



THE

CHESAPEAKE CHEMIST

MARYLAND SECTION
AMERICAN CHEMICAL SOCIETY

VOL. LV

NOVEMBER, 1999

NUMBER 8

November Dinner Meeting

Date: *Wednesday, November 17, 1999*

Location: University Union
Towson University
Towson, MD

5:30 – 6:15 PM Technical Presentation; Dr. J. Michael McBride; Title -
*Controlling the Growth and Dissolution of Molecular
Crystals* - Room 311

6:00 - 7:00 PM Reception/Social Hour – Refreshments and Hors
d'oeuvres – Potomac Room

7:00 PM Dinner – Chef William Gourmet Buffet Extravaganza!

7:45 PM Topical Presentation; Dr. J. Michael McBride, Title –
*Seeing Atoms with the Mind's Eye: 100 Years of Occult
Chemistry*

Meeting Registration

Dinner price is \$20 per person; \$18 for retired members and spouses; \$10 for students. Reservations must be made by 12:00 noon on Friday, November 12th by contacting Dr. Shirish Shah at 410/532-5712.

**Maryland Section
American Chemical Society**

Headlines 1998

**Kids & Chemistry + National Chemistry Week = Year Round
Excitement in Maryland**

*Attendance records set for Family Science Day @ Maryland Science Center,
Chemistry, Ballet and Degas @ the Baltimore Museum of Art, and
Programs at Schools, Community Centers Libraries*

Presenters span the spectrum of age and experience

Taking Chemistry to Places Where No Chemist Dare Go Before

*Baltimore Museum of Art, US Senate (Senator Mikulski's Office), Jewish
Cultural Festival, Maryland and DC Sections Joint Picnic @ Patapsco State
Park*

**New Monthly Meeting Format Catalyzes the Appearance of New
Faces from New Places**

*Joint meetings with other professional organizations (Maryland
Environmental Business Alliance (MEBA), Society for Applied Spectroscopy
(SAS), Chemistry Educators of Maryland (ChEMd); Sigma Xi*

*Pre-dinner focused, technical talks complement after dinner general interest
talks of import to Maryland chemists*

**Outstanding (and Just Interested) Maryland Chemistry Students
Recognized and Mentored**

*Bel Air High School student Alex Ioannidis selected for the US Chemistry
Olympiad Team (Melbourne, Australia)*

*Grades 5-16 students trained as presenters for outreach events aimed at
students*

*May Monthly Meeting honors outstanding achievement by area community
college and university chemistry students*

EAS 2000

Bruce McPherson, EAS 2000 president, informs us that the Eastern Analytical Symposium, anticipating the need for additional housing, meeting rooms and exhibit space as a result of the steady growth of the Symposium, is planning to move from its current venue in Somerset, New Jersey, to Atlantic City.

The 2000 meeting will be held October 29 - November 3 at the Atlantic City Convention Center and the Sheraton Hotel, connected to the Center, will be the headquarters.

The final meeting in Somerset will be held this year November 14 - 19.



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The Chesapeake Chemist is published monthly September through May by the Maryland Section of the American Chemical Society. Address editorial comments to the Editor. Send advertising copy and inquiries to the Business Manager. The Maryland Section is not responsible for opinions expressed herein. Editorials express the opinions only of their authors. The Editor is responsible for all unsigned material.

J. Michael McBride
Professor of Chemistry
Yale University

Michael McBride was born in Lima, Ohio in 1940 and studied at the College of Wooster and Harvard College. Since receiving his Ph.D. from Harvard University in 1966 for work in mechanistic free-radical chemistry under Paul D. Bartlett, he has taught at Yale University, where he is Professor of Chemistry.

