

The  
**North American Catalysis Society**  
**NEWSLETTER**

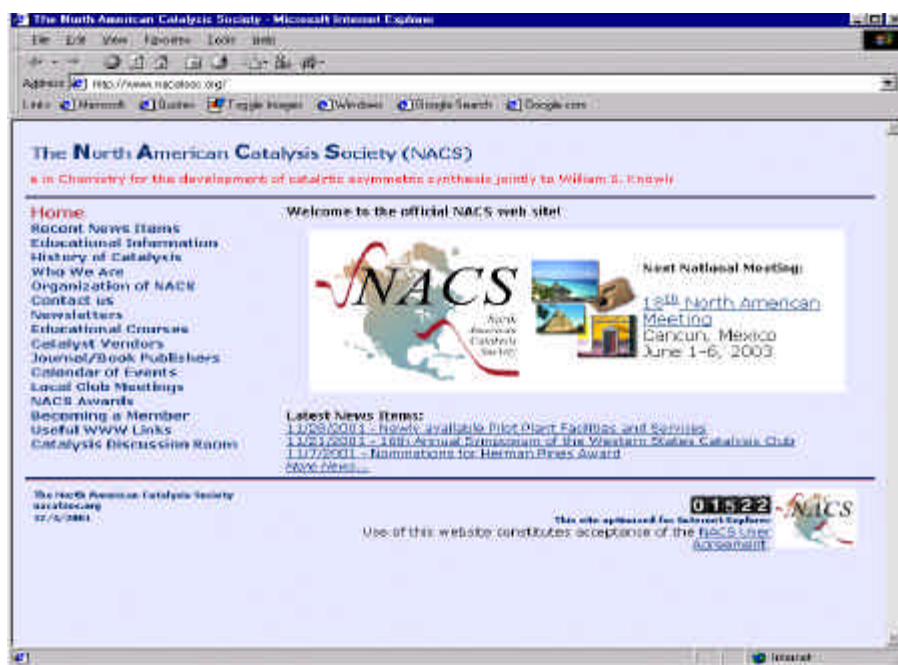
December, 2001

<http://www.nacatsoc.org>

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**Society News Update from Your President**

I would like to continue a tradition that Al Vannice initiated when he was the President: occasional updates about our Society. At the Board meeting in June, the Board of Directors approved several new items of direct interest to the members. Let me summarize where we stand on several things. The Board agreed to make a small investment to hire a professional web site designer to update the NACS web page. The President was asked to carry through this decision, which I did by appointing a sub-committee. The members included Mike D'Amore, Curt Conner, and Alan Allgeier. I worked with them to screen several alternative designers, and we finally selected Tech-Savvy Consulting. Tech-Savvy worked with the committee to gather material and consider design alternatives for the new site. The product is seen in the reproduction of the home page below, and it emphasizes the educational purposes of our Society. I encourage you to visit the site [[www.nacatsoc.org](http://www.nacatsoc.org)], bookmark it and use it for future informational needs. We ran a beta test version for one month with a subset of the members, then launched this product in September. Eventually we disconnected the former Du Pont based server site (re-directing any incoming new queries to the new site). In just over 2 months there have been over 1,500 inquires to this site. I hope you will find it useful for anticipating and planning future meeting events (see Calendar of Events folder), copies of the Newsletters, Local Club events, News items, contacting local and national officers, joining the award process, educational short courses, catalyst vendor contacts, or inquiring about membership. Inquires regarding additions to the web site should be directed to me at [armorjn@apci.com](mailto:armorjn@apci.com) or the "Contact Us" reply folder. I also would encourage you to open the last folder item, Catalysis Discussion Room, which is an open-ended chat room style discussion space providing feedback to posted questions ranging from the synthesis of specific catalyst compositions to employment postings. Curt Conner is handling all the operations dealing with this bulletin board. (*cont. on page 2*)



