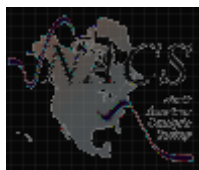


The
North American Catalysis Society



NEWSLETTER

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<http://www.nacatsoc.org>

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Highlights from Anaheim Board Meeting, March 2004

At least once a year the Board of Directors of the NACS meets to review the finances and take new actions for the Society. In a year without a NAM meeting, we recently met during the recent ACS meeting in Anaheim, California. I'd like to provide a summary of some of the actions the Board undertook.

Vice-president Gary McVicker has been asked to prepare a slate of candidates for the director-at-large positions and for the Society officers. Nominations and self-nominations are welcome. Paper ballots for the four Director-at-large positions will be sent out in the Spring of 2005 since the directors-at-large need to be elected before the next Board meeting. Members should contact Gary (gary.b.mcvicker@exxonmobil.com) if they wish to run for Director-at-Large.

At the next Board meeting during the May 2005 NAM meeting in Philadelphia, the next round of elections for officers of the Society will be held. Gary McVicker has also been asked to draw up a list of candidates for each of the offices (President, Vice-President, Secretary, Treasurer, and Foreign Secretary). An officer must be a member of the Society; members wishing to run for office should contact Gary prior to April 2005. In order to maximize the representation of members at the Board meeting, if a Director-at-large is elected to an office, a new Director-at-large shall be appointed from first and second alternate Directors-at-Large (so designated by the order in the voting for National Directors). Similarly, Club Representatives who are elected to officer positions are asked to have other members of their Clubs appoint new local club representatives.

Calls for nominations for the 2005 Emmett Award (just posted on the NACS web site), the Houdry Award (July), and the Burwell Award (September) will be requested during the next few months. Any member can nominate qualified persons for these awards via the process which is described on the Web site.

Over the last 12 years, the Society has managed to build a sizable amount of funds (largely from excess proceeds from the NAM meetings). The interest generated from these funds is used to support many of the educational efforts of the Society (seed funds for operation of national meetings, Kokes student travel awards, sponsoring National awards, operation of the NACS Web site, printing and distribution of quarterly Newsletters, etc.). The Board voted to maintain the current \$600,000 level (maintaining inflation) in the Keith Hall Educational Fund, and decide on new educational activities deserving new funding by excess funds in the Fund. Suggestions for new funding activities should be forwarded to the President (nacs@entermail.net) and the Treasurer (john.byrne@engelhard.com).

The Philadelphia Catalysis Society was incorporated and is about to apply for tax free status using templates supplied by the National organization. The Chicago Club received its tax-free status a few years ago, and Michigan and Western States have started the process. The National organization of the NACS will provide the templates and assistance to construct By-Laws and to apply for corporation status in local states and then to apply for tax free status. Local club officers should contact the Treasurer, John Byrne, for assistance.

John Armor, President

Professor Douglas Stephan- 2004 Ciapetta Lecturer

The 2004 F. G. Ciapetta Lectureship is awarded to Professor Douglas Stephan of the Department of Chemistry & Biochemistry, University of Windsor, Windsor, Ontario, Canada. The F.G. Ciapetta Lectureship in Catalysis is cosponsored by Davison Catalyst, a business unit of W. R. Grace & Co and The North American Catalysis Society. 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. The Award consists of a plaque, an honorarium and additional money is available to cover traveling expenses to visit the local clubs. Local clubs should contact Professor Stephan directly to make travel arrangements.

Professor Stephan received his Ph.D. in Inorganic Chemistry from the University of Western Ontario. He undertook a NATO Postdoctoral Fellow in Chemistry at Harvard University before moving to the University of Windsor where he has spent his career doing research. Doug Stephan's research group has been active for over 20 years in studying the fundamental organometallic chemistry of early transition metals. He has received many distinctions and honors for his accumulated accomplishments during the course of his studies, but it was his recent success in developing a novel set of catalysts for polymerizing ethylene that have earned Doug Stephan many accolades both in industrial circles and among his academic peers. This development is expected to have a major impact on the Canadian petrochemicals industry, which is a significant part of the manufacturing capability in this country. Stephan's innovative approach to ancillary ligand design quickly led to dramatic findings of new patentable catalysts that were highly active under industrial conditions. NOVA Chemicals' goal of developing new single site catalyst technologies was significantly advanced with the discoveries of potential new catalyst compounds from the Stephan labs. In collaboration with a team of chemists and engineers at NOVA Chemicals Stephan's team worked to explore and develop these new catalyst families towards commercialization. Stephan and his group have continued to study the structure-reactivity relationship of these single-site catalysts. In addition, Stephan's group has discovered and studied a number of unusual deactivation pathways that these new catalysts exhibit allowing optimization of process conditions. More recently, Stephan's group has been studying modified systems that exhibit living catalyst behavior and their use in the formation of co- and block polymers. His new efforts are focused on developing new co-catalysts as well as strategies to late transition metal catalysts.

