



THE

CHESAPEAKE CHEMIST

MARYLAND SECTION
AMERICAN CHEMICAL SOCIETY

VOL. XLVIII

MARCH, 1992

NUMBER 3



CAROL A. ROUZER

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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.

Carol A. Rouzer is a 1976 graduate of Western Maryland College. She holds an M.D. degree from Cornell University Medical College and a Ph.D. in biochemistry and cellular physiology from the Rockefeller University.

Following four years as a postdoctoral fellow in physiological chemistry at the Karolinska Institute in Stockholm, Sweden, and three years as a research fellow in pharmacology at Merck Frosst Canada, Inc., she returned to Western Maryland College where she is now an assistant professor of chemistry.

Dr. Rouzer has held a Swedish Medical Research Council Visiting Scientist Fellowship, a Damon Runyon - Walter Winchell Cancer Fund Postdoctoral Fellowship and an NIH Medical Scientist Training Program Fellowship. She currently holds a Research Corporation - Cottrell College Science grant for research in the biochemistry of acyltriazenes. She is the author or co-author of nearly forty publications in biochemistry.

Dr. Rouzer is a member of the Mid-Atlantic Association of Liberal Arts Chemistry Teachers and of the Council for Undergraduate Research.

HUMAN LEUKOCYTE 5-LIPOXYGENASE - STUDIES OF A NOVEL MECHANISM FOR ENZYME ACTIVATION AND ENZYME INHIBITION

Leukotrienes (LT) are metabolites of arachidonic acid that are believed to play a role in the pathophysiology of allergic and inflammatory responses. The enzyme, 5-lipoxygenase (5-L0), catalyzes the first two steps in the biosynthesis of LT from arachidonic acid. 5-L0 purified from human peripheral blood leukocytes is dependent on Ca^{2+} , ATP, and cellular membranes for maximal activity. Studies of LT biosynthesis in intact leukocytes led to the discovery that activation of 5-L0 is accompanied by a translocation of the enzyme from the cytosol to cellular membrane. Further studies indicated that the LT biosynthesis inhibitor, MK 886, inhibits the activity of 5-L0 in intact leukocytes by preventing the translocation process. MK 886 binds specifically to a 18,000D protein in leukocyte membranes. When the genes for both 5-L0 and the 18,000D protein were co-transfected into human osteosarcoma cells, the cells acquired the capacity to synthesize LT. This LT synthesis did not occur unless both proteins were present in the cells. These results suggest that the 18,000D protein may serve as a receptor for 5-L0 at the leukocyte membrane, and that MK 886 is a prototype for a new class of enzyme inhibitors acting through inhibition of translocation. The potential value of such inhibitors in the therapy of asthma is presently under evaluation.

ANNE ARUNDEL COMMUNITY COLLEGE

Anne Arundel Community College is located at 101 College Parkway, very near its intersection with Route 2, Governor Ritchie Highway, in Arnold, Maryland.

SHORT COURSE REMINDER

The short course entitled "Your Laboratory's Chemical Hygiene Plan" will be conducted March 28 at the College of Notre Dame of Maryland. Information and application form were printed in last month's issue of The Chesapeake Chemist. For further information, contact Dr. Shirish Shah at (410) 532-5712. For registration, contact Dr. Steve Gregory at (410) 532-5714.

CAPILLARY CHROMATOGRAPHY SYMPOSIUM

The 14th International Symposium on Capillary Chromatography will be held in Baltimore at the Stouffer Harborplace Hotel May 25-29. An advertisement appeared in our last issue and will be repeated in the next issue.

MARCH MEETING

DATE:

Wednesday, March 11, 1992

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

PLACE:

Anne Arundel Community College
College Dining Hall

Dr. Stephen M. Gregory
College of Notre Dame
4701 North Charles Street
Baltimore, MD 21210

SCHEDULE:

6:00 Social Hour

by March 4. Late reservations may be made by calling

(410) 532-5714

7:00 Dinner

by March 6; answering machine is available at this number.

8:00 Lecture

Carol A. Rouzer
Western Maryland College
"Human Leukocyte 5-Lipoxygenase - Studies of a Novel Mechanism for Enzyme Activation and Enzyme Inhibition"

Dinner price is \$16.00 per person, but spouses and retired chemists may attend for \$14.00; students may attend for \$8.00.

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

The Johns Hopkins University 1992 Spring Chemistry Colloquium Schedule

Remsen 221, Tuesdays, 4:15 p.m.

