

THE

TarHelium



A Publication of the North Carolina Section of the American Chemical Society

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October 1987

STRATEGIC DEFENSE INITIATIVE: THE TECHNICAL ISSUES

Lecture by
Dr. Dorit L. Noether

Tuesday, October 20, 1987
University Room
N.C. State Faculty Club

Social Hour
5:30

Dinner
6:30

Lecture
8:00

The dinner cost is \$10 for members and guests and \$5 for students. Please make reservations by phoning one of the following people by Thursday, October 15 at 3:00 pm: in Chapel Hill, Debbie Edwards, 962-2172; in Durham, Carolyn Bean, 684-2414; in Raleigh, Joyce Dunn, 737-2545; in Fayetteville, Sandra Smith, 486-1500. To cancel reservations for the meal, please call Debbie Edwards in Chapel Hill at 962-2172.

ELECTION BALLOT FOR SECTION OFFICERS INSIDE

Dorit L. Noether—Prior to joining CHEMTECH, where she is Associate Editor, Dorit L. Noether served as Special Consultant for Masterplanning at the New Jersey Department of Higher Education. There she helped develop Masterplans for Environmental Science, the Fine and Performing Arts, Educational Media, and Teacher Education. She has also been a member of the chemistry faculty at Rutgers University and was the sole chemistry instructor at C.W. Post College during its early years.

Dr. Noether earned her B.S. at Radcliffe College and her M.S. at Columbia University. She earned her Ph.D. from Rutgers University.

She is active in the American Chemical Society and has arranged a number of symposia at national and regional meetings. She chaired the North Jersey Section in 1985 and is currently a member of the Women Chemists Committee, Chairman of the Committee on Copyrights and a National ACS Tour Speaker. In her spare time, Dr. Noether likes to play tennis, hike and ski. An amateur artist, she has recently exhibited her watercolors.

STRATEGIC DEFENSE INITIATIVE: THE TECHNICAL ISSUES

How is SDI to defend our country against enemy missiles?

The plan for a multilayered defense puts demands on the technical and scientific community that are often shrouded by language and acronyms understood only by the in-crowd

Dr. Noether's talk gives an overview of the plan, the underlying science and technology and some economic aspects.

VOTE FOR 1988 OFFICERS

*North Carolina Section
American Chemical Society*

Please select one candidate for each office by marking the ballot below. Ballots must be postmarked by November 10, and they should be mailed, in the enclosed envelope, to:

Dr. John Myers
Chemistry Department
North Carolina Central University
Durham, North Carolina 27707

BALLOT VALIDATION IS REQUIRED. To validate your ballot, sign and print your name on the outside of the mailing envelope on the appropriate lines. Election officials must be able to verify your membership before your ballot can be counted.

Brief biographies, provided by the candidates, are included in this issue of *TarHelium* to help you select your choice.

Shiflett came to Meredith College in 1978, where he is currently Professor of Chemistry and Department Head. His interests include electronic spectroscopy, integrating polymer chemistry into the chemistry curriculum and developing classroom demonstrations and experiments to illustrate important chemical principles. He joined the N.C. Section in 1978 and has served on the Hospitality, Membership, and Academic/Industrial Interface Committees.

COUNCILOR

Maurice Bursey

Maurice Bursey is Professor and Director of Undergraduate Studies for the Chemistry Department at UNC-CH. Dr. Bursey received his degrees from Johns Hopkins University. He did a two year postdoctoral with F.W. McLafferty at Purdue University before coming to Chapel Hill to start his own research program in mass spectrometry. He has published over 200 papers and has won both research and teaching awards. He has been Secretary-Treasurer and Chairman of the local section, and he is currently a Councilor. He is a member of the Continuing Education Committee and is chairman of the Archives Committee. Dr. Bursey is active with the ACS nationally, serving on the Meetings and Expositions Committee of the ACS Council.

Councilor cont.

Kathryn MacLeod

Kathy MacLeod received B.S. and M.S. degrees in chemistry from the University of South Carolina. From 1971 to 1981, she worked for the U.S. Environmental Protection Agency as a research chemist. Since 1981, she has been employed by Mallinckrodt as a quality control chemist. She has been a member of the ACS since 1971 and has served as Secretary-Treasurer, and Chairman of the N.C. Section. She has also served on several Section committees, including the 1984 Southeastern Regional Meeting Steering Committee and, most recently, the High School Chemistry Committee.

ALTERNATE COUNCILOR

Halbert Carmichael

Halbert Carmichael received his B.S. from the University of Tennessee in 1959 and his Ph.D. from the University of California in 1963. Employed in the Department of Chemistry at North Carolina State University since 1964, he is now a Professor. Dr. Carmichael has served as Secretary-Treasurer and Chairman of the N.C. Section of the ACS and is presently an Alternate Councilor. He was also Registration Chairman for the 1984 Southeastern Regional Meeting of the ACS.