Travel Funds for the 13th International Congress on Catalysis

The Catalysis Society of North America will distribute funds from NSF to approximately 20 U.S. scientists to attend the 13th International Congress on Catalysis in Paris, 11-16 July 2004. Congress participants and younger catalytic scientists will be given priority. Grantees will be selected by a committee of catalytic scientists only to compensate for the lowest available airfare costs by US carrier. All U. S. Scientists working in catalysis are invited to apply for support. A brief vita (two pages) should also be included along with a statement concerning their airline ticket costs and participation in the meeting. All requests should be mailed (or email) to : NSF ICC Travel, c/o Bea Ouimette, Dept. Chemical Engineering, Univ. Massachusetts, Amherst. MA 01003, or email: ouimette@ecs.umass.edu put ICC Travel in the Subject. The applications must arrive before 15 May 2004. Include your email address. Selection will be made by 1 June 2004. This will be an "equal opportunity" selection independent of the race, color, or national origin of the applicant. More information is available at www.nacatsoc.org. Wm. Curtis Conner, Prof. Chemical Engineering, University of Massachusetts Amherst, MA 01003. 413 545-0316 office & 413 545-1647 fax. wconner@ecs.umass.edu & Curt@robinfood.org(home)

Emmett Award Nominations

The Paul H. Emmett Award in Fundamental Catalysis is sponsored by Davison Catalyst, a business unit of W. R. Grace & Co. It is administered by The Catalysis Society and is awarded biennially in odd numbered years, and it will be presented at the Philadelphia meeting of The North American Catalysis Society (NACS) in 2005. The award consists of a plaque and a prize of \$3,000. 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. The award winner shall not have passed his/ her 45th birthday on April 1 of the award year.

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. Posthumous awards will be made only when knowledge of the awardee's death is received after announcement of the Award Committee's decision. Nomination packages for the Award must be received by 30 September and should contain the nominee's qualifications, accomplishments, a nominating letter, a seconding letter and a biography of the nominee. A critical evaluation of the significance of publications and patents should be made as well as a statement about the particular contribution on which the nomination is based. Nomination documents should be submitted in six copies to the President of the Society along with no more than two seconding letters. All nomination packages for the Emmett Award should be addressed to John Armor, President, North American Catalysis Society; 1608 Barkwood Dr, Orefield, PA 18069 USA and must be received by on 1 September, 2004.

ORCS Presents Three Awards at 20th Conference

Three recipients were selected to receive awards for excellence in organic catalysis at the 20th Conference of the Organic Reactions Catalysis Society (<http://www.orcs.org>) sponsored by the Organic Reactions Catalysis Society (ORCS) on the week of March 21, 2004 in Hilton Head, South Carolina. The 2003 Paul N. Rylander Award went to **Prof. Donna Blackmond**, Imperial College, London and the 2004 Paul N. Rylander Award was presented to **Richard Larock**, Iowa State University, Ames, Iowa. The 2004 Murray Raney Award, sponsored by W. R. Grace & Co., was presented to **Prof. Jean Lessard**, University of Sherbrooke, Quebec, Canada. The Paul N. Rylander Award is an annual award, sponsored by ORCS, made to an individual who has made significant contributions to the use of catalysis in organic reactions as exemplified by Paul N. Rylander. The Murray Raney Award is made to an individual who has made a significant technical contribution to the catalyst industry via skeletal metal catalyst technology based on that originally developed by Murray Raney.

Blackmond has been at the forefront of the kinetic analysis and modeling of catalytic and asymmetric catalytic reactions including the investigation of unusual effects such as asymmetric amplification. Her presentation was titled "Reaction Progress Kinetic Analysis: A Powerful Methodology for Mechanistic Studies of Complex Catalytic Reaction Networks". **Larock** has been a pioneer in the use of palladium in organic synthesis. He has discovered a range of new useful methodologies involving aryl, allylic, and vinylic palladium intermediates that have been used to synthesize a broad range of organic compounds. His presentation was titled "Palladium-catalyzed Annulation and Migration Reactions". **Lessard** has been a pioneer in electrocatalytic hydrogenation using RANEY-type catalytic electrodes. He has developed and patented a more durable and structurally stable RANEY-type electrode, which had previously been a significant problem. His talk was titled "Electrocatalytic Hydrogenations of Organic Compounds at RANEY Metal Electrodes: Scope and Limitations".

Club/Society News

Organic Reactions Catalysis Society. Chair for the 2006 meeting will be Steve Schmidt from W. R. Grace and Advertising Coordinator will be Alan Allgeier from Invista.

The Catalysis Club of Philadelphia. The Spring Symposium will be held on May 20, 2004 at the University of Delaware.

Confirmed speakers include: John Armor (Air Products), Teh Ho (ExxonMobil), Paul Andersen (Johnson-Matthey), Shyam Vyas (Accelyres), and Andrew Goudy (Del State). For more information contact Jingguang G. Chen chen@che.udel.edu.

19th North American Catalysis Society Meeting Dates: May 22-27,

2005, Philadelphia, PA. Contact: Edrick Morales, Secretary 19th NACS Meeting. www.19nam.org; e-mail: secretary@19nam.org; Fax: (610)359-4866. Deadline for abstract submission: November 15, 2004.

