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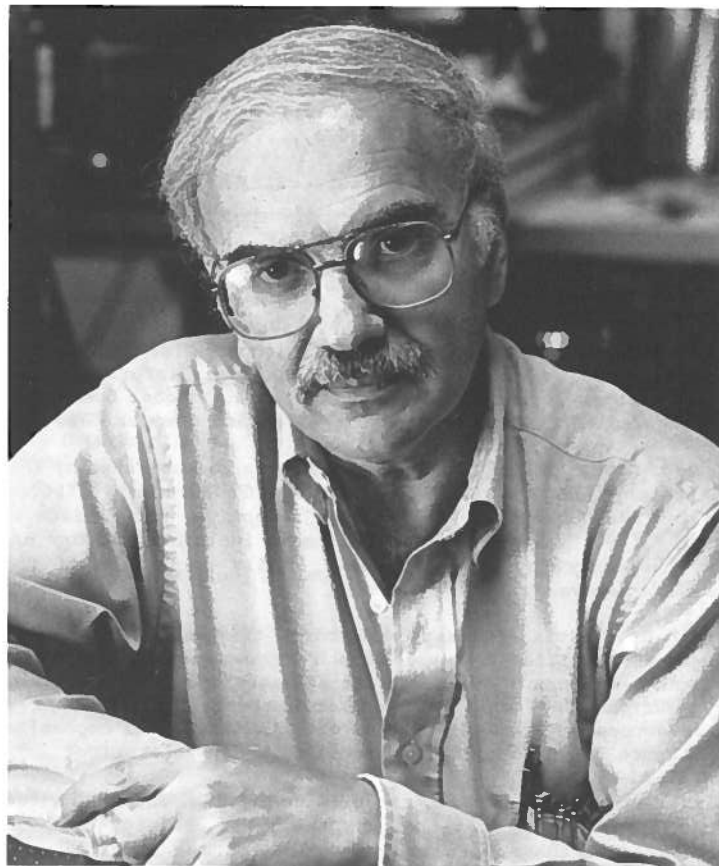
CHESAPEAKE CHEMIST

MARYLAND SECTION
AMERICAN CHEMICAL SOCIETY

VOL. LIII

MARCH, 1997

NUMBER 3



L. MARIO AMZEL

MARYLAND SECTION FINANCIAL REPORT

Revenues:	1994	1995	1996
Annual ACS Allotment.....	\$10,597	\$10,741	\$11,180
New Member Commissions.....	20	50	0
Local Section Dues.....	5,056	5,483	6,356
Newsletter.....	2,634	5	1,714
Meals (Total Revenues).....	4,203	5,166	4,098
Interest, Dividends.....	636	852	2,137
Donations.....	3,000	5,210	1,500
ACS Rebate - Councilor Travel Expenses.....	0	675	1,923
Other - Includes MARM Income.....	0	2,453	160
Total Revenues.....	\$26,146	\$30,635	\$29,068
Expenses:			
Administrative.....	\$ 552	\$ 1,013	\$ 597
Subsidies.....	0	0	3,696
Short Courses.....	0	150	0
Local Meetings - Includes Speakers.....	998	2,550	1,937
Meals (Total Expenses).....	6,576	6,938	5,948
Newsletter.....	9,509	10,452	10,982
Awards.....	5,437	7,400	2,200
Travel Subsidies to Councilors.....	0	1,359	2,334
Officer Subsidy.....	0	0	140
Other - Includes MARM Expenses.....	2,661	660	38
Total Expenses.....	\$25,733	\$30,522	\$27,872

HERITAGE SERIES EDITORIAL TEAM

A new team has taken on the direction of a growing, innovative series of books on the achievements of the modern chemical sciences. The team consists of two highly experienced, respected editors and science historians - Anthony S. Travis of The Hebrew University, Jerusalem, and O. Theodor Benfey, well-known from his roles as editor of *Chemistry* magazine and *Chemical Heritage*.

The *History of Modern Chemical Sciences* series is co-published by the American Chemical Society and the Chemical Heritage Foundation. Titles already available include *Nobel Laureates*, *Stalin's Captive*, and *Wallace Carothers, Inventor of Nylon*. Volumes under development include a *History of Women in Chemistry*, the biography of *Fritz Haber*, and a collection of the *Classic Papers of R.B. Woodward*.