His primary research has involved using single crystals of free-radical precursors to understand the factors that influence chemical reactions in organic solids. Supplementing X-ray diffraction with EPR and FTIR after minor photolysis at very low temperature has revealed the course of complex reactions in great structural detail. In molecular environments that are uniform and structurally well characterized, reaction steps that involve atomic motion over less than 1% of a bond distance have been characterized. Studies of azoalkanes, organic peroxides, and nitramines have shown unprecedented control over reaction stereo- and regiochemistry resulting from a complex interplay between the chemical and physical properties of molecular crystals. This interplay has led to studies of the relationship between molecular structure and such bulk properties of crystals as melting point, compressibility, and refractive index. Recent research has involved the mechanism of crystal nucleation, growth, and dissolution using crystal optics and AFM.

McBride's research and teaching have been influenced by interest in the historical development of chemistry, with special emphasis on the structural model of organic chemistry, on free-radical chemistry, and on 19th-Century crystallography. He understands how the Levitron works.

He has served on the editorial advisory board of *Accounts of Chemical Research* and on the Commission on Physical-Organic Chemistry of the IUPAC.

He has held a Sloan Fellowship, a Dreyfus Teacher-Scholar Award, a Senior Visiting Fellowship from the Science Research Council of Britain, and the Michael Visiting Professorship and Schmidt Lectureship at the Weizmann Institute of Science. He received the Prelog Medal of the ETH (1992). His teaching has been recognized by the Catalyst Award of the Chemical Manufacturers Association (1996) and the ACS Nobel Laureate Signature Award for Graduate Education (1987, shared with his former student Mark Hollingsworth).

NATIONAL TECHNOLOGY MEDAL NOMINATIONS

All ACS members are invited by the Committee on Patents and Related Matters (CP&RM) to suggest possible nominees for the National Technology Medal. Funded by the United States Department of Commerce and established by the Stevenson-Wydler Innovation Act of 1980, the medal is awarded annually by the President. It may be awarded to individuals, groups, companies, or institutions within the United States for outstanding contributions to technology or for the promotion of the technological workforce. Nominations can be sent to Debbie Fillinich, CP&RM staff liaison, American Chemical Society, 1155 Sixteenth Street, NW, Washington, DC 20036.

For further information search <http://www.ta.doc.gov/medal>, call ACS at 202-872-4476, or e-mail d_fillinich@acs.org. CP&RM will consider the nominations during the national ACS spring meetings.

The Johns Hopkins University 1999 Fall Chemistry Colloquium Schedule

Remsen Hall 233 – Tuesdays, 4:15 pm

For more information contact Rosalie Elder, 410-516-7432

November 2	Dr. Byron Lengsfeld IBM Research Laboratories	"The Theory of Magnetic Media"
November 9	Professor Neil Marsh University of Michigan	"Coenzyme B12 - Nature's Radical Catalyst"
November 16	Professor J. Michael McBride Yale University	"Free-Radical Reaction Mechanisms in Molecular Crystals"
December 2 Thursday	Professor James K. Hurst Washington State University	"The Radical Chemistry of Peroxynitrite and its CO ₂ Adduct"

AMERICAN CHEMICAL SOCIETY ONLINE

ACS has decided to merge ChemCenter and the ACS Web site. The new site will carry the ChemCenter name and will be located at www.acs.org – it was scheduled to debut on August 15.

It is expected that the new site will prove more efficient than the old ones, will have increased content and will greatly strengthen the online presence of the ACS.

Applications invited for CHF Research Travel Grants

Philadelphia—The Chemical Heritage Foundation (CHF) offers small travel grants to enable interested individuals to make use of the research resources of the Beckman Center for the History of Chemistry, the Othmer Library of Chemical History, and its associated facilities. Grants may be used for travel, subsistence, and copying costs. While grants do not normally exceed \$500, applications for up to \$1000 will be considered, particularly from international applicants.

Applications should include a complete curriculum vitae, a one page statement on the research proposed and the applicability of area resources, and a budget. In addition, applicants should arrange for two letters of reference to be sent directly to CHF. Applications should be sent to Mary Ellen Bowden, Chemical Heritage Foundation, 315 Chestnut Street, Philadelphia, PA 19106; phone 215 873 8228; fax 215 925 1954.

