herman Pines award in Catalysis** is being awarded to **Professor Chunshan Song** of Penn State University. Professor Song will provide a keynote address at the Spring Symposium of the CCC in May. The title of his address is "Challenges in Developing Catalysts and Sorbents for Liquid Fuel Processing for Fuel Cells". Professor Song is a Professor in the Department of Energy & Geo-Environmental Engineering and the Director of the Clean Fuels and Catalysis Program, The Energy Institute, Penn State University.

The **Catalysis Club of Chicago** will be sponsoring their annual **Spring Symposium** on Wednesday, May 16 at the University of Illinois at Chicago. In addition to submitted papers, there will be two keynote addresses: Professor Alexis T. Bell and Dr. Galen B. Fisher.

Further information is available on the CCC website: www.cmt.anl.gov/CCC/.

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The **Spring Symposium** is scheduled for Monday, May 14, 2007 in the Holiday Inn Select – Wilmington, Delaware. Advance registration deadline is Monday, May 7, 2007

Registration and abstracts are available at <http://catalysisclubphilly.org/symp.php>. For additional information contact [Edrick Morales](mailto:EdrickMorales)

The **Annual Student Poster Competition** was held on March 22, 2007. The overall winner is **Eseoghene Jeroro** from the U. of Pennsylvania with her poster "Mechanistic Studies of the Steam Reforming of Methanol on Pd/ZnO Catalysts". Runners-up are **Ed Lee**, Lehigh: "Controlling the Molecular Structure and Reactivity of Supported Metal Oxide

Catalytic Active Sites", **Mike Nash**, U Delaware: "Acid Site effects on the photocatalytic properties of ETS-10 & ETVS-10s toward the reduction of VOCs", **Parag Shah**, U Pennsylvania: "Comparison of Redox Thermodynamic Properties of V₂O₅ and Mg₃(VO₄)₂" and **Chunli Zhao**, Lehigh: "Operando Spectroscopy of Propylene Oxidation to Acrolein over Well-Defined Supported Vanadia Catalysts".

Spring Symposium Program

7:45		Registration and Refreshments
8:25		Welcome
8:30	Timothy D. Gierke, DuPont	The Importance of Catalysis in the Conversion of Renewable Resources to Useful Biomaterials
9:15	Dennis J. Miller, Michigan State	Heterogeneous Catalysis for Hydrogenation of Biorenewable Intermediates
9:55		Break
10:10	Victor S.-Y. Lin, Iowa State	Functional Mesoporous Metal oxides for Biomimetic Cooperative Catalysis and Biodiesel Synthesis
10:50	Jingguang Chen, University of Delaware	Functional Mesoporous Metal oxides for Biomimetic Cooperative Catalysis and Biodiesel Synthesis
11:20	Eseoghene Jeroro, University of Pennsylvania	Mechanistic Studies of the Steam Reforming of Methanol on Pd/ZnO Catalysts
11:45		Announcement of CCP Awardee
11:50		Lunch
1:00	Wolfgang Ruettinger, BASF	The need for realistic testing in the development of monolithic catalysts for hydrogen generation
1:40	Jaime R. Blanton, Degussa Corporation	Highly Active Catalysts for Production of Hydroxylamine
2:10	Joel Cizeron, Symyx	Discovery of CO Oxidation and Water Gas Shift Catalysts Using High Throughput Reactors
2:40		Break
2:55	John Holladay, Pacific Northwest National Laboratory	Aqueous Phase Catalytic Upgrading of Biomass to Address Fuels and Chemicals
3:35	Al Metauro, Hyperion Catalysis	Carbon Nanotubes as Heterogeneous Catalyst Supports
4:05		Closing

Catalysis Society of Metropolitan New York



Terrence J. Collins,

Thomas Lord professor of chemistry at Carnegie Mellon University, has won the **2007 Award for Excellence in Catalysis** presented by the **Catalysis Society of Metropolitan New York**.

Collins is being recognized for his extensive and important contributions in the field of catalysis. He has worked to develop a new class of oxidation catalysts for hydrogen peroxide activation based on the TetraAmidoMacrocyclicLigand (TAML®) moiety. The development has been possible because of his thoughtful and visionary approach to ligand design and reaction analysis.