Other Board actions included: the selection of a logo for the NACS; selecting an attorney to provide generic documentation for the local clubs to prepare their own by-laws and apply for a tax-free id number; providing bonding for the administrators of the Keith Hall Trust Funds; and establishing a nominations committee for the awards the NACS provides. With regard to the last item, Gary McVicker, our Vice-President has been charged with leading this committee. Nominations for the G. Ciapetta Lectureship in Catalysis close in mid-December and nominations for 3 major awards (the Paul H. Emmett Award in Fundamental Catalysis, the Eugene J. Houdry Award in Applied Catalysis, and the Robert Burwell Lectureship in Catalysis) will be due in 2002. Please refer to the web site for descriptions of these awards.

The Board reviewed several proposals for a logo [special thanks go to Burt Davis] for the NACS. It was decided that some alterations to several alternatives be made and the Board members should vote on the final selection. The new logo is posted on the home page of our web site, just to the left of the image and news for the Cancun meeting.

Planning continues for our next National meeting which will be in Cancun, Mexico in June 2003 (refer to the web site home page) and for the Philadelphia meeting in 2005. The Toronto meeting was an excellently operated meeting by the Canadian Catalysis Club, and they deserve a great deal of credit for running a technically and financially successful meeting. The meeting had a much higher attendance than expected so there were substantial excess proceeds which will be transferred to the Keith Hall Educational Trust.

John Armor, December 2001

## Multiple ACS Awards for Catalysis Research

Once again, several of the 2002 ACS awards were given to those working in catalysis.

ACS Award for Creative Research in Homogeneous or Heterogeneous Catalysis sponsored by Shell Oil Foundation, **Jack H. Lunsford**, Texas A&M University. ...for innovative applications of spectroscopic techniques to the characterization of solid catalysts and to the elucidation of catalytic reaction mechanisms.

ACS Award in Industrial Chemistry, **Bipin V. Vora**, UOP, LLC, Des Plaines, IL. ...for contributions to breakthrough technologies in key petrochemical industries and for your leadership in two major commercial developments: new selective process for the production of propylene and isobutylene by catalytic dehydrogenation and new catalytic processes critical for the production of linear alkyl benzene based detergents.

Arthur W. Adamson Award for Distinguished Service in the Advancement of Surface Chemistry sponsored by Occidental Petroleum Corporation, **D. Wayne Goodman**, Texas A&M University. ...for his innovative research that has helped bridge the gap between surface science and catalysis, and for his leadership role in a large number of councils that have significantly influenced the direction of surface chemistry.

Earle B. Barnes Award for Leadership in Chemical Research Management sponsored by The Dow Chemical Company, to **Kurt W. Swogger**, The Dow Chemical Company, Polyolefins and Elastomers Research and Development, Freeport, TX. ...for his leadership in the development and commercialization of Dow INSITE\*Technology which profoundly changed the course and growth of the global polyolefin industry.

Arthur C. Cope Award sponsored by the Arthur C. Cope Fund, **Robert H. Grubbs**, California Institute of Technology. ...for his invention of new transition metal catalysts that have made a major impact on the fields of organic chemistry and materials science.

Arthur C. Cope Scholar Awards sponsored by the Arthur C. Cope Fund, **Xumu Zhang**, The Pennsylvania State University; ...for his invention of a toolbox of chiral ligands and his development of homogeneous catalysts that enable practical syntheses of many chiral molecules, especially ones having biological significance.

E. V. Murphree Award in Industrial and Engineering Chemistry sponsored by ExxonMobil Research and Engineering Company and ExxonMobil Chemical Company, **George R. Lester**, Allied Signal, Inc. (retired). ...for his extraordinary contributions to catalytic science and technology and especially for his innovations in environmental control catalysts for automobiles, turbine engines and work places.

George A. Olah Award in Hydrocarbon or Petroleum Chemistry sponsored by the George A. Olah Endowment, **Gary B. McVicker**, ExxonMobil Research and Engineering Company. ...for his many contributions to the fundamental understanding of the catalytic transformations of petroleum derived hydrocarbons.