According to Dr. Travis, the series editor, "this ACS-CHF series offers unprecedented opportunities to develop new reference resources on our chemical heritage, and new accounts that make chemical achievement accessible to wider publics". Dr. Benfey, associate editor, agrees, and stresses that "the combined resources and marketing skills of ACS and CHF will emphasize the role and significance of the chemical sciences to a new generation".

The Chemical Heritage Foundation, established by the American Chemical Society and the American Institute of Chemical Engineers, had its origins in 1982. CHF seeks to strengthen public understanding of the chemical sciences and technologies, increase the flow of the ablest students into the chemical sciences and chemical process industries, and instill in chemical scientists and engineers a greater pride in their heritage and their contributions to society.



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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.

L. MARIO AMZEL

Mario Amzel is professor of biophysics in the Johns Hopkins University School of Medicine.

Dr. Amzel is a graduate of the Universidad de Buenos Aires, Argentina, whence he also received a Ph.D. in physical chemistry in 1968. From 1967-1969 he was an instructor at the Universidad Central, Caracas, Venezuela, after which he came to the Johns Hopkins University School of Medicine as a postdoctoral fellow. He became an instructor in 1970, assistant professor in 1973, associate professor in 1978, and assumed his present position as professor of biophysics in 1984. He was a Damon Runyon postdoctoral fellow in 1970-1971 and since 1988 he has been an honorary professor at the University of Buenos Aires.

His professional activities include being treasurer of the Latinoamerican Biophysical Society, member of the Scientific Advisory Panel of the Institute of Genetic Engineering and Biotechnology of the Spanish government, member of the NSF Panel for Facility Centers and a member of various special study sections of NIH and ONR.

He has been a member of the editorial boards of the *Journal of Molecular Recognition*, *Proteins: Structure, Function and Genetics* and the *Journal of Bioenergetics and Biomembranes*. He has been a session chairman in several Gordon Conferences and was co-chair of the 1995 Gordon Conference on proteins. He is the author or co-author of more than 100 scientific publications.

Dr. Amzel will discuss the subject of the structure of bovine odorant binding protein and its mechanism of odor recognition.

Our March meeting is being held jointly with the local section of the Institute of Food Technologists. It will feature an informal demonstration of the "Electronic Nose" by the Alpha M.O.S. Company and perhaps a man versus machine challenge pitting teams from ACS and IFT against the "Nose".

ALPHA M.O.S.

Alpha M.O.S. is a multinational corporation headquartered in Toulouse, France, with the North American Division based in Belle Mead, NJ.

Alpha M.O.S. has developed and manufactures the FOX Line of Electronic Nose products. The FOX Intelligent Electronic Nose Analysis Systems are based on Multiple Odor Sensing technologies designed to assess and analyze taste, smell and compositional attributes for a broad range of matrixes.

Electronic Nose and Sensory Products are currently used to analyze a broad number of sample types such as food, agricultural materials, chemicals, polymers, pulp & paper, and the environment, to name a few. The FOX Electronic Nose Products are routinely used to qualitatively and quantitatively assess freshness and aging, shelf life, product stability, odor permeation, flavor scalping, adulteration, and much more.

The strengths of the "Electronic Nose" technique have been the subject of several publications and symposia resulting in its achieving recognition as a powerful tool for R&D and QC. The Electronic Nose products provide a bridge between specific chemical analysis such as GC and GCMS and human sensory assessment. From these techniques' complementary nature, information not previously available about process and products is now accessible, leading to improved product quality and consistency and savings of time and money.

MARCH MEETING

DATE & PLACE:

Wednesday, March 26, 1997
Foyer and Ballroom
Sheraton Baltimore North Hotel
903 Dulaney Valley Road, Towson
(0.25 mile inside beltway exit 27)
Free parking in adjacent garage

Dinner reservations should be made by mailing checks, payable to Maryland Section of ACS, to

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

SCHEDULE:

5:30 Social Hour - Cash Bar
"Electronic Nose"

6:30 Dinner - Chicken Teriyaki or Grilled Chicken Breast with salad, vegetable, rice, dessert and beverage.