Collins is the director for the Institute for Green Oxidation Chemistry.

The institute is focused on replacing polluting technologies with more

benign alternatives.

The Excellence in Catalysis Award lecture will take place on May 16th at the Somerset Marriott in NJ where Collins will also receive a plaque and cash award. For more details, visit www.nycsweb.org.

(Image source:
<http://www.chem.cmu.edu/about/news/20070315-collins.html>.)

2007 Spring Symposium

The Catalyst Society of Metropolitan New York held its **2007 Spring Symposium** on March 21st. ExxonMobil Research & Engineering Company hosted the event to which 124 people attended. Nine outstanding oral presentations were shared by graduate students, postdoctoral fellows. Distinguished speakers including **Maria Flytzani-Stephanopoulos** (keynote, Tufts University), **Hans-Joachim Freund** (Fritz-Haber-Institut), **John Regalbuto** (University of Illinois), and **Robert Farrauto** (BASF).

The oral presentations were complimented by an

equally outstanding poster session with 26 poster presenters. Congratulations to **Wenhua Chen** (Rutgers University), **Chunli Zhao** (Lehigh University), Kamalakanta Routray (Lehigh University), **Alan Lee** Stottlemeyer (University of Delaware) and **Elizabeth Ross** (Lehigh University) who won this year's awards for best poster presentations.

The New York section extends its thanks to attendees, participants, organizers, and corporate sponsors (ExxonMobil, BASF, and Millennium Cell) for collectively making the event a success.

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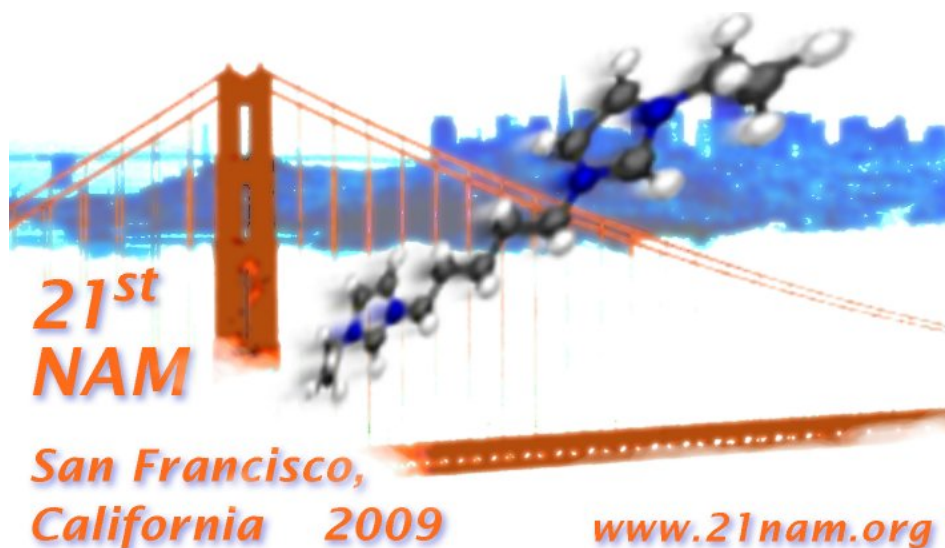
The Pacific Coast Catalysis Society

2009 NAM scheduled for San Francisco

The **Pacific Coast Catalysis Society** is organizing the **2009 North American Catalysis Society** meeting, to be held at the Hyatt Regency Hotel (Embarcadero Center) in

San Francisco, June 6 through June 12, 2009. Co-chairs of the meeting are Charles Wilson of Chevron (CharlesWilson@chevron.com), Enrique Iglesia of the University of California, Berkeley (iglesia@berkeley.edu),

and Bruce Gates of the University of California, Davis (bcgates@ucdavis.edu). Jon McCarty (JonGMcCarty@Eaton.com) is leading the fund raising activity.



21nam.org is not active at this time.

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The Southeastern Catalysis Society

The **Southeastern Catalysis Society** will hold its **Annual Symposium** at the Crowne Plaza Resort in Asheville, NC on September 30 - October 1. One page abstracts will be accepted in August with a deadline of September 7. Please contact Chris Williams (willia84@engr.sc.edu) or Steve Overbury (overburysh@ornl.gov) for more information.