## Club/Society News

**The Catalysis Club of Philadelphia** announces its Meeting Speakers for 2002. 1/17/02, Alexis T. Bell Berkeley, CA, *Student Poster Session*; 2/21/02, Anca Ghenciu, Johnson Matthey; 3/21/02, William Tumas, Los Alamos National Laboratory; 4/18/02, Tobin J. Marks, Northwestern University; 5/23/02, Spring Symposium, Clayton Hall, University of Delaware. March 15, 2002 will be the deadline for submission of nominations for The Catalysis Club of Philadelphia Award. The award is to recognize someone "who has made an outstanding contribution to the advancement of catalysis. Such advancement can be scientific, technological or in organization leadership" Contact Jennifer Jewson, Lyondell cnsjld@lyondell.com

16th Annual Symposium of the **Western States Catalysis Club** will be held Feb. 22, 2002, Wyndham Airport Hotel, Albuquerque, New Mexico. Sponsored by: University of New Mexico and Sandia National Laboratories. Abstracts are being solicited for all aspects of catalysis and industrial chemistry, including (but not limited to) catalyst and novel materials preparation,

characterization, and testing, as well as modeling and simulation. Please send abstracts to one of the contacts shown below. Include names and affiliations of all co-authors and denote the presenter by underlining his or her name. All abstracts should fit within conventional margins on a single standard 8.5 x 11 in. page for ease of inclusion in an abstract book to be published for distribution at the meeting. Abstracts may be submitted via hard copy, fax (followed by a mailed hard copy), or e-mail. If abstracts are submitted via e-mail, please attach a file (preferably in a MS Word format) to the e-mail message. In whatever form the abstract is submitted, please include a complete address, phone number, fax number, and e-mail address of the author to whom further correspondence should be addressed. Initial plans call for single day of oral presentations on Friday, February 22, 2002. However, if enough interest is demonstrated, a poster session may be added. In conjunction with our meeting, the Western States Catalysis Club (WSCC) business meeting (lunch) will also be held on Friday, February 22, 2002. As always, presentations by students and technicians are strongly

encouraged. Student presentations will be judged based on technical merit and presentation skills, with first, second, and third place cash prizes awarded. Contacts: Tim Gardner, Sandia National Laboratories, P.O. Box 5800, MS 1349 Albuquerque, NM 87185-1349, (505) 272-7621 fax: (505) 272-7336 tjgardn@sandia.gov. Jim Miller, Sandia National Laboratories, P.O. Box 5800, MS 1349 Albuquerque, NM 87185-1349, (505) 272-7626 fax: (505) 272-7336. jemille@sandia.gov. Deadline for Abstract Submission: January 11, 2002

### ***The Catalysis Division, The Canadian Society.***

The Canadian Catalysis Foundation is pleased to announce that Dr. Marten Ternan is the winner of the 2001 Canadian Catalysis Lectureship Award. The award consists of an honorarium along with funding so that the winner can provide a series of lectures across Canada. The Canadian Catalysis Lectureship Award is made to a researcher who is recognized as a leader in a particular field of catalysis, or someone who has just completed a new and interesting/controversial piece of work that is not widely recognized.

It is restricted to Canadians who are currently working in Canada in the area of catalysis, and is intended to provide exposure to Canadian scientists and engineers.

Dr. Ternan has contributed extensively to the catalytic processing of hydrocarbons. One of Dr. Ternan's principal research interests is low temperature fuel cell technology using hydrocarbons directly for an electrochemical reaction, without any conversion to hydrogen. Methylocracking petroleum residue is another of his interests. His Canadian Catalysis Lecture will present an overview of direct hydrocarbon fuel cells, and compare their great potential and advantages with the poor performance that they have often achieved. He is currently working with a team at the University of Ottawa (Bourgault, Conway, and Psafogiannakis) on modeling direct hydrocarbon fuel cells using computational fluid dynamics.