7:30 Dr. L. Mario Amzel
Johns Hopkins University
School of Medicine
"The Three-dimensional Structure of Bovine Odorant Binding Protein and Its Mechanism of Odor Recognition"

by March 19. Late reservations may be made by calling

(410) 532-5712

by March 21. Answering machine is available at this number.

Dinner price is \$25.00 per person, but spouses and retired chemists may attend for \$23.00; students may attend for \$12.50.

It is not necessary to be a member of the American Chemical Society to attend. You may attend the meeting without attending the dinner.

CAREER MATERIALS AND PLANNING

The Section has a number of brochures from the ACS on the topic of careers and planning; a list is available. Our contact for Career Planning is Dr. Linh Cheong at (410) 354-7747. The ACS Job Bank can now be reached at <http://www.ChemCenter.org> using your membership as the password.

E. EMMETT REID AWARD

The Middle Atlantic Regional Meeting (MARM) is accepting nominations until March 26 for the 1997 E. Emmett Reid Award. The award recognizes outstanding teaching in chemistry at a small college. Please contact Mike Zapf at (410) 771-7471 or mike_zapf@mccormick.ex.com@notes.compuserve.com

SCIENCE FAIRS

The Morgan State Science and Engineering Fair and the Baltimore Science Fair will both take place on Saturday, March 22nd. Judges are still needed to complete two large teams for the two fairs. Please contact Mike Zapf at (410) 771-7471.

NOMINATIONS

The Maryland Section is now accepting nominations for 1998 officers and for three alternate councilors to be elected this year. Please send nominations to the chairman of the nominating committee, Shekar Munavalli, 700 Paige Circle, Bel Air, MD 21014.

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PACS ENVIRONMENTAL SAMPLING CONFERENCE

Professional Analytical and Consulting Services, Inc., PACS, will host its 3rd Annual Environmental Sampling, On-site Analysis and Sample Preparation Conference June 18-19, 1997 in Pittsburgh, PA. Topics of interest include environmental, pharmaceutical, bio-tech, sampling plans, on-site analysis, equipment, MS, GC, HPLC, SFE, microwaves, data analysis, quality, automation, training and safety.

Authors are invited to submit 150-250 word abstracts on regular paper by April 15. Oral presentations are scheduled for 15 minutes with 5 minutes for discussion. Posters are also welcome.

Submit abstracts and questions to Dr. Henry Nowicki, PACS, Inc., 409 Meade Drive, Coraopolis, PA 15108; phone (412) 457-6576; FAX (412) 457-1214.

YOUR CHEMICAL WORLD

ACS Corporation Associates has just produced the third edition of *Your Chemical World*, an 88-page book that describes chemistry in layman's terms and shows the critical role that it plays in everyday life. Printed in full color, this book makes an interesting and informative read for teachers, students, and the general public. To obtain copies of *Your Chemical World*, contact ACS Customer Service at 800-227-9919. You may also fax your request to 202-872-6067.

APRIL MEETING

Next month's meeting, our annual student awards meeting, is scheduled for April 16 at Western Maryland College in Westminster.

University of Maryland Baltimore County Department of Chemistry and Biochemistry and Howard Hughes Medical Institute Spring 1997 Seminar Schedule

- | | | |
|-------------|--|---|
| February 4 | Dr. Jose Casas-Finet
"New Insights on Conformation and Association with Nucleic Acids of HIV-1 Nucleocapsid Protein p7" | NCI-Frederick Cancer Research and Development Center |
| February 18 | Dr. Kirk Schanze
"Applications of Transition Metal Photophysics: From DNA to Airplanes" | Department of Chemistry University of Florida |
| February 25 | Dr. Michael Rossmann
"Structural Studies on Enveloped Viruses, Including HIV and Alpha Viruses" | Department of Biology Purdue University |
| March 4 | Dr. Steve Mayo
"Protein Design Automation" | HHMI California Institute of Technology |
| March 11 | Dr. Judith Levin
"Exploring the Role of Template Structure in Transcription by E.Coli RNA Polymerase" | Department of Chemistry Goucher College |
| March 18 | Dr. Carlos Bustamante
Title TBA | HHMI University of Oregon |
| March 27 | Dr. Richard Aldrich
Title TBA | HHMI Stanford University |
| April 8 | Dr. Andrew Hamilton
"Molecular Recognition in Organic and Biological Chemistry" | Department of Chemistry University of Pittsburgh |
| April 22 | Dr. Anna Brajter-Toth
"Electroanalysis with Sensors: New Strategies for High Sensitivity, Selectivity and Speed" | Department of Chemistry University of Florida |
| April 29 | Dr. Charles Perrin
"Reverse Anomeric Effect and Steric Hindrance to Ionic Solvation" | Department of Chemistry and Biochemistry University of California San Diego |

Seminars to be held at 3:30 p.m. in Biological Sciences Rm 403 (refreshments at 3:15 p.m.). For information contact Dr. Lisa Kelly (410)455-2507 or Dr. Bradley Arnold (410)455-2503.

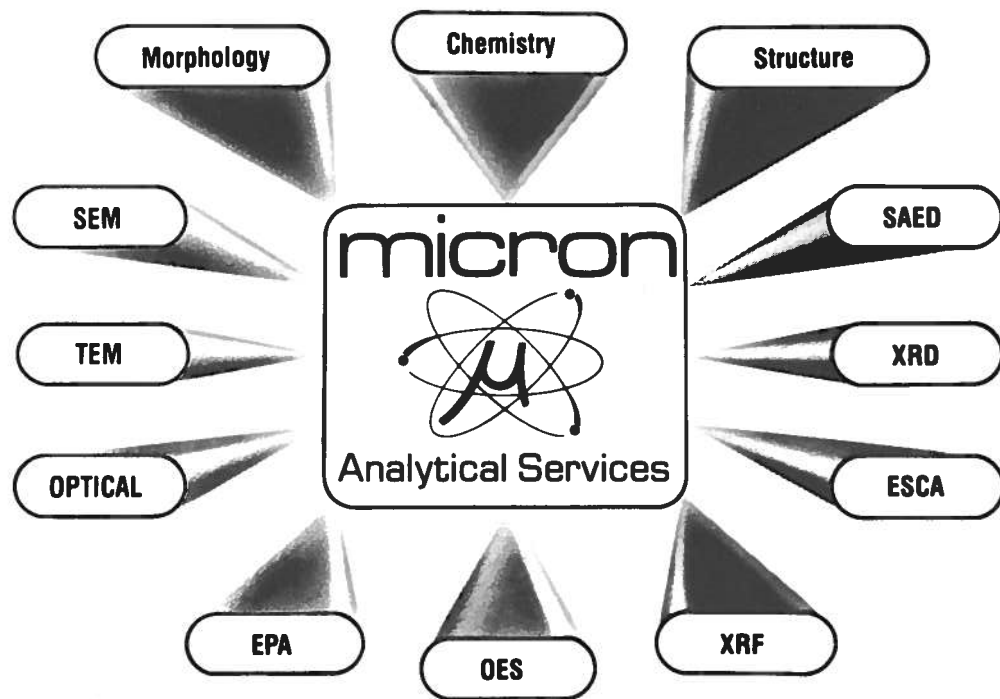
DJERASSI LECTURE AT UMBC

Professor Carl Djerassi of Stanford University will give a public lecture at 7:30 p.m., Thursday, April 10 in the Engineering Building at UMBC. His title is "Nobel Science and Nobel Lust: Disclosing Tribal Secrets through Science in Fiction." Admission is free.

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GRANTS FOR COLLEGE TEACHERS

The Division of Chemical Education invites chemistry teachers in two-year colleges and in undergraduate-only four-year colleges to apply for grant awards to support continuing education activities that will enhance their classroom teaching. Typical examples of these activities include, but are not limited to, enrollment in an advanced course in a nearby university, an ACS short course, or an instrumentation workshop. Your proposal should include a brief statement about your institution and its faculty development plan, how much support you need, and what your personal investment will be in the project. Note that the Passer Fund cannot support sabbaticals.

All proposals should be sent to Larry Peck, Department of Chemistry, Texas A&M University, College Station, TX 77843-5000. You may send an e-mail to peck@chemvx.tamu.edu or contact Dr. Peck by phone at 409-845-2356 or by fax at 409-845-4719.