



VOL. LV

MAY, 1999

NUMBER 5

1999 REMSEN AWARD



THOMAS J. MEYER

Picnic

Picnic

Picnic



THE CHESAPEAKE CHEMIST

When: July 11, 1998

Where: Patapsco State Park, Pavilion # 501
McKeldin Area (Marriottsville Road)

Time: Noon to Dusk

The Maryland Section in cooperation with the Washington Chemical Society will again sponsor our almost annual family picnic. The Sections will furnish hotdogs, hamburgers, sodas, beer, condiments, paper goods, cups, utensils, etc. The McKeldin Area has a ball diamond, basketball court, volleyball court, hiking trails, horseshoe pits, wading type stream and more. There will be a nature walk.

To make the picnic a special food fest we are asking participating families to bring a prepared dish of food. Please use the formula listed below:

- | | | | |
|-------|---------|-------|-----------|
| a - f | salad | g - l | snack |
| m - r | dessert | s - z | side dish |

Fees: \$7.50 per individual, \$ 15.00 per family.

Entrance to the Park is free for children under 16 and for Seniors, 62 and up. There is a small fee for adults.

Reservations: Please send checks, payable to Maryland Section ACS, to

Dr. Shirish Shah
College of Notre Dame
4701 North Charles Street
Baltimore, MD 21210

by June 25, 1999. Late reservations may be made by calling 410-532-5712.

Bring your sports equipment. Plenty of free parking,
Experienced camp councilors needed

LOCAL SECTIONS MINIGRANTS AVAILABLE

The ACS Committee on Minority Affairs is now offering minigrants of as much as \$500 to local sections to support the implementation of programs that encourage the participation of underrepresented minority scientists. If you are interested in receiving more information about this program, contact Stephanie Butler of the Department of Minority Affairs at 1-800-227-5558 ext. 6262 or s_butler@acs.org.

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THE 54th REMSEN LECTURER

THOMAS J. MEYER
KENAN PROFESSOR OF CHEMISTRY
UNIVERSITY OF NORTH CAROLINA - CHAPEL HILL

Thomas J. Meyer is Vice Provost for Graduate Studies and Research and Kenan Professor of Chemistry at the University of North Carolina at Chapel Hill.

Born in 1941 in Dennison, Ohio, he received the B.S. degree *summa cum laude* from Ohio University in 1963 and a Ph.D. degree from Stanford University in 1966. At Stanford his research director was Professor Henry Taube. After leaving Stanford he spent a year as a NATO Postdoctoral Fellow at University College, London and worked with the late Sir R. S. Nyholm. In January, 1968, Professor Meyer was appointed assistant professor at the University of North Carolina at Chapel Hill where he has remained throughout his academic career. He has served as Chair of Chemistry and of the Applied Sciences Curriculum and is currently on the boards of the NC Board of Science and Technology, Research Triangle Institute, NC Biotechnology Center and Triangle Universities Center for Advanced Studies, Inc.

Professor Meyer has served as visiting lecturer or visiting scholar at many universities throughout the United States and abroad and has been recipient of a number of awards which have recognized his contributions as a teacher and scholar, including induction into both the National Academy of Sciences and the American Academy of Arts and Sciences.

Professor Meyer's research interests extend over a number of areas of chemistry. They include mechanisms and catalysis of oxidation-reduction reactions, photochemical electron and energy transfer, artificial photosynthesis, and interfacial chemistry in thin films and molecular layers.

CHEMICAL APPROACHES TO ARTIFICIAL PHOTOSYNTHESIS

Polypyridyl complexes of Ru(II), Os(II) and Re(II) have low-lying metal-to-ligand charge transfer (MLCT) excited states whose molecular and electronic structures are well understood. These excited states also undergo facile electron and energy transfer to added quenchers in solution or by intramolecular processes in molecular assemblies.

In independent studies, complexes having closely related structures have been developed that have the ability to carry out the catalytic oxidation of organic and inorganic molecules, including the oxidation of H₂O to O₂ and the reduction of CO₂ to reduced carbon. The availability of both the excited state and catalytic reactivity opens the possibility of designing molecular assemblies for artificial photosynthesis, the formation of high energy chemicals by using visible light.

Strategies will be discussed for assembling various components in single molecular assemblies. These strategies include the utilization of chemical links between transition metal complexes, the derivatization of soluble polymers, and the controlled synthesis of assemblies by the utilization of solid state peptide coupling. Specific examples will be discussed in which light absorption and intramolecular electron transfer combine to give spatially separated oxidant and reductive redox equivalents, and of antenna molecules that have the capability of absorbing visible light and transmitting it rapidly by energy migration.

COVER PHOTO by Dan Sears
UNH-CH News Service

THE 54th REMSEN LECTURE

Wednesday, May 12, 1999

Johns Hopkins University
Homewood Campus

The Great Room in Levering Hall

6:00 PM Reception

7:00 PM Banquet

Remsen Hall, Room 101

8:00 PM Presentation of Remsen Award to Professor Thomas J. Meyer, Vice Provost for Graduate Studies and Research and Kenan Professor of Chemistry at the University of North Carolina at Chapel Hill

Remsen Award Address, "Chemical Approaches to Artificial Photosynthesis" by Professor Meyer

Meeting Registration

Banquet price is \$20.00 per person (including the reception in honor of Professor Meyer); \$17.00 for spouses and retired members and \$10.00 for students. Reservations must be made by 12:00 noon on Friday, May 7, 1999 by calling the Section reservation line 410-532-5712 leaving your name (with spelling), affiliation and telephone number. No shows will be billed; cancellations must be received by 12:00 noon on Monday, May 10, 1999. Mail checks payable to the Maryland Section of the ACS to Dr. Shirish Shah, Department of Chemistry, College of Notre Dame of Maryland, 4701 N. Charles Street, Baltimore, Maryland, 21210. Payment at the door will also be accepted. Late reservations will be accepted on a space available basis. You may attend Professor Meyer's address without attending the banquet.

Directions to Johns Hopkins University

From the North. From I-695 (Baltimore Beltway) proceed to exit 25 (Charles Street). Follow Charles Street south for eight miles to University Parkway. Turn right on University Parkway and stay in the left-hand lane. Travel 500 feet and you will see a brick entrance to The Johns Hopkins University (Goodnow Road). Proceed to the visitor parking meters.

From the South. Drive north on I-95. Do not take the Harbor Tunnel or Beltway exits! Follow the signs to downtown Baltimore ("Inner Harbor/Memorial Stadium - Use 395 North" and "395 North, Right Lanes"). The city skyline will be to the left. Take the exits marked "395 North Downtown" and "395 Downtown/Inner Harbor". Turn right on Conway Street (first traffic light). Proceed two blocks to Charles Street and turn left. Follow Charles Street north (about 2.5 miles) to University Parkway. Turn left onto University Parkway and stay in the left-hand lane. Travel 500 feet and you will see a brick entrance to The Johns Hopkins University (Goodnow Road). Proceed to the visitor parking meters.

50-YEAR MEMBERS AT BELMONT

THE ACS MARYLAND SECTION WILL HOST ITS NEW 50-YEAR MEMBERS OF THE AMERICAN CHEMICAL SOCIETY AT A LUNCHEON AT BELMONT ON MAY 28, 1999. ALL SECTION MEMBERS ARE ENCOURAGED TO ATTEND, BUT SPACE IS STRICTLY LIMITED.

THE COST FOR THE LUNCHEON FOR MEMBERS WILL BE \$25, BUT SPOUSES AND RETIRED PERSONS MAY ATTEND FOR \$20. PLEASE MAKE RESERVATIONS PROMPTLY WITH

DR. SHIRISH SHAH
COLLEGE OF NOTRE DAME
4701 NORTH CHARLES STREET
BALTIMORE, MD 21210
410-532-5712
e-mail sshah4@juno.com

Shirish Shah, Alvin Bober and Ernest Silversmith have organized a congratulatory program for the occasion.

KIDS AND CHEMISTRY

SHOW AND DEMONSTRATION

SPONSORED BY THE AMERICAN CHEMICAL SOCIETY

MARYLAND SECTION AND THE CHEMICAL SOCIETY OF WASHINGTON

WHERE: PATAPSCO STATE PARK, PAVILION 501

WHEN: JULY 11, 1998 AT 4:00 PM

COST: FREE

PROFESSORS FROM AREA SCHOOLS AND COLLEGES WILL INTERACT WITH THE CHILDREN TO MAKE SLIME AND OTHER SUPER THINGS.

THIS AWARD WINNING PROGRAM COMES DIRECTLY FROM A SUCCESSFUL RUN AT THE MARYLAND SCIENCE CENTER AND THE BALTIMORE ZOO.

FOR YOUR NEXT MEETING, WE'VE GOT ALL THE RIGHT CHEMISTRY

As a member group of the ACS you can't go wrong at *Belmont Conference Center*. A full-service conference center located on the grounds of an elegant 18th century estate, you'll find over 80 acres of rolling meadows, with fully staffed services, a gourmet chef and overnight accommodations for up to 25 guests. We also offer complete audio-visual and communication capabilities, tennis courts, swimming pool and hiking trails. Belmont is conveniently located 8 miles from BWI airport and 35 miles from Washington, D.C.

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For more information, please contact us by phone at 410-796-4300 or visit our website at www.acs.org/belmont.

If one advances confidently in the direction of his dreams, and endeavors to live the life which he has imagined, he will meet with a success unexpected in common hours.
Henry David Thoreau

THE REMSEN AWARD

The annual Remsen Memorial Lectures were inaugurated in May, 1946 by the Maryland Section of ACS to honor Ira Remsen, first Professor of Chemistry and second President of the Johns Hopkins University. The Remsen Memorial Lecturers are chemists of outstanding achievement, in keeping with Ira Remsen's long and devoted career as an exponent of the highest standards in teaching and research in chemistry.

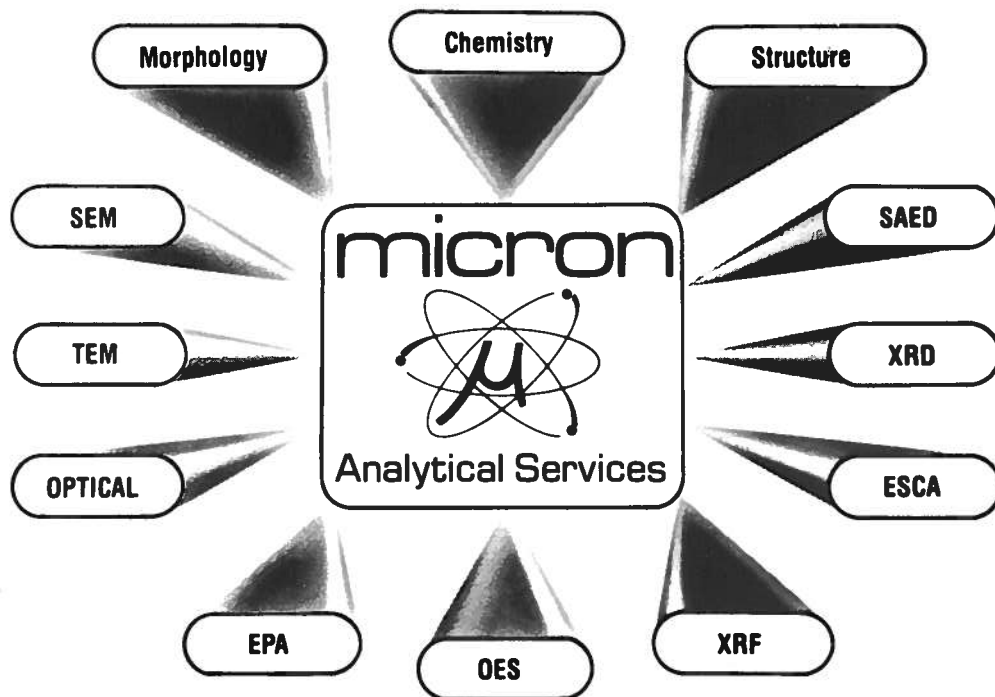
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1998 Peter B. Dervan	1980 Roald Hoffman	1962 George Porter
1997 William Hughes Miller	1979 Harry B. Gray	1961 Herbert C. Brown
1996 David Evans	1978 John Charles Polanyi	1960 Henry Eyring
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MARM 1999

32nd Middle Atlantic Regional Meeting
American Chemical Society

May 17 – 19, 1999

Fairleigh Dickinson University,
Madison, New Jersey