Hillebrand Prize Recipient Michael Kurylo Will Address CSW March Dinner Meeting

Topic: Atmospheric Chemistry from the Laboratory to the National Policy Level

CSW will present the 2008 Hillebrand Prize to Dr. Michael J. Kurylo, senior research scientist at the Goddard Earth Sciences and Technology Center of the University of Maryland Baltimore County, at its dinner meeting on March 12 at the NASA Goddard Recreation Center. Dr. Kurylo will address the meeting with a seminar entitled “From the Laboratory to the Stratosphere: Constructing a Bridge Between Science and Policy.” Details of the dinner meeting are listed on page 2.

Dr. Kurylo received a B.S. degree in chemistry from Boston College in 1966 and a Ph.D. in physical chemistry from the Catholic University of America in 1969. Following a National Research Council Postdoctoral Associateship at the National Bureau of Standards (now NIST), he was a Research Chemist at NBS and NIST from 1971 – 2003. During the last half of this period, he continued his NIST research in laboratory atmospheric kinetics and photochemistry while serving on a detailed assignment to the National Aeronautics and Space Administration as manager of NASA's Congressionally-mandated Upper Atmosphere Research Program. In 2004 he transferred to NASA as a Program Scientist in Atmospheric Composition, and retired from the federal government in 2008.

Dr. Kurylo’s laboratory research has focused on gas phase free radical photochemistry and kinetics with an emphasis on atmospheric processes related to stratospheric ozone depletion and climate change. An author or co-author of 140 scientific articles, he has given more than 190 technical presentations nationally and internationally. As a NASA program scientist he was largely responsible for organizing and implementing several airborne scientific investigations that linked the depletion of stratospheric ozone to manmade chemicals containing chlorine and bromine. He has provided similar leadership for other field investigations utilizing measurements from satellites, aircraft, balloons, and the ground for examining the connections between changes in atmospheric composition and in climate. Since 1987, he has served at the interface between scientific research and international environmental policy through extensive participation in each of the Scientific Assessments of Ozone Depletion conducted by the United Nations Environment Programme and the World Meteorological Organization. These assessments are required by the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer and the Vienna Convention for the Protection of the Ozone Layer. He has been elected Chair of several past meetings of international Ozone Research Managers of the Parties to the Vienna Convention and has presented the consensus recommendations at subsequent meetings of the Parties (most recently in Doha, Qatar this past November). Dr. Kurylo also holds leadership positions on several international organizations in atmospheric chemistry.

As an internationally acclaimed atmospheric research scientist and program manager, Dr. Kurylo has received numerous awards. These include the Department of Commerce Bronze and Silver Medals, two NASA Exceptional Service Medals, the NASA Cooperative External Achievement Award, more than a dozen NASA Group Achievement Awards, the Catholic University of America Alumni Achievement Award in the Field of Science, the National Oceanic and Atmospheric Administration Environmental Hero Award, and the US Environmental Protection Agency Stratospheric Ozone Protection Award. His efforts leading to the success of the Montreal Protocol have recently been acknowledged by his being named to the Montreal Protocol Who’s Who listing. Dr. Kurylo is a member of the ACS, the American Physical Society, the American Geophysical Union, and Sigma Xi.

At the CSW dinner meeting seminar, Dr. Kurylo will describe developments in laboratory (continued, page 3)
THE CHEMICAL SOCIETY OF WASHINGTON PRESENTS:
1086th Dinner Meeting

Thursday, March 12th 6:00 pm SOCIAL HOUR
NASA Goddard Space Flight Center
Recreation Center COST $22.00 Members and Guests
Good Luck Road Gate No. 13 $11.00 Students
Greenbelt, MD 20771

Menu: Social Hour (Open Bar): beer, wine and soda; meatballs, potato chips and pretzels. Dinner: Choice of Entrée: Steak or Grilled Chicken Breast (Please specify choice with reservation), Baked Potatoes, Oven Roasted Vegetables, Tossed Salad, Rolls and Butter, Assorted Desserts, Coffee.

8:00 p.m. Hillebrand Award Ceremony
Featured Speaker: Dr. Michael J. Kurylo
Title: “From the Laboratory to the Stratosphere: Constructing a Bridge Between Science and Policy”

Make reservations by Monday 12:00 noon, March 9, 2009, to the CSW office: csw@acs.org or 202-659-2650. Please designate the names in your party. The public is invited to attend. You may attend the talk only, but reservations are appreciated. Those who make a reservation but are unable to attend should send a check for the cost of their meal to the CSW office.

Directions: From I-95/495 (Washington Beltway) take Exit 22A to the Baltimore-Washington Parkway (toward Baltimore). From the Baltimore-Washington Parkway take the exit to Greenbelt Road (Route 193); this exit is just a short distance from the Beltway and is a right turn exit. Turn left at the traffic light onto Greenbelt Road. Drive past the Main Gate of Goddard Space Flight Center on the left and go to the second traffic light at Good Luck Road. Turn left onto Good Luck Road. Go to the first traffic light on Good Luck Road (it has a left turn lane) and turn left into the gate (No. 13) for the Goddard Recreation Center (less than 0.5 mile from Greenbelt Road). The gate has the number 13 on it. There will be a security guard stationed just inside the gate who will check the names in your party against the attendance list. Everyone, including those attending only the evening lecture, must call in a reservation to the CSW office so their names will be on the security list. There can be no walk-ins.

Abstract: Depletion of the Earth’s stratospheric ozone layer was the first manifestation of global environmental change attributable to human activity. Ranging from moderate losses at mid-latitudes to large-scale seasonal losses in the Polar Regions, its detection and attribution have required integrated efforts across the full spectrum of atmospheric science. Sophisticated atmospheric observations from the ground, balloons, aircraft, and satellites together with the results from laboratory investigations have provided the scientific bases for sound environmental policy at the national and international levels. Dr. Kurylo will describe the developments in laboratory measurement techniques for gas phase kinetics and photochemistry that have enabled atmospheric scientists to isolate and investigate specific chemical reactions. The role of measurement campaigns for studying the atmosphere itself as a complex photochemical reactor will also be described. The subsequent interpretation of the field measurement observations through the use of laboratory data has been a key element in the formulation of international assessments that underlie environmental treaties.
Awardees at the College Achievement Award ceremony, part of the February CSW dinner meeting. The awardees, from left: Luigi J. Alvarado (Catholic U.), Elizabeth Hurst (GWU), Clare E. Rowland (GWU), Daniel D. Powell (St. Mary’s, MD), Amine Lambarqui (UDC), David An (Georgetown), Katherine Baugh (American U.), and Yishan Zhou (UMD). Two awardees were not present at the ceremony: Christopher R. Cammarata (St. Mary's, MD) and Eric D. Nellis (Georgetown). Katherine Baugh was inadvertently omitted from the announcement in the February Capital Chemist. Photo courtesy of Tim Henry.

Green Chemistry and Engineering Conference at UMD

The 13th Annual Green Chemistry and Engineering Conference, the premier meeting of the year for scientists, engineers and corporate leaders engaged in the business of sustainability, will be held June 23-25, 2009 at the Marriott Inn and Conference Center, College Park, MD. The theme of the conference is “Sustainability in the Chemical Industry: Grand Challenges and Research Needs.”

The conference features two keynote speakers: Len Sauers, Ph.D., Vice President, Global Sustainability, The Proctor & Gamble Company; and Jean-Michel Cousteau, Founder and President, Ocean Futures Society and Executive Vice President, The Cousteau Society. Also featured are talks by winners of the Presidential Green Chemistry Challenge Awards, and the Student Workshop. Web site: www.gcande.org. Registration and housing are open.

Kurylo Address at CSW Dinner Meeting

(Continued from page 1) measurement techniques for gas phase kinetics and photochemistry that have enabled atmospheric scientists to isolate and investigate specific chemical reactions. These studies have provided the data required for modeling calculations of the transformations of important atmospheric trace species. The role of measurement campaigns for studying the atmosphere itself as a complex photochemical reactor will also be described.

Dr. Kurylo will also provide an historical perspective of the development of past and present national and international research programs for investigating changes in atmospheric composition. Scientific achievement under these programs have led to the success of the Montreal Protocol on Substances that Deplete the Ozone Layer.

Volunteer Services Opportunities: Science Fair Judging

Please contact CSW (contact info, page 2) to volunteer to judge the following upcoming science fairs:

Anne Arundel County Schools: North County HS, Glen Burnie, MD, March 14, 9 am - 12:30 pm
DC Schools: McKinley Tech HS, DC, March 14, 8:30 am - 12:30 pm
Montgomery County Schools: Reckord Armory Building, UMD, College Park, MD, March 21, 12 noon - 5:30 pm
Fairfax County Schools: Robinson HS, Fairfax, VA, March 28, 7 am - 12:30 pm
Prince George’s County Schools: PG Community College, Largo Student Center, March 28, 7:45 am - 12:30 pm.

High School Chemistry Grant Proposals Due April 1

The ACS-Hach High School Chemistry Grant is awarded to teachers and institutions aiming to enhance the teaching and learning of high school chemistry. Applicants can receive up to $1,500 to support ideas that transform classroom learning and encourage student development.

Application forms can be found at the ACS web site, www.acs.org, following the links Home > Funding & Awards > Grants > ACS-Hach High School Chemistry Grant.

To apply for the ACS-Hach High School Chemistry Grant, mail or fax the application form and a one-page proposal. The deadline to apply is April 1, 2009. Notification letters will be emailed May 1.

If you are approved for a grant, your check will be mailed May 1. ACS-Hach will also request a photograph of you or your students and a statement describing how the grant has helped your classroom.

CSW Calendar

CSW Monthly Dinner Meetings
Thursday, April 16
Thursday, May 14

Board of Managers Meetings
Monday, March 16
Monday, May 18
DC Area Chemistry Seminar Schedules

Listed below are chemistry-related seminar schedule web sites from area universities, that were up-to-date as of press time. More will be posted as they become updated. Contact the department to find out about general public admission, directions to campus, and parking. Viewing the PDF? Just click!

Georgetown Chem: http://chemistry.georgetown.edu/news/seminars.html
GWU Biochem: http://www.gwumc.edu/biochem/seminars.html
GWU Chem: http://www.gwu.edu/~gwchem/seminars.cfm
Maryland Biotechnology Institute: http://www.umbi.org/home.php
Maryland Chem Eng: http://www.chbe.umd.edu/events/seminars.html
Maryland Chemical Physics: http://www.chemicalphysics.umd.edu/8_courses.htm

DC Area Chemistry Seminars: Editor’s Choice

Check web sites for times and locations.
Maryland Chem: Dr. Jovica Badjic, Ohio State University: “Gated Molecular Baskets,” March 12.

Chem-Mystery

A possibly amusing amalgamation of chemistry, wordplay and trivia

The name “Barack” can be spelled using symbols of elements two different ways: Ba Ra C K, or B Ar Ac K. But the name “Obama” cannot be spelled exactly using symbols of elements. In fact, only one president’s full name (no middle name or initial) can be spelled using element symbols. What is it? Lists of US presidents can easily be found on the Internet. (Answer, page 6)
ACS Publications from DC Area Research Groups

This feature of The Capital Chemist is a compilation of selected publications in ACS journals, appearing recently, from area institutions. The list is selected based on a number of factors: representation of different chemistry sub-disciplines, representation of different institutions and departments, noted involvement of undergraduate students, and prominence within the journal issue. Don’t see an article you think should be featured? Send it to csw@acs.org for consideration. If the article is an accelerated or highlighted publication, or has been featured in the popular/scientific press, let us know that, too. * - denotes corresponding author.


Joseph Fortunak Receives ACS Astellas Award

ACS has announced the winners of the Astellas USA Foundation Awards. The awards recognize individuals or teams that have significantly contributed to scientific research that improves public health. Each winner will receive a $30,000 grant from the Astellas USA Foundation’s award program.

Joseph Fortunak, associate professor of chemistry and pharmaceutical sciences at Howard University, was given the award for his pioneering work to engage in research to make essential medicines for HIV and malaria more affordable and available to patients in the developing world. Reprinted from C&E News, Feb. 16, 2009, 87(7), p. 57. Copyright 2009.
**Business Directory**

**Services**

**Chem-Mystery Answer**

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Or use the ACS web site.
2009 Eastern Analytical Symposium

November 16 - 19, 2009
Garden State Exhibit Center, Somerset, New Jersey

CALL FOR PAPERS
Deadline – April 15, 2009

The Eastern Analytical Symposium and Exposition is the second largest conference and exposition for laboratory science in the U.S. dedicated to the needs of analytical chemists and those in the allied sciences. We offer high quality cutting-edge technical sessions and state-of-the-art short courses, workshops and seminars. We invite you to be a part of the program by contributing a paper for oral or poster consideration. Please note that all abstracts must be submitted electronically via the EAS web site at www.EAS.org. The abstract submission deadline is April 15.

To submit a contributed paper for the 2009 EAS Technical Program, please submit abstracts through our web site at www.EAS.org, between March 1 and April 15, and follow the instructions for abstract submission. Invited speakers must not submit abstracts to EAS until requested.

Please carefully review the following information:

- All contributed abstracts must be submitted through our web site at www.EAS.org between March 1 and April 15, 2009. No faxed, e-mailed, or mailed abstracts will be accepted.
- Please note that no one author may submit and present more than two posters.
- All abstracts will be acknowledged via e-mail.
- The title of the presentation and the list of authors that you submit are final, and may not be changed.
- The abstract that you submit will be considered to be your final abstract that will be printed in the abstract book for the 2009 Eastern Analytical Symposium.
- Presenting authors of contributed submissions will be notified in June 2009 of the status of the abstract and its session assignment.

TOPIC AREAS

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EAS Hotline 732-449-2280
EAS Faxline 732-612-1123
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www.EAS.org
Career Seminar at Delaware Offers Professional Guidance, Advice

The ACS Delaware Section, a neighbor section to the CSW, will host a career seminar of particular interest to area chemists facing employment uncertainty. The seminar will be held on Monday, March 16, at the Perkins Student Center, University of Delaware, in Newark. Cost is $5 per person for students and Delaware ACS members and $8 per person for non-section members.

The agenda includes a 4:00 – 6:00 pm session on Résumé Critiques and a Sponsor Exhibition. A pizza dinner will commence at 6 pm, followed by speaker sessions beginning at 6:30. The following speakers, with presentation information as available, have been confirmed:

**Dr. Pat N. Confalone,** Vice President, Global R&D, DuPont Health, Nutrition, and Crop Protection. Recently elected to the ACS Board of Directors.

**Dr. William C. Golton,** Vice President, The CECON Group, Inc. This talk is aimed at stimulating discussion on what chemical consultants do, defining your clients, preparing a good résumé, marketing your services, how much to charge, legal and tax considerations.

**James W. Parrett, Jr.,** Attorney at Law, Morris, Nichols, Arsh & Tunnell LLP. Not all careers in chemistry have to take place in the lab. During this talk alternative career paths in the legal field will be discussed. In particular, opportunities for chemists in the field of patent law as litigation attorneys, patent prosecutors and expert witnesses and consultants will be described.

**Dr. Masha Petrova,** founder and CEO of MVP Modeling Solutions, LLC. “Successful Unemployment: 10 things you need to do to increase your professional value.” During this talk attendees will hear 10 specific action items that you can do while searching for your next job, that will dramatically improve your résumé, greatly increase your interviewing skills, provide many more opportunities for employment and set you apart from the rest of the job seekers in your field.

**Dr. Cynthia H. Stahl,** EPA. Expertise includes air quality programs, integrated health and ecological analyses, and addressing uncertainty in decision making.

**Professor Klaus H. Theopold,** Chair, Department of Chemistry and Biochemistry, the University of Delaware. Life as a chemist in academia can be a tremendously fulfilling experience, but it is not for everyone. Topics will include what it takes to get an academic job, how to keep it, and what to expect in today's university environment. It's not all “ivory tower” any more.

For more information, visit the ACS Delaware Section web site at: http://membership.acs.org/d/Del/#Calendar_of_Events.