Dr. Ternan has degrees in chemical engineering from the University of British Columbia and McGill University. He has worked for a number of organizations (Imperial Oil, INCO, the federal government's CANMET laboratories, H-Power) on a variety of projects (process design, pilot plant operation, fossil fuel conversion, environmental catalysis, ammonia reactions in chemical heat pumps, and hydrogen synthesis for fuel cells). Dr. Ternan has held part time appointments at the University of Ottawa (Adjunct Professor) and at Université de Québec (Professeur associé). He has 7 patents and 62 publications. Dr. Ternan has been given the Catalysis Award from the Canadian Catalysis Foundation and the ERCO Award (now the Syncrude Award) from the

Canadian Society for Chemical Engineering. He has been active at the local and national levels of the Catalysis Division of the Chemical Institute of Canada and the Canadian Society for Chemical Engineering. In 2001 Dr. Ternan was the Co-chair of the 17th Meeting of the North American Catalysis Society, held in Toronto.

The 17th Canadian Symposium on Catalysis will be held in conjunction with the Canadian Society of Chemistry meeting in Vancouver on June 1-5, 2002. The conference will cover most aspects of heterogeneous and homogeneous catalysis, with a strong focus on environmental issues.  
[www.ualberta.ca/CMENG/Csc2002/](http://www.ualberta.ca/CMENG/Csc2002/)

#### ***The Tri-State Catalyst Club.***

Dr. Peter Smirniotis (Chem. Eng. Dept., Univ. of Cincinnati) received the BP Faculty Excellence Award for 2000-2001. This newly created award was presented by Mr. Jon Radabaugh, Catalyst Product Manager of BP.

#### ***The Catalysis Society of Metropolitan New York.***

The Catalysis Society of Metropolitan New York is seeking nominations for its twenty-first annual "Award for Excellence in Catalysis." The award, sponsored by ExxonMobil Research and Engineering Company, consists of a plaque and a \$1,200 gift. It is granted to an individual or a research team from North America to recognize outstanding contributions in either applied or basic research in either homogeneous or heterogeneous catalysis. Particular effort is made to identify worthy individuals or teams who have not received sufficient recognition for their work. This award will bring due

recognition to the recipient(s), and we appreciate your help in seeking first-rate candidates. We especially need to fortify our active nomination list! Nominations are solicited from anyone who is currently, or has been previously, active in the field of catalysis. Nominations previously submitted as well as new ones will remain active for a period of three years. Those wishing to submit a nomination should write a letter of recommendation for the individual nominee or team, including pertinent biographical information and a specific description of the impact of the nominee's achievements in catalysis. The maximum length of the letter should be no more than two pages. It may be accompanied by copies of no more than two items presenting important documentation, such as papers or patents. Deadline for receipt of nominations is January 18, 2002. Nominations should be sent to: David Calabro, ExxonMobil Research & Engineering, 1545 Route 22, East Annandale, NJ 08801.  
[david.c.calabro@exxonmobil.com](mailto:david.c.calabro@exxonmobil.com)

The 2002 Spring Symposium will be held, April 26, 2002 at Seton Hall University, South Orange, New Jersey. The Society invites you to submit abstracts of papers for oral or poster presentation at the 2002 Spring Symposium. As a heading of the abstract please list the title, author(s) (underline the speaker) and affiliation. The length of the abstract should not exceed one page, single-spaced. Twenty minutes will be allotted for each oral presentation, followed by a ten-minute discussion period. Times will be strictly monitored so as to encourage a thorough discussion. In addition, two \$125 awards will be given to the best student posters.

All members are urged to reserve the date and participate in the Spring Symposium. The deadline for receipt of abstracts is February 1, 2002. You will be notified of consideration for the Symposium by February 22, 2002. Those submitting an award nomination and/or paper(s)/poster(s) for consideration for the Spring Symposium should send or e-mail them to: David Calabro, ExxonMobil Research & Engineering, 1545 Route 22 East, Annandale, NJ 08801. david.c.calabro@exxonmobil.com

**The Catalysis Society of New England** held its Fall meeting on December 1 at Worcester Polytechnic Institute. The featured speakers were Dr. Robert McCabe, from Ford Motor Company, and Professor Israel Wachs, from Lehigh University. Please check our website, [www.yale.edu/yaleche/NECatal/index.html](http://www.yale.edu/yaleche/NECatal/index.html) for additional information.

**The Catalysis Club of Chicago** The Catalysis Club of Chicago is soliciting nominations for the Herman Pines Award for outstanding research in the field of catalysis. Herman Pines was an outstanding research scientist, and his work revolutionized the general understanding of organic chemistry, particularly the chemistry of hydrocarbons interacting with strong acids. The award in his honor

is sponsored by UOP where Herman began his industrial career in 1930 and amassed 145 US patents over a 23 year period. The award is being co-sponsored by the Catalysis Club of Chicago of which Professor Pines was a founding member. The award will be presented annually at the Spring Symposium of the Catalysis Club of Chicago. The recipient will receive a cash award of \$1,000 and reimbursement for travel and lodging as a plenary speaker at the Spring Symposium. A committee appointed by the Executive Committee of the Catalysis Club of Chicago will choose the recipient based on the following criteria:

- ? Importance of catalysis research completed in the past five years.
- ? Alternation of the award between industrial and academic/national laboratory researchers.
- ? Recipient must be a resident of North America.

For the award to be given in 2002, nominations for **An Industrial Researcher** are sought by December 31, 2001. Nominations should describe the specific work for which the nominee should be recognized. Please send your nomination either through Internet Nomination Form ([www.cmt.anl.gov/CCC/Pines\\_Award/](http://www.cmt.anl.gov/CCC/Pines_Award/)) or directly via regular mail by the deadline to: Dr. Paul T. Barger, President of the Chicago Catalysis Club, UOP Research Center, 50 East Algonquin Road, Des Plaines, IL 60017-5016,

ptbarger@uop, (847) 391-3729, (847) 391-3724 (fax). The recipient will be notified in February of 2002, and the award address will take place at the Spring Symposium in May of 2002.

Speakers for 2002 are: January 14, 2002, Levi Thompson, University of Michigan; February 11, 2002, Mark Barteau, University of Delaware; March 11, 2002, Matt Neurock, University of Virginia; April 8, 2002, Leo Manzer, DuPont. Contact Wolfgang A. Spieker, UOP, (847) 391-2378, waspieke@uop.com.

**The Organic Reactions Catalysis Society** The 19th Conference of the Organic Reactions Catalysis Society will be held on April 14-18, 2002 in San Antonio, TX at the Plaza San Antonio, a Marriott Hotel. San Antonio was the location for the twelfth ORCS conference and will be an excellent venue for our conference. As in the past, the scientific program will consist of plenary lectures including the Paul Rylander and Murray Raney award recipients, and papers and posters dealing with all aspects of heterogeneous and homogeneous catalysis in their use and applications in fine chemicals and pharmaceutical synthesis. [www.orcs.org](http://www.orcs.org)

## Meetings

**April 7 -11, 2002. Selective Oxidation of Alkanes.** Orlando, FL. ACS Symposium. Contact Anne M. Gaffney, Rohm&Haas Co. (215) 619-5260. [anne\\_gaffney@rohmmaas.com](mailto:anne_gaffney@rohmmaas.com).