Oak Ridge National Laboratory is the site of one of the new DOE funded Nanoscale Science Research Centers. ORNL's Center for Nanophase Materials Sciences (CNMS) has a broad research portfolio including a theme area in Catalysis and Nano-Building Blocks. The Center's User program provides an opportunity for catalysis researchers throughout the US to

access the facilities and expertise at the CNMS to help accomplish their own research goals. The CNMS recently completed a Call for Proposals but a new call will be issued in the summer of 2007. More information about the Center, its facilities and about the peer-reviewed proposal process can be found at the CNMS Web site (www.cnms.ornl.gov/). In

addition the CNMS User Meeting, currently planned for October 10-12, 2007, will provide an opportunity for current and prospective Users to meet with staff to discuss the feasibility of their own research proposals. For more information you may contact Steve Overbury (overburysh@ornl.gov) or Tony Haynes (hayneste@ornl.gov)

ORGANIC REACTIONS CATALYSIS SOCIETY

The **22nd Conference of the Organic Reactions Catalysis Society** will be held on March 30 – April 3, 2008 at The Jefferson Hotel in Richmond, Virginia. The focus of this conference is on the application of catalysis to solve synthetic challenges. Sessions on Catalysis in the Pharmaceutical Industry and Catalysis in the Fine Chemical Industry are being organized. We are seeking presentations from industrial speakers for these sessions. Please contact Mike Prunier at chair@orcs.org if you are interested in submitting an abstract. The initial call for Abstracts for the **22nd Conference** will be issued shortly.

The **22nd Conference** will also feature a Pre-conference Tutorial on Catalysis. This will be a series of presentations made by industrial experts and is designed for scientists and engineers with responsibility for organic synthesis as well as professionals in the catalyst supplier organizations. Those just starting jobs in industry or national labs, or with less than five years experience, may especially find the tutorial helpful. A small additional fee will be charged for this tutorial and seating will be limited. More details will be found at www.orcs.org as the tutorial plans are finalized.



Meeting Links:

Web site: www.20nam.org

Registration – www.nam07.com

Program - www.20nam.org/schedule_view.asp

Visit us at
www.20nam.org

What is provided during the 20th NAM?

Your registration fee provides you with the following during the 20th NAM:

- Opening Reception (Sunday, June 17)
- Access to all sessions and meetings
- Morning and Afternoon breaks each day during meeting sessions
- Poster session reception Mon. – Weds.
- One ticket to the Closing Banquet (Thurs.) is included in all standard registration fees. Additional tickets are available for \$85 per person. Tickets may be purchased in advance on the registration website or on-site.

20th NAM Fees	Web Registration	On-Site Registration	One Day Registration
Standard Registration	\$600	\$700	\$260
Student Registration	\$330	\$330	\$120
Retiree Registration	\$400	\$400	NA
Spouse/Guest Registration	\$155	\$155	\$155
Additional Banquet Tickets	\$80/each	\$80/each	NA

Join us in Houston at the 20th North American Meeting, June 17 – 22, at the Hilton Americas Hotel. Scheduled – 5 plenary lectures (Nobel Laureate Robert Grubbs, Cal Tech; Stacey Zones, Chevron, Houdry Award; Alex Bell, UC Berkeley, Boudart Award; Robert Davis, Univ. of Virginia, Emmett Award; Theo Fleisch, BP Distinguished Advisor), 19 keynote lectures, 246 other oral presentations and 332 poster presentations. There will be sessions on alternative fuels/energy, nano-materials, fuel cells, catalytic technology for the protection of the environment and many others. There is also a special session to honor Heinz Heinemann, a founder of NACS.

The opening reception will be held at the Houston Museum of Natural Science, currently hosting the Imperial Rome exhibition. For a guide to the many attractions in the Houston area, see <http://www.houston-guide.com/> , <http://www.visithoustontexas.com/> , and http://www.chron.com/apps/dining/Rest_Search.mpl .

While space at the Hilton is now full, we have secured a room block at a special discounted rate at the Doubletree Hotel, also in downtown Houston. We have also negotiated discount airfares with Continental – go to <http://www.20nam.org/attendee.asp> for details. Much more information including the entire technical program and schedule of events may be found at the meeting web-site www.20nam.org.