For more information contact Rosalie Elder (410) 516-7432

March 3	Dr. Leah Frye Rensselaer Polytechnic Institute	"Dual-Action Inhibitors of Cholesterol Biosynthesis"
March 24	Dr. Brian M. Hoffman Northwestern University	"New Molecular Metals"
March 26 <i>Thursday</i>	Dr. William H. Okamura University of California, Riverside	"Mechanistic and Synthetic Studies of Vinylallenes and Related Polyenes: Pericyclic Reactions, Cis-Trans Isomerization and Vitamins A and D"
March 31	Dr. Cecil Robinson Johns Hopkins School of Medicine	"Cytochrome P-450 Aromatase: Chemical and Biochemical Studies with a Remarkable Estrogen-synthesizing Enzyme"
April 14	Dr. Luigi G. Marzilli Emory University	"Multinuclear NMR Studies in Bioinorganic Chemistry"
April 21	Dr. Doreen Leopold University of Minnesota	"Gas-phase Studies of Organotransition Metal and Organosilicone Transients by Negative Ion Photoelectron Spectroscopy"

Proposed
**BYLAWS OF THE MARYLAND SECTION OF
THE AMERICAN CHEMICAL SOCIETY**

Bylaw I. Name.

This organization shall be known as the Maryland Section of the AMERICAN CHEMICAL SOCIETY hereinafter referred to as the "Section" and the "SOCIETY," respectively.

Bylaw II. Objectives.

The objectives of the Section shall be the same as those in Article II of the Constitution of the SOCIETY, and in addition, such intersectional and official activities as shall be approved by the Executive Committee which are not inconsistent with the above objectives.

Bylaw III. Territory and Headquarters.

The territory of the Section shall be that assigned to it by the SOCIETY, consisting of the City of Baltimore and the Counties of Anne Arundel, Baltimore, Carroll, Cecil, Frederick, Harford, Howard, Kent and Queen Annes in the State of Maryland.

Bylaw IV. MEMBERS, ASSOCIATE MEMBERS and Affiliates.

Sec. 1. The rolls of the Section shall include those MEMBERS, ASSOCIATE MEMBERS, and National Affiliates of the SOCIETY residing within the territory of the Section, provided that exceptions to this rule shall be made in conformity with the Constitution and Bylaws of the SOCIETY.

Sec. 2. The Section may have Local Section Affiliates as authorized in the Constitution and Bylaws of the SOCIETY.

Sec. 3. MEMBERS, ASSOCIATE MEMBERS, National Affiliates, and Local Section Affiliates shall have such rights and privileges as are accorded them by the Constitution and Bylaws of the SOCIETY. All members may vote. An ASSOCIATE MEMBER is entitled to all privileges of membership except that of holding an elective position or serving as a Temporary Substitute Councilor. National Affiliates and Local Section Affiliates may not vote for or hold an elective position of the Section, vote on Articles of Incorporation or Bylaws of the Section, or serve as Temporary Substitute Councilor.

Bylaw V. Organization.

Sec. 1. The officers of the Section shall be a Chairman, Chairman-Elect, Secretary, and Treasurer.

Sec. 2. The Section shall have Councilors and Alternate Councilors as provided in the Constitution and Bylaws of the SOCIETY.

Sec. 3. The Executive Committee shall consist of the officers of the Section, the Councilors, Alternate Councilors, Past Chairmen residing within the territory of the Section, five Members-at-Large, the Editor and Business Manager of THE CHESAPEAKE CHEMIST, and the Chairmen of all standing committees.

Sec. 4. All officers, Councilors, Alternate Councilors, and other persons

holding an elective office, shall be chosen from the MEMBERS.

Bylaw VI. Manner of Election and Terms of Office.

Sec. 1. Officers of the Section and Members-at-Large of the Executive Committee shall serve for a term of one year, beginning on January 1 following their election, or until their successors are chosen or qualify. The Chairman-Elect shall succeed to the office of Chairman upon completion of the term of office of the Chairman.

Sec. 2. Councilors and Alternate Councilors shall be elected for a term of three years, beginning on January 1 following their election, or until their successors are chosen or qualify. The number of Councilors shall be determined by the SOCIETY.

Sec. 3. In the event of a vacancy in the office of Chairman, the Chairman-Elect shall assume the added duties of the Chairman for the unexpired term. All other vacant elective positions shall be filled by a vote of the Executive Committee for a period up to the next annual election. In the event the office of Chairman-Elect is filled by such interim election, the Section shall elect both a Chairman and Chairman-Elect at its next annual election. A Chairman may not serve more than one year unless he (or she) had to assume the duties of Chairman for part of a term.

Sec. 4. Nominations.

(a) The Chairman shall appoint in January a Nominating Committee of 5 Persons, not more than 3 of whom are to be members of the Executive Committee. The Chairman shall designate any one of the five to be Chairman of the Committee.

(b) Notice shall be given to the members by March 30 in THE CHESAPEAKE CHEMIST of the names of the persons serving on the Nominating Committee. This shall be prior to the date of meeting of the Nominating Committee to permit members time to suggest suitable candidates for the positions named in Bylaw V for which vacancies shall occur on December 31.

(c) The Nominating Committee shall meet at such a time that its recommendations may appear in the September issue of THE CHESAPEAKE CHEMIST. The Committee shall select one or more candidates for each position named in Bylaw V.

(d) Before October 1, members of the Section may nominate candidates for any office by providing the Section Chairman with nominating petitions containing the signatures of at least two percent of the Section members. To be valid, the signature of a member may not appear on behalf of more than one candidate for the same office. The names of any such MEMBERS so nominated shall be included on the ballots with the names of those nominated by the Nominating Committee.

(e) In all cases, before a name can be placed on the ballot, the nominee must agree to serve if elected.

(f) Publication in THE CHESAPEAKE CHEMIST and its mailing to members shall be considered adequate notice.

Sec. 5. Elections.

(a) The elections shall be held by ballot which will be mailed in or with THE CHESAPEAKE CHEMIST or separately before October 15th to all members of the Section.

(b) The ballots must be returned by November 10th.

(c) If a single candidate is to be elected, the candidate with the largest number of votes will be declared elected. Positions for which more than one candidate is to be elected (e.g., Member-at-Large of the Executive Committee) shall be filled by declaring those candidates elected who receive the largest number of votes. In the event of a tie vote, a special committee consisting of the Section Chairman, Chairman-Elect, Secretary, Treasurer and Chairman of the Nominating Committee shall by a majority vote determine the winner.

(d) The Secretary of the Section shall count the ballots and certify to the Executive Director of the SOCIETY as soon as possible but not later than December 1 of each year, the names, addresses, and terms of the elected Councilors and Alternate Councilors from Local Section for the following year.

Bylaw VII. Duties of Officers and Executive Committee.

Sec. 1. The duties of the officers shall be those customarily performed by such officers, together with those responsibilities prescribed by the Constitution and Bylaws of the SOCIETY and the Section bylaws along with other duties as may be assigned from time to time by the Executive Committee.

Sec. 2. The Chairman of the Section shall serve as Chairman of the Executive Committee, shall appoint members to standing committees, and may establish any standing or ad hoc committees authorized in these bylaws or by the Executive Committee. The Chairman shall appoint a Committee to audit the Treasurer's records annually.

Sec. 3. The Executive Committee shall be the governing body of the Section and, as such, shall have full power to conduct, manage, and direct the business and affairs of the Section in accordance with the Constitution and Bylaws of the Society and the bylaws of the Section.

Sec. 4. The latest edition of "Robert's Rules of Order" shall be used as the authority to resolve procedural matters during business meetings.

Bylaw VIII. Committees.

Sec. 1. There shall be the following standing committees whose Chairman shall be appointed by the Chairman of the Section except as noted elsewhere in the bylaws:

- Archives
- Awards and Nominations
 - National Nominations
 - Maryland Chemist Award
 - Maryland Service Award
 - Remsen Memorial Award
 - Student Awards
 - W. R. Grace & Co. Award
- Bylaws
- Chemical Education and Safety
- Education
- Finance
- High School Activities
- House
- Investment
- Member Assistance
- Membership

- Program
- Publicity
- Public Relations
- Women Chemists

Sec. 2. The Executive Committee may establish or abolish any ad hoc committee. The duties of committees shall be as described from time to time by the Executive Committee.

Sec. 3. The Chairman-Elect of the Section shall be the Chairman of the Program Committee.

Sec. 4. The Chairmen of the various Awards and National Nominations Committees shall submit the names of all nominees and all supporting documents along with the committee's recommendations to the Section Chairman. Submissions must be made by the dates that follow:

Maryland Chemist Award	1 July of the year of award
Maryland Service Award	1 August of the year of award
Remsen Memorial Award	1 December of year preceding award

Sec. 5. The final selection of individuals for Section awards or nominations for other awards shall be made by a committee consisting of the Section Chairman, Chairman-Elect, Treasurer, Secretary and Past-Chairman of the Section.

Sec. 6. Recipients of Maryland Chemists Award must have been members of the Section for a minimum of five years and have made outstanding contributions to chemistry as defined in Article II of the Constitution of the SOCIETY (Chemistry is defined in very broad terms.). The work on which the award is based should have been performed in Maryland.

Sec. 7. The Investments Committee shall select appropriate investments for the Section's funds subject to approval of the Executive Committee. When necessary the Investment Committee shall have independent authority to direct the Treasurer on buying or selling an investment. The Treasurer shall report the status of all such actions at each Executive Committee Meeting or on request by the Section Chairman. The Investment Committee should consist of three members, preferably past Treasurers with some investment experience.

Sec. 8. The Finance Committee shall prepare an annual budget for annual review by the Executive Committee.

Bylaw IX. Meetings.

Sec. 1. A regular meeting of the Section shall be one at which business of the Section, which may require a vote of the members, may be conveniently transacted.

Sec. 2. The Section shall hold not less than 6 regular meetings each year, at places and times designated by the Executive Committee.

Sec. 3. The Section may hold special business meetings at the call of the Executive Committee, or by the request of 50 members of the Section. Any other meetings shall be called only by the Executive Committee. The notices of special business meetings shall state the exact nature of the business to be transacted and no other business shall transpire at such meetings.

Sec. 4. Due notice of all meetings shall be sent to each MEMBER, ASSOCIATE MEMBER, National Affiliate, and Local Section Affiliate of the Section. A quorum for all meetings of the Section shall consist of 4% of the members of

the Section. In the absence of a quorum, no business shall be transacted, except that any pending business shall be tabled to a meeting to be held on a specified date.

Sec. 5. The Executive Committee shall meet not less than 4 times each year upon due notice to its members at the call of the Chairman or at the request of a majority of the members of the Committee. In the absence of a quorum, which shall be 25% of the members of the Executive Committee, exclusive of Past Chairmen not serving in another capacity, called meetings of the Executive Committee shall adjourn to a specified date.

Bylaw X. Dues and Special Contributions.

Sec. 1. All Section funds shall be received and disbursed by the Treasurer, subject to the approval of the Executive Committee.

Sec. 2. The Executive Committee may authorize the Treasurer to solicit from all MEMBERS, ASSOCIATE MEMBERS, National Affiliates and Local Section Affiliates of the Section, except members of the Society in emeritus status, the payment of such voluntary Section dues as may be set by that Committee.

Sec. 3. The annual dues of the Local Section Affiliates shall be set by the Executive Committee in accordance with the Constitution and Bylaws of the Society. The dues of Local Section Affiliates will be equivalent to current Section dues plus an amount approved by the Executive Committee approximately equivalent to the apportionment made by the SOCIETY for each member. Failure to pay such dues in advance shall automatically terminate such affiliation.

Sec. 4. The Executive Committee may authorize the Treasurer to solicit from MEMBERS, ASSOCIATE MEMBERS, National Affiliates, and Local Section Affiliates of the Section, such voluntary contributions for special purposes as may be set by that Committee from time to time.

Bylaw XI. Amendments.

Sec. 1. A proposed amendment to these Bylaws must first be submitted in writing to the Executive Committee. If it is approved by a majority of the Executive Committee, or if the proposal is signed by 50 or more members of the Section, the Secretary shall mail to all members of the Section copies of the proposed amendment.

Sec. 2. A letter ballot, a copy of Bylaw XI, and the section of the Bylaws to be amended shall accompany the notice of the proposed amendment. The amendment may be adopted if 2/3 of the ballots returned to the Secretary, within 30 days after the mailing of the notice, are in the affirmative. The amendment shall become effective upon approval by the Committee on Constitution and Bylaws acting for the Council unless a later date is specified.

Bylaw XII. Dissolution of the Section.

Upon the dissolution of the Section and the discharge of its debts and the settlement of its affairs, any assets of the Section remaining thereafter shall conveyed to such organization then existent, within or without the territory of the Section as is dedicated to the perpetuation of objectives similar to those of the SOCIETY, or to the SOCIETY, so long as whichever organization is selected by the governing body of the Section at the time of dissolution shall be exempt under Section 501 (c)(3) of the Internal Revenue Code of 1954 as amended or under such successor provisions of the Code as may be in effect at the time of the Section's dissolution.