**Applications of Biocatalysis to Industrial Based Processes.** Orlando, FL. ACS Symposium. Contact Scott F. Mitchell, DuPont Co. (302) 695-1742. [scott-fenton.mitchell@usa.dupont.com](mailto:scott-fenton.mitchell@usa.dupont.com).  
**Catalysis Dependent New Commercial/Near Commercial**

**Technologies for Improving Air Quality.** Orlando, FL. ACS Symposium. Contact Robert A. Stowe, Bobcat Technologies. (231) 526-5078. [rstow@northlink.net](mailto:rstow@northlink.net).  
**Sulfur Removal from Gasoline and Distillate Streams** Orlando,

FL. ACS Symposium. Contact: Richard F. Wormsbecher, Grace Davison, 7500 Grace Drive, Columbia, MD 21044, (410) 531-4299 or fax: (410) 531-4101 rick.wormsbecher@grace.com.

**Utilization of Greenhouse Gases** Orlando, FL. ACS Symposium. Contact: Professor Richard Mallinson, Institute for Gas Utilization Technologies, The University of Oklahoma, 100 E. Boyd, EC T335, Norman, OK 73019, 405-325-4378, fax: 405-325-5813 mallinson@ou.edu www.acs.org/meetings/abstract/abinfo.html

**Advances in C1 Chemistry.** Orlando, FL. ACS Symposium Contact: Daniel E. Resasco, School of Chemical Engineering and Materials Science, University of Oklahoma, Norman, OK 73019-1004, (405) 325-4370, fax: (405) 325-5813, resasco@ou.edu

**Hydrogenation in Petroleum Upgrading** Orlando, FL. ACS Symposium. Contact: Girong Xiao ART LLC, 7500 Grace

Drive, Columbia, MD 21044, (410) 242-2413

**Advances in SO<sub>x</sub> and NO<sub>x</sub> Control in Refinery and Chemical Plant Processes.** Orlando, FL. ACS Symposium Contact: Terry G. Roberie, Grace Davison, 7500 Grace Drive, Columbia, MD 21044, (410) 531-4279, fax: (410)531-4695 Terry.G.Roberie@grace.com

**Kinetics of Petroleum Refining Processes.** Orlando, FL. ACS Symposium Contact: Paul R. Robinson Aspen Technology, Inc. (281) 504-3242, fax: (281) 584-4329 paul.robinson@aspentech.com

**April 14-18, 2002. 19th Organic Reaction Catalysis Society Meeting** San Antonio, Texas. Contact: Dennis G. Morrell Hercules Inc., Hercules Research Center, 500 Hercules Road, Wilmington, DE 19808, (302) 995-3446 or (302) 594-7287 (M W F) fax: (302) 995-4324 or (302) 594-6998 dmmorrell@herc.com , www.orcs.org

**April 25-26, 2002. BIOCAT2002, First Annual Conference & Exhibition** Park Hyatt Hotel, Philadelphia, PA, Contact: Lindsay Young, The Catalyst Group Resources, Inc., cnf@catalystgrp.com, www.catalystgrp.com

**June 1-5, 2002. The 17th Canadian Symposium on Catalysis.** Vancouver, Canada Contact: Dr. R.E. Hayes, Department of Chemical and Materials Engineering, University of Alberta, Edmonton, Alberta, bob.hayes@ualberta.ca www.ualberta.ca/CMENG/Csc2002/

June 12-15, 2002. **Nanoporous Materials-III.** Ottawa, Ontario, Canada. Contact Abdel Sayari, Univ. of Laval. (418) 656-3563. sayari@gch.ulaval.ca. www.science.uottawa.ca/nano-3/

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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; 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, General Motors. Club Representatives: California-Dr. E. Iglesia; Canada-Dr. C. A. Mims; Chicago-Dr. G. Antos; Mexico-Dr. G. Diaz; Michigan-Dr. G. Fisher; New England-Dr. W.C. Conner; New York-Dr. J. Byrne; Philadelphia-Dr. A. Gaffney; Pittsburgh/Cleveland-Dr. M. A. Vannice; Organic Reactions-Dr. S. E. Jacobson; Southwest-Dr. B. D. Murray; Tri-State-Dr. B. D. Davis; 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, Experimental Station, 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](http://www.nacatsoc.org).