The Catalysis Society of Metropolitan New York is pleased to announce that **Dr. Ralph Dalla**

Betta from Catalytica Energy Systems, Inc. is the recipient of its 2004 Excellence in Catalysis Award. This award recognizes Dr. Dalla Betta's contributions in the area of catalytic research and specifically in environmental catalysis which culminated in the invention of the Cool Combustion technology. His breakthrough catalyst technology led to the commercialization of Catalytica's XONON system which avoids pollution by harmful NO_x gases in the catalytic combustion for power plants. In addition, Dr. Dalla Betta has made significant contributions to the development of automotive catalysts at Ford Motor Company. The award will be presented at the May 5 Meeting.

The Catalysis Division, The Canadian Society announces that the 2004 Catalysis Award of the Chemical Institute of Canada has been given to **Professor Colin A. Fyfe** of University of British Columbia, Vancouver, B.C., for his pioneering studies of zeolite catalysts using solid state, high resolution nuclear magnetic resonance (NMR) spectroscopy. Sponsored by the Canadian Catalysis Foundation, this prize is given in even-numbered years to a researcher who while resident in Canada has made a distinguished contribution to the field of catalysis. Professor Fyfe will receive a

rhodium-plated silver medal and travel expenses to present the Award Lecture at the 18th Canadian Symposium on Catalysis. Since 1981, the Fyfe group has developed high resolution ²⁹Si solid-state NMR spectroscopy as a complementary technique to diffraction for the investigation of zeolite materials. In particular, they demonstrated that contrary to what was believed, highly informative Si spectra of zeolites could be obtained by magic angle spinning (MAS) experiments on a commercial high resolution NMR spectrometer. Colin Fyfe has also pioneered the development of two-dimensional solid-state NMR experiments to deduce the three-dimensional Si-O-Si bonding connectivities within the zeolite lattice. This greatly extended the potential of solid-state NMR techniques for investigations of unknown zeolite structures.

The Michigan Catalysis Society. The Michigan Catalysis Society (MCS) Spring Symposium will be held on May 18, 2004 at the Ford Motor Company in Dearborn, Michigan. **Dennis A. Hucul**, The Dow Chemical Company, 2004 recipient of the Michigan Catalysis Society Parravano Award for Excellence in Catalysis Research and Development will give our Award lecture. Professor Enrique Iglesia, University of California at

Berkeley, will present our invited lecture.

The Western States Catalysis Club

The 18th Annual Meeting of the Western States Catalysis Club was held on February 27, 2004 at the Marriott Hotel in Provo, UT. Professor Doug Stephan from the University of Windsor, Canada presented the keynote talk "Highly Active Homogeneous Catalysts for Olefin Polymerization: Molecular Design, Optimization, and Utilization". The full program featured 19 additional papers representing 8 different institutions. The winners of the 2004 Shane L. Anderson/Jay C. Dorius Outstanding Student Presentation Awards are: 1st Place - \$100 Award – Thomas Hansen - University of New Mexico 2nd Place - \$75 Award – Aaron Nackos - Brigham Young University 3rd Place - \$50 Award – Xiaoyou Guo -Brigham Young University The next meeting will be held in the Spring of 2005 in Albuquerque, New Mexico.

California Catalysis Society.

Professor Enrique Iglesia has been chosen as the recipient of the 2004 Award for Excellence in Natural Gas Conversion. Alex Bell has received an honorary professorship from the Siberian Branch of the Russian Academy of Sciences.

This Newsletter is a publication of The North American Catalysis Society, President: Dr. John N. Armor, Air Products & Chemicals; V. President: Dr. Gary McVicker, ExxonMobil; Secretary: Dr. Umit S. Ozkan, Chemical Engineering Dept, Ohio State University, Columbus, Ohio 43210, ozkan.1@osu.edu; Treasurer: Dr. John W. Byrne, Engelhard; Foreign Secretary: Dr. Curt Conner, University of Massachusetts; Past President: Dr. M. Albert Vannice, Penn State Univ.; Directors-at-Large: Dr. Bruce Gates, UC, Davis, Dr. John Armor, Air Products & Chemicals, Dr. Gary McVicker, Exxon, Dr. Kathleen Taylor. Club Representatives: California-Dr. E. Iglesia; Canada-Dr. J. Monnier; Chicago-Dr. G. Antos; Mexico-Dr. M. Viniegra; Michigan-Dr. G. Fisher; New England-Dr. W.C. Conner; New York-Dr. J. Byrne; Philadelphia-Dr. A. Gaffney; Pittsburgh/Cleveland-Dr. D. Dadyburjor; Organic Reactions-Dr. S. E. Jacobson; Southwest-Dr. B. D. Murray; Tri-State-Dr. P. Doolin; Western States-Dr. A. Datye. Contributions for the Newsletter should be directed to the Editor, Dr. Michael B. D'Amore, DuPont Company, P.O. Box 80262, Wilmington DE 19880-0262, Ph: (302) 695-2488, Fax: (302) 695-8347, E-mail: michael.b.damore@usa.dupont.com. Society Web address www.nacatsoc.org.