Ivy Carroll

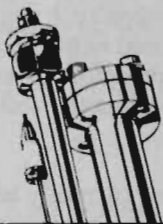
Ivy Carroll received his B.S. degree in chemistry from Auburn University in 1957 and his Ph.D. degree from UNC-Chapel Hill in 1961. He joined Research Triangle Institute in 1964 and has been Director of the Organic and Medicinal Chemistry Division of the Chemistry and Life Sciences Unit since 1975. Dr. Carroll's research at RTI has been concerned mainly with the application of organic chemistry to biomedical problems, especially compounds with potential chemotherapeutic value. He served two consecutive terms on the ACS Offices and Awards Committee in 1980 and 1981 and is presently a member of the Long Range Planning Committee of the Medicinal Chemistry Division of the ACS.

1987 CENTENNIAL SCHOLARSHIP AWARD WINNERS

Karen L. MacLachlan of Duke University, Arthur G. Palmer of UNC-CH, and Matthew J. Smith of Duke University were awarded 1987 Centennial Scholarship awards. The \$500 awards were announced at the Meeting-in-Miniature in April. Recipients submitted summaries of research work, letters of recommendation from their research advisors, and descriptions of how the award was to be used. Join us in congratulating these young chemists.

1987 HIGH SCHOOL CHEMISTRY TEACHER AWARDS

John M. Davis of Garner Senior High School in Garner and Peggy Davis of Southview Senior High School in Fayetteville were each awarded \$500, as recipients of the Section's Outstanding High School Chemistry Teacher award.



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REPORT FROM THE ACADEMIC/ INDUSTRIAL INTERFACE COMMITTEE

This committee, headed by George Wyman, was established by past Chairman Eric Bigham in the fall of 1986 to explore what, if anything, could be done to improve the interaction between chemists in industrial and government laboratories and their colleagues in academic institutions. The committee consists of representatives from the chemistry departments of Duke University, Meredith College, NCCU, NCSU, UNC-CH, EPA, RTI, Burroughs Wellcome Co. and Glaxo Inc.

The following topics were explored during the first meetings of the committee: chemistry course offerings and curricula for advanced degrees for scientists and technologists who are employed full time; summer jobs for students; local recruiting; exchange of scientists across the A/I interface (consultants, sabbaticals); cooperative research programs, etc. There was a general recognition of the need to get better acquainted with colleagues "on the other side" of the interface.

To ascertain the demand for courses at both undergraduate and graduate levels, in May the committee mailed a questionnaire to the employers of most chemists in the area. Response to the questionnaire indicates that there are over 200 potential students for chemistry courses in the region. About 30 would be interested in working toward an undergraduate degree, and another 40 indicated an interest in acquiring advanced degrees, provided that this could be done while continuing to work full time. The remaining two-thirds were interested in taking one or two courses without being registered as candidates for a degree.

There was considerable discussion about courses that are currently being offered at most of the academic institutions in the area during the early morning and late afternoon and the need to publicize these better. For this reason, a list of such courses, offered in the spring semester of 1988, will be published in the next issue of the *TarHelium*. In addition, this guide to courses in chemistry in the Research Triangle will also provide information for prospective students on how they can register for one or two courses at each institution.

50 YEAR ACS MEMBERS

We would like to recognize two local members who have been active in the American Chemical Society for 50 years:

Marcus Hobbs of Duke University

Raymond White of North Carolina State University

MOREHEAD LABORATORY DEDICATION AT UNC

Dr. Frank Press, President of the National Academy of Sciences, will be the keynote speaker at the October 30 dedication of the new Morehead Undergraduate Laboratory at UNC-CH. A brief dedication ceremony will begin at 2:00 pm, and tours of the facility will begin afterwards. At 4:00 Dr. Press will speak in Venable 207 on "Science in a New Era." Everyone is invited to attend.

A banquet will be held Friday evening in the Morehead Planetarium Banquet Hall. Professor David Harp of the University of Ottawa will speak on "Chemistry for the Public—The Final Frontier." Harp is a UNC chemistry graduate who appears regularly on Canadian television as a public scientist. The cost of the banquet is \$20.

Saturday morning there will be a poster session from 8:00 to 9:00 in the lobby of Kenan Laboratories. Continental breakfast will be provided. At 9:00 a series of three technical talks of broad interest will begin. Dr. E.L. Smithwick, Jr. of Eli Lilly will represent the industrial sector as he discusses "The Manufacture of Recombinant Human Insulin and Other Useful Proteins." Next Professor R.P. Van Duyne of Northwestern University will present an academic view of "Molecules on Surfaces: Laser Techniques to Answer the Questions—What? When? and Where." The final talk, entitled "Unlocking the Chemistry of Photosynthesis," will be presented by Dr. J.R. Norris of Argonne National Laboratory.

FUTURE PROGRAMS

November 18* *Dr. Janos Fendler, Syracuse University*
Photochemical Solar Energy Conversion
Hubbard Chemistry Auditorium
North Carolina Central University

December 15 *Dr. Pedro Cuatrecasas*
Vice President, Glaxo Inc.
North Carolina Distinguished Speaker
Meredith College

*Rescheduled from November 17

REGISTRATION FORM

*Dedication of the Morehead Laboratories
October 30-31, 1987
University of North Carolina at Chapel Hill*

Name _____

Affiliation Address _____

Telephone _____

Plan to attend banquet Friday evening:

yes no yes with guest

Please indicate the number of tickets desired at a subsidized price of \$20 each. Make checks payable to: UