



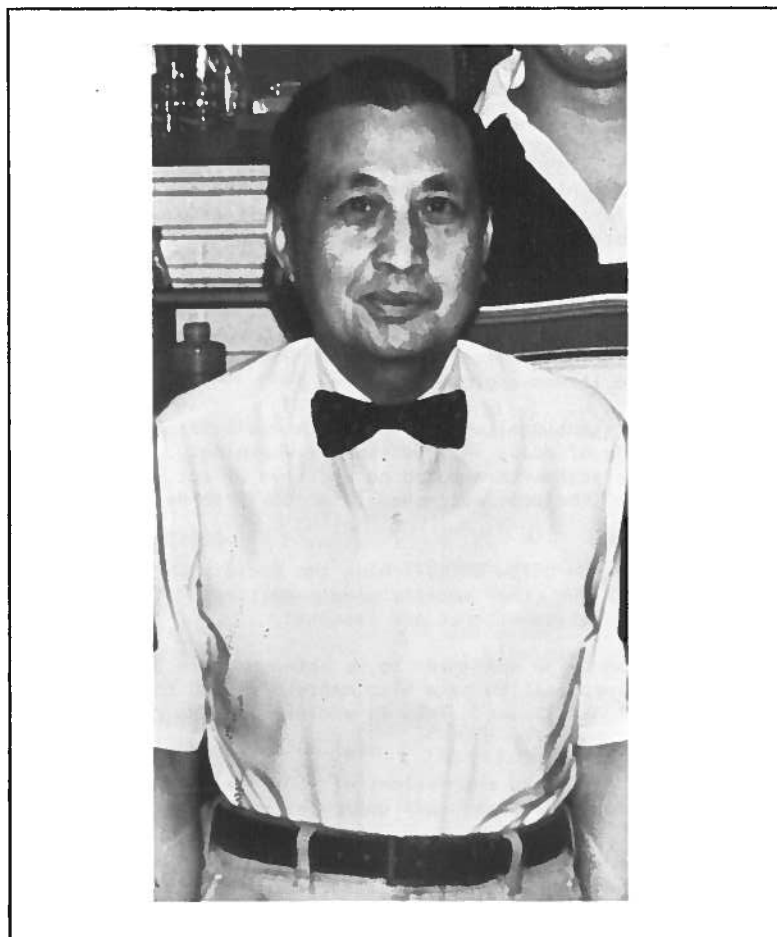
THE **CHESAPEAKE
CHEMIST**

MARYLAND SECTION
AMERICAN CHEMICAL SOCIETY

VOL. XXXIX

DECEMBER, 1983

NUMBER 9



THE MARYLAND CHEMIST OF THE YEAR

MARYLAND SECTION SERVICE AWARD

At the September meeting of the Maryland Section, Howard J. Cohen of SCM Corporation was honored as the 1983 recipient of the section's Service Award. The awardee distinguishes his award by being one of the most dedicated and loyal members of the section. It was correctly noted at the presentation that there are few responsibilities in the operation of the section that have not been assumed by Howard at some time. His assumption of such responsibility invariably assures a timely professional performance with a breadth of understanding and with the section's welfare uppermost. He was an exceptional chairman whose meeting programs were unusually good and whose administrative changes lightened the load of his successors while leading to excellent performance. Many members choose to maintain a low profile and most chairmen feel they have done their part. Howard has worked as willingly at routine jobs since his chairmanship as he did before. His impact on others who have served with him was well demonstrated at the presentation by his appeal for more of the chemical community to join in running the section. His motto of "participate and make it better by your efforts" is a precept by which he lives. We are honored to have him as our 1983 winner.

COUNCILORS' REPORT

The Council meeting opened at the Washington Hilton Ballroom promptly at 8:00 a.m. All three of your councilors were in attendance. There was little real controversy and none had been anticipated. We all voted with the majority on all petitions for action.

The council policy committee (CPC) indicated that the divisor for local sections was being set at 390. The divisional structure was changed slightly by increasing the membership requirement from 500 to 600 for small divisions, and from 1200 to 1300 for large ones. This had the effect of distributing the divisional councilors more broadly. The change in divisions caused the shift in local section councilors to be an increase to one section of one and a decrease of one to another. (I have just learned that we will get a fourth councilor for 1984-85.) A motion was made to postpone their actions. The motion was resoundingly defeated. A second action was a motion to become a part of a group with The Chemical Engineering Society on Pensions. Since no costs were involved it was approved handily.

There were two constitutional and one bylaw change relating to the date of the count for allocation of dues. All passed overwhelmingly. This made all of the dates easier to work with and had no negative effect on either divisions or local sections. (The date was moved from July 1 to December 31 of the preceding year.)

The last item was a new bylaw establishing the Society Committee on Education so it is on par with the other society wide committees. There was no discussion and the motion passed without any dissent.

There is one pending bylaw amendment to be acted upon in St. Louis next spring. This is a proposal to make allotments of \$5.00 for new and \$2.50 for reinstated National Affiliates. This in addition to the regular member allotment.

We all welcome and encourage expressions of your feelings on these and any other subjects. Please write or call us to let us know your concerns.

Respectfully submitted,

Donald E. Jones
David Roswell
Charles Rowell

THE CHESAPEAKE CHEMIST



THE CHESAPEAKE CHEMIST

VOL. XXXIX

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Chemical Education and Safety.....
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Program.....Nolan Phillips

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Western Maryland College

Student Awards.....Donald Hoster
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396-7991

Remsen Award.....Robert L. Caret
Towson State University

Finance.....Harold Klapper
653-3351

MEMBERS-AT-LARGE

John Roach Paul Gabbert
Timothy McNeese Alice Zeiger
Thomas Bitterworth

ALTERNATE COUNCILORS

Linda Sweeting Merle Eiss
Timothy McNeese

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.



Towson State University

**Evening Courses
Spring Semester 1984
January 26 to May 21**

Chem. 1905.341 **PHYSICAL CHEMISTRY**
— **THERMODYNAMICS** (lecture — 3
credits) Wednesdays 7-9:50 p.m.

Chem. 1905.361 **CHEMICAL AND BAC-
TERIOLOGICAL STUDIES ON**
WATER POLLUTION (lecture — 3 cred-
its) Thursdays 7-9:50 p.m. Instructor: Max Eisen-
berg, Department of Health and Mental Hygiene,
State of Maryland

Chem. 1905.363 **CHEMISTRY OF DAN-
GEROUS DRUGS** (lecture — 3 credits)
Wednesdays 6:30-9:20 p.m. Instructor: Frank R.
Milio, Towson State University

Chem. 1905.417 **ADVANCED ANALYTI-
CAL CHEMISTRY** Selected topics in analyt-
ical and instrumental analysis (lecture — 3 cred-
its) Tuesday and Thursdays 5-6:20 p.m.
Instructors: Joseph J. Topping and David Larkin,
Towson State University

Chem. 1905.423 **INORGANIC CHEMIS-
TRY** (lecture — 3 credits) Mondays 7-9:50 p.m.
Instructor: Alan J. Pribula, Towson State University

Special New Course

Chem. 1905.461 **FOURIER
TRANSFORM NUCLEAR
MAGNETIC RESONANCE**
(2 credits — lecture and laboratory)
Instructor: Linda M. Sweeting,
Towson State University
Wednesdays 5:30-8:00 p.m.
This course will feature hands-on use
of Towson State's new JOEL FX90Q
Fourier transform nuclear magnetic
resonance spectrometer.

Register early. Enrollment limited.

Register by Mail: Deadline December 12
In-Person Registration: January 16 and 17

For Course Information call: 321-3058
For Registration Information and
Materials call: 321-2022

ACS VIDEO SHORT COURSE

TOPIC: TECHNICAL WRITING
SPONSOR: Maryland Section of ACS
COORDINATOR: Dorothy Blackwell, Towson State University
DATES: January 10 and 17, 1984, at 1:30 pm
PLACE: University of Baltimore
Academy Center, Room 239
COST: ACS Members \$35.00 (prior to January 1)
\$45.00 (after January 1)
High School Teachers \$17.50 (prior to January 1)
\$27.50 (after January 1)
20% discount for three or more registrants from the
same organization (prior to January 1)
REGISTRATION: Register by January 1
Check payable to Maryland Section of ACS should be sent to:
Alvin Bober, Chemistry Department, University of Maryland
Baltimore County, 5401 Wilkins Avenue, Baltimore, MD 21228
INFORMATION: Call Alvin Bober (455-2491 or 821-5980) or
Dorothy Blackwell (321-2657 or 655-6923)

From: Chuck Rowell

To: The Section Membership

Subject: End of the year remarks

As I go out of office I look back over the year and realize that many people have worked to make the section, its publications and its program work. The list is long (just look at page 3 of this publication for a start) and their work is often behind the scenes which may not lead to their getting proper recognition. We need your participation as well but, if you see one of these folks, please tell them 'thank you.'

We started the year with the intention of trying to work with a program to involve the high school teachers of chemistry as started by Merle Eiss last year. Over the summer an *ad hoc* committee worked long and hard. During October, November and December a pilot program was run in Anne Arundel County with modest success. Next month the same program will start in Baltimore City. Many thanks to Tom Bitterwolf, Tim McNeese, John Roach and Mike Zapf for spearheading the effort and to Bart Hausman, Kris Kirk, Ernie Silversmith and Ron Watras for joining in the presentations. We also have opened up a special membership in the section for high school teachers which we ask you to tell them about also.

From my successor, Nolan Phillips, we picked up a theme of membership growth. We did not put together a real drive but we did succeed in growing faster than the National Society so we got back our lost Councilor, but we need to grow more to protect the seat.

We remain in good financial health and look forward to greater things under Nolan Phillips (who is running a very good meeting program) and under the stewardship of Harold Klapper as chairman-elect.

THE MARYLAND CHEMIST OF THE YEAR

SHIH-YI WANG

Dr. Shih-Yi Wang, known to his friends as Sidney, was born in Peking, China on June 15, 1923. He obtained his early education in China earning a B.S. in Chemistry from National Peking University in 1944. In 1952 he completed his doctoral studies in organic chemistry at the University of Washington in Seattle, Washington. After postdoctoral study at Boston University with W.J. Genser during 1952-1954 and at Harvard with R.B. Woodward in 1954-1955, he joined the faculty of Tufts Medical School in 1955. In 1961 he came to the Johns Hopkins University where he held joint appointments in the School of Hygiene and Public Health and the Medical School in the areas of Biochemistry, Radiation Chemistry and Radiology. In 1976 he became the Director of the Division of Radiation Chemistry which grew into the Division of Environmental Chemistry in the Department of Environmental Health in the School of Hygiene and Public Health. He continued in this post until his untimely death in October of this year.

The award selection was based on two of the many areas in which his influence was most clearly demonstrated.

Of 99 original papers that he contributed to the open literature all but a few early ones were devoted to unraveling the photochemistry of the heterocyclic bases that were characteristic of the nucleic acids and in pursuing understanding of the biological effects of such photochemistry. This seminal work is now making fundamental contributions to understanding cancer and the interactions of light in its etiology.

Of similar impact is the range of his influence as a teacher and mentor to 29 postdoctoral fellows and to all who encountered him in his work. The posts held by his former postdoctoral associates are in laboratories which span the world, including Japan, Mexico, Korea, Israel, Poland, France, Nigeria and Saudi Arabia as well as such American laboratories as the Mayo Clinic, Woods Hole and many medical schools.

The Maryland Section of the American Chemical Society is honored to be able to acknowledge his status as an extraordinary scientist and gifted teacher.

THE WORK OF DR. SHIH-YI WANG

Dr. Shih-Yi Wang, Professor and Director of Environmental Chemistry of the Johns Hopkins University School of Hygiene and Public Health, made the first and most definitive systematic investigations of the ultraviolet photochemistry of pyrimidines and purines. Describing the photochemical changes which components of DNA and RNA can undergo and the inherent chemical characteristics of these photoproducts permitted the biologists and biochemists to study their intrinsic effects in a variety of biological systems. Having a body of knowledge of the chemistry of the dimers, photohydrates, and the 6-4 adducts of pyrimidines provided a molecular tool with which to study the mutational and cytotoxic effects of this form of non-ionizing radiation. Both of these biological phenomena, now termed "genotoxicity," can be investigated at the levels of DNA replication, DNA transcription, translation, recombination and in DNA repair. The remarkable progress in our understanding of how these environmental agents perturb these systems is largely due to the committed efforts of "Sidney" Wang and his colleagues.

THE MARYLAND CHEMIST AWARD

DATE

Wednesday, December 14, 1983

PLACE:

Knott Science Center
(cocktails and dinner in the
Doyle Building dining room)
The College of Notre Dame
of Maryland
North Charles Street
Baltimore

RESERVATIONS:

Dinner reservations are necessary
and should be made by mailing checks
to

Nolan Phillips
J.M. Huber Corp.
Havre de Grace, MD 21078

by December 5. Checks should be
payable to Maryland Section of ACS.
Late reservations may be made by
calling Cheryl Manger (x 358) or
Linh Cheong (x 208) at

(301) 355-3600

by December 8.

SCHEDULE:

6:30 Social Hour

7:15 Dinner

8:15 Dr. Lawrence Grossman
The Johns Hopkins University
"The Work of Dr. Shih-Yi Wang"

Dinner price \$10.00 per person, but
retired chemists and students may
attend the dinner for \$8.00

It is not necessary to be a member of the American Chemical Society to attend.

The 1983 Maryland Chemist Award is made posthumously. Dr. Wang was aware that he had been chosen for this honor. His work will be discussed by Dr. Lawrence Grossman.

LAWRENCE GROSSMAN

Dr. Lawrence Grossman is a native of Brooklyn, N.Y. He received his B.A. in chemistry from Hofstra College and in 1954 he received a Ph.D. in biochemistry from the University of Southern California. He taught biochemistry for a number of years at Brandeis University, and has been the E. V. McCollum Professor at the Johns Hopkins University since 1975.

Professor Grossman has received a number of awards and fellowships including a Guggenheim Fellowship in 1973-74. He has served as a member of several advisory committees including those of the American Cancer Society and of the NIH, and he also serves on several editorial boards. He is the author or co-author of about 85 publications in various areas of biochemistry.



TOWSON STATE UNIVERSITY
DEPARTMENT OF CHEMISTRY

NMR SYMPOSIUM

to announce our new

JEOL FX90Q MULTINUCLEAR NMR SPECTROMETER

**Friday, December 16, 1983
Smith Hall, Room 556**

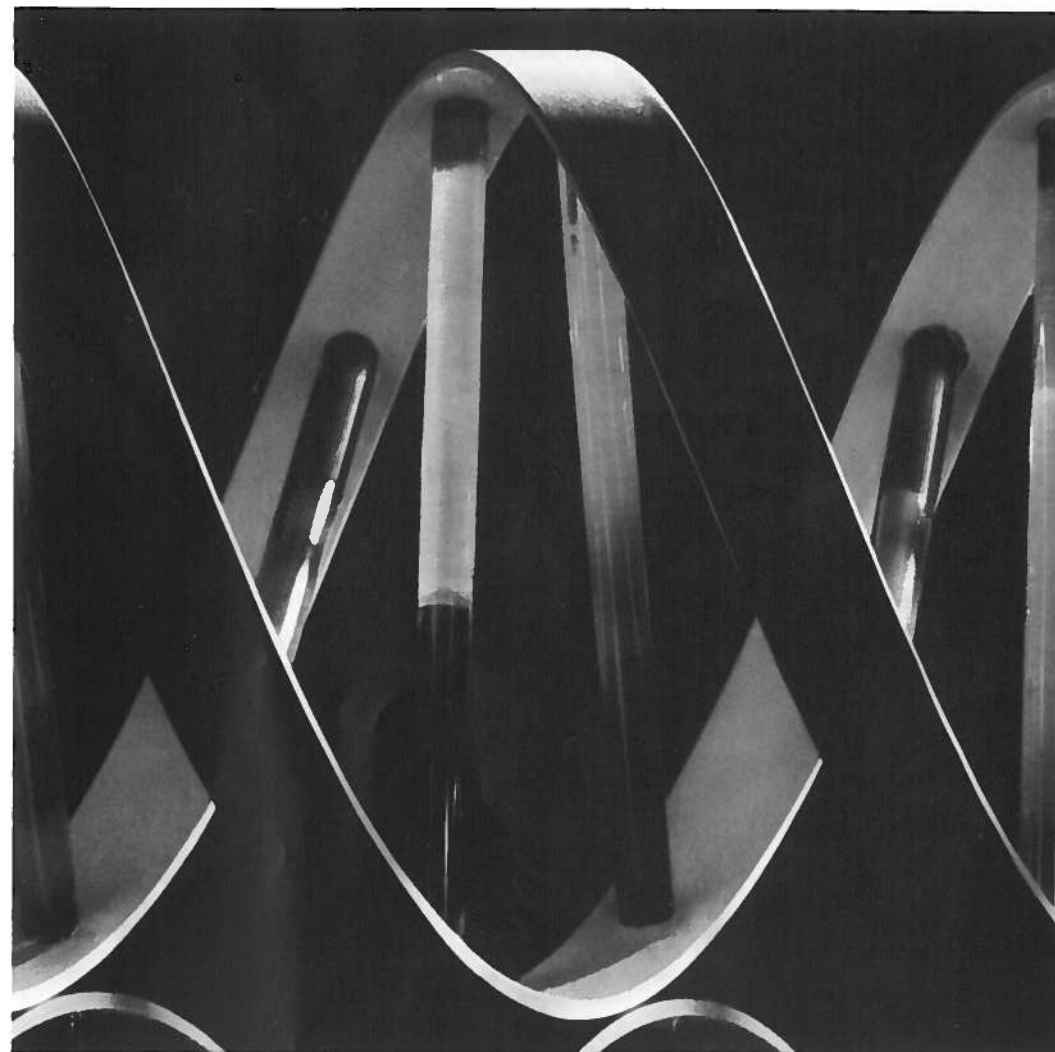
- 1:00 Opening Remarks**
Dr. Robert L. Caret, Dean, College of Natural and Mathematical Sciences.
- 1:10 Energy Metabolism of Anaerobic Thermophiles: Some Like It Hot**
Dr. Mary F. Roberts, Associate Professor, Department of Chemistry, Massachusetts Institute of Technology.
- 2:00 Structural Analysis of Carbohydrates by Two-Dimensional NMR**
Dr. Bruce Coxon, Research Chemist, Organic and Analytic Research Division, National Bureau of Standards.
- 2:50 Break**
- 3:00 NMR Structural Studies of Polyethylene and Polystyrene**
Dr. Anita J. Brandolini, Research Chemist, Analytical Department, Research and Development Laboratories, Mobil Chemical Company.
- 3:50 Break**
- 4:00 Organic Structure Characterization by Natural Abundance N-15 NMR Spectroscopy**
Dr. Robert L. Lichter, Regional Director of Grants, Research Corporation.
- 5:00 Open House and Reception**

To reach Smith Hall, use the South York Road Entrance and keep to the left. Parking will be available in the gated lot at this entrance. Tell the attendant you are going to the NMR symposium.

This instrument will be available for use by the scientific community at reasonable rates. Information will be available at the symposium.

There will be a Fourier transform NMR course Wednesday evenings in the spring.

For further information, contact:
Dr. Linda M. Sweeting
Department of Chemistry
(301) 321-3113 (or 3058)



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There will be no January meeting of the Maryland Section. Consequently, the January and February issues of *The Chesapeake Chemist* will be combined and will appear in early February. We wish everyone a happy holiday season.

EXECUTIVE COMMITTEE MINUTES

The Executive Committee, Maryland Section, American Chemical Society was called to order by the Chairman, Charles Rowell, on September 19, 1983 at 7:30 P.M. at the College of Notre Dame. The following members were present: A. Bober, B. Caret, L. Cheong, H. Cohen, M. Eiss, H. Freimuth, P. Gabbert, D. Jones, K. Kirk, R. Kreps, C. Manger, R. Petersen, N. Phillips, J. Roach, E. Silversmith, and M. Zapf. The minutes of the meeting of April 27, 1983 were read and approved.

A motion was passed to skip the reading of the minutes if they had been published previously in the *Chemist*.

Treasurer's Report. H. Klapper distributed a financial report for the period January 1 through September 15, 1983. The cash on hand is \$23,037.47 plus approximately \$1,200 in recent deposits.

Awards and Nominations. E. Silversmith is trying to generate more activity in the form of nominations.

Chemical Education. A. Bober reported that the next short course will be "Chemical Engineering for Chemists" given on November 14 and 21 by coordinator Linh Cheong. A motion was passed to give the "Technical Writing" course one afternoon in January at the state office building complex. A third course in April is possible.

M. Zapf suggested a special mailing of notices for the courses to college chemistry departments.

House. P. Gabbert reported that there were 73 persons at the dinner and 75 persons at the talk at the September meeting.

Public Relations. B. Kreps reported that two more bulletins were issued about the Remsen award. Two releases are currently in process.

Membership. K. Kirk reported that there were 33 new members from June through September. Kris has sent out 14 applications; 3 of the new members Kris can identify as having processed.

C. Rowell stressed the need to keep new members coming in so that we can keep our new Councilor allotment.

Publicity. D. Jones reported that the bill for the '82-'83 costs for mailing, paper and duplication totalled \$199.19.

Program. N. Phillips distributed the program for the year. He has spoken to Ann Donohue to set up a table on ACS membership at the Aquarium meeting. The date for the Remsen lecture has been tentatively set for May 16. The Maryland Chemist Awardee has been selected; however, it is not yet definite who the speaker will be. If a large crowd is expected for the Edgewood meeting, the talk will be held in the theater.

Finance. H. Klapper suggested using some of the Section money for additional short courses, perhaps on computers and also for first class mailings of the *Chemist*. A motion was passed to authorize the chairman to send two issues of the *Chemist* by first class mail at his discretion. This is expected to cost approximately \$300.00 a mailing this year.

High School Activities. M. Zapf reported that Project Seed was very successful. He has received responses from teachers who would like to be members. C. Rowell said that we will need an additional set of mailing labels made up for the teachers. A motion was passed to invite 6 guests, 3 teachers and 3 students, to the November meeting.

C. Rowell reported that on the first Thursday in October an 8-week program for high school teachers would begin at Broadneck High and will cover subjects such as acids and bases and kinetics. The committee would also like to do something similar at Poly in Baltimore; however, that is presently stalled for lack of volunteers. Future plans may include Carroll County. Some money may be needed for the program. H. Cohen suggested that National be contacted at some time for financial help if necessary.

Remsen Award. B. Caret reported that a new member has been added to the committee. Also a new Chairman has been named at Hopkins.

Student Awards. D. Hoster will send out notices to 2 year and 4 year colleges in the area to solicit names for the student awardees around the end of November. R. Petersen stated that the deadline for names and photos for the *Chemist* is February 25.

Congressional Science Councilors. D. Jones reported that the Hatch Bill is being bottled up currently but when it comes out it should be passed immediately. This bill would have to be reconciled with the House Bill 1310.

Chesapeake Chemist. R. Petersen said that the October issue was at the printer's. The November issue is presently running late but no problems are expected.

MARM. B. Caret reported that A. Zeiger is taking over as chairman and the records are being transferred. We may need to change the date of the MARM so it does not conflict with the Pennsylvania meeting.

New Business. C. Rowell said that the next Executive Committee meeting would be held on December 7. He has requested each committee chairman to write a report on the accomplishments of this year which will be incorporated into the yearly report from the section to National.

He also reported that National has increased our allotment of Councilors and Alternate Councilors to 4 each. The Nominating Committee met and nominated Merle Eiss for Councilor. The nomination was endorsed by the Executive Committee. For the 2 Alternate Councilor positions Mike Zapf and Bob Caret were nominated. A motion was passed to have a special election in November for the two offices as the ballot in the October issue was already at the printer's.

The meeting was adjourned at 9:28 P.M.

Respectfully submitted,

Cheryl L. Manger
Secretary

**Toxicological
Chemistry
at UMBC**
A three-credit course
(undergraduate or graduate)
taught by Dr. Jack Schubert,
chairman, UMBC Chemistry Department
Sixteen weeks beginning
January 24.
Tuesday and Thursday Evenings
7:30 to 9:00 p.m.
UMBC
University of Maryland
Baltimore County
Catonsville, MD 21228

A systematic examination of the relationships between the chemical properties of toxic chemicals—chlorinated hydrocarbons, metals, drugs, solvents, and naturally occurring toxicants—and their genotoxic effects.

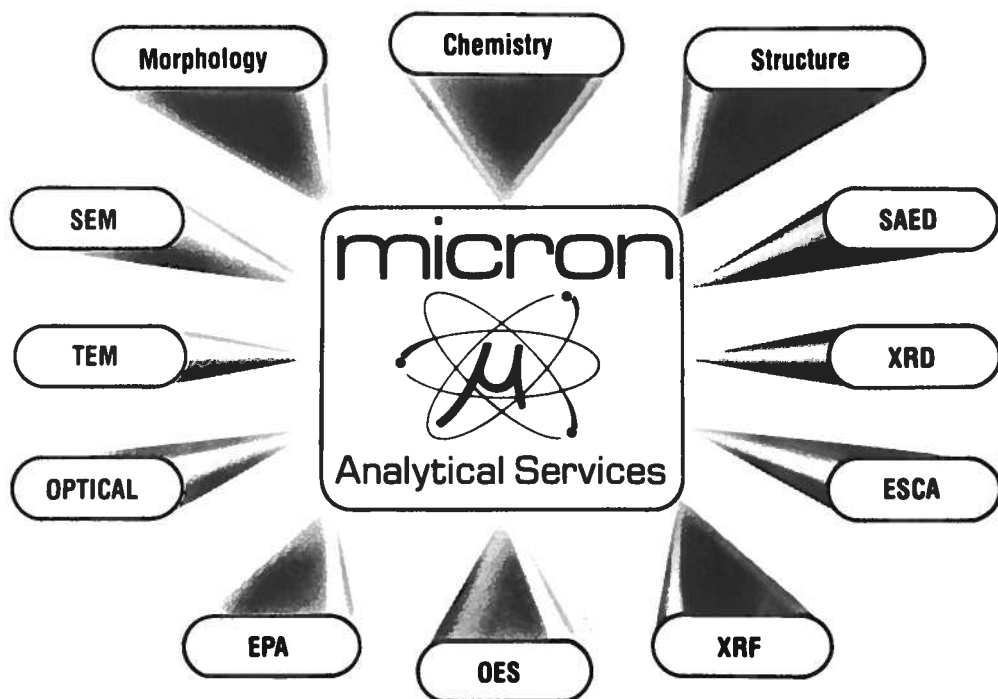
Topics include biotransformations, dose-response and statistical considerations, chemical air pollution, pharmacokinetics, chemical mutagenicity and carcinogenicity, analytical procedures, geochemistry of environmental pollution, radiation toxicology, and combinations of chemicals.

For information call 455-2505.

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