Deadlines: 1 February for grants used April-June
1 May for grants used July-September
1 August for grants used October-November
1 November for grants used January-March

Chemical Heritage Foundation wishes to thank the American Association of Textile Colorists and Chemists for their generous support of the travel grant program.

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When is the last time you attended an ACS meeting?

DERVAN WINS PAULING MEDAL

Peter B. Dervan, Bren Professor of Chemistry at the California Institute of Technology and 1998 winner of the Maryland Section's Remsen Award, has been chosen to receive the 1999 Linus Pauling Medal. The Pauling Medal is presented annually by the Oregon, Portland and Puget Sound Sections of the ACS in recognition of work in chemistry that is significant and has broad impact in the spirit of the life and work of Linus Pauling.

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Successful salesmen, authors, executives and workmen of every sort need patience. The great liability of youth is not inexperience but impatience. *William Feather*

ELECTION OF OFFICERS

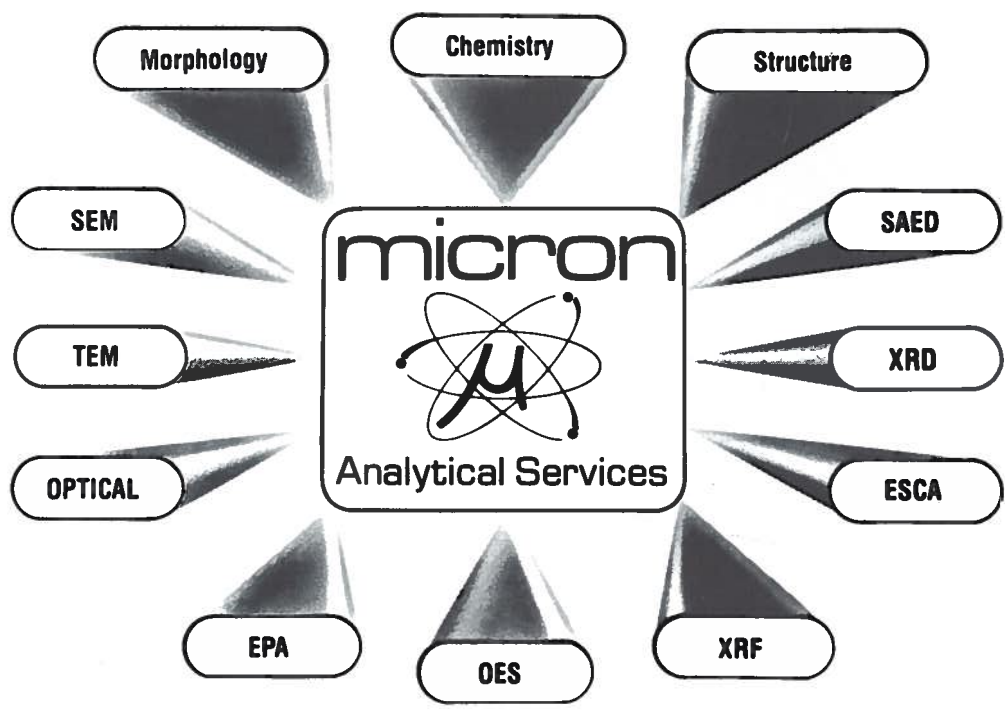
Please complete the following ballot for the election of 2000 officers, councilors and members-at-large of the Executive Committee of the Section and return it to the Chair by December 10. Please sign the envelope but not the ballot itself so that membership can be verified.

Chair	Victoria Kuntz	_____
Vice Chair	Mark Gold	_____
Chair-elect	Tom Brewer	_____
Secretary	Mya Morton	_____
Treasurer	Robert von Tersch	_____
Councilors (elect two)	Donald Jones	_____
	David Roswell	_____
Alternate Councilor	Elwin Penski	_____
Members-at-large (elect five)	Saeed Kahn	_____
	Walter Roy	_____
	Demetrius Michos	_____
	Mark Banash	_____
	Jan Kolakowski	_____

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