December 1991 Amendments

of the
BYLAWS OF THE MARYLAND SECTION OF
THE AMERICAN CHEMICAL SOCIETY

In accordance with directions of the Executive Committee of the Maryland Section and the National ACS, the Bylaws of the Section are being amended. The procedure being followed is provided in Section Bylaw XI. After several years of discussion, the proposed amendments to these Bylaws have been approved by the Executive Committee. The National Committee on Constitution and Bylaws acting for the National ACS Council has approved the changes and suggested and ordered other changes.

Now a letter ballot and a copy of the proposed Bylaws must be sent to all the Section members. The amended Bylaws may be adopted if 2/3 of the ballots returned to the Secretary, within 30 days after the mailing of the notice, are in the affirmative. The amendments will become effective upon approval by the Committee on Constitution and Bylaws acting for the Council unless a later date is specified.

The substantive changes are outlined below:

1. At the suggestion of the Council's Constitution and Bylaws Committee (CCBC), Baltimore is no longer designated as Section headquarters.
2. At the suggestion of the CCBC, the wording of Bylaw VI was clarified.
3. Bylaw VII has been rewritten. Now, the latest edition of "Robert's Rules of Order" shall be used as the authority to resolve procedural matters during business meetings.
4. Bylaw VIII has been rewritten. The Investment Committee has been added.
5. Bylaw XII has been rewritten at the direction of the CCBC.

A copy of a proposed ballot and Bylaws are attached for each members' information and use. These Bylaws have been carefully designed to clarify each officers' duties.

Submitted by

Elwin C. Penski, Chairman
Bylaws Committee
Maryland Section of the ACS

Ballot for Proposed Amendments

of the
BYLAWS OF THE MARYLAND SECTION OF
THE AMERICAN CHEMICAL SOCIETY

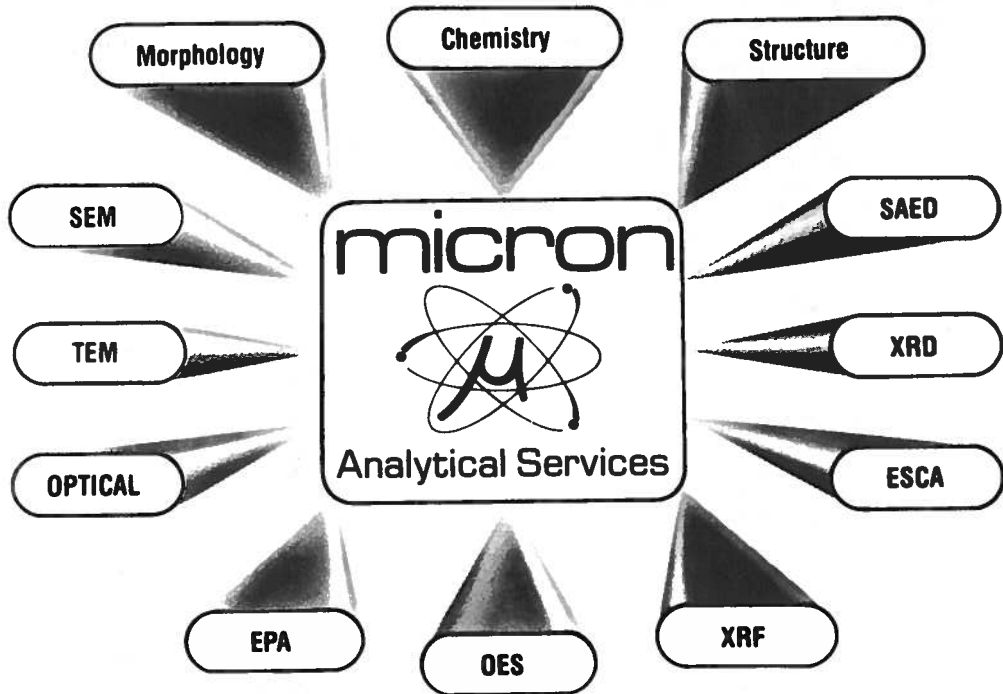
FOR _____ AGAINST _____

Mail ballots to the Section Secretary (Address on 3rd page of current issue of The Chesapeake Chemist). Ballots must be returned to the Secretary within 30 days after the mailing of this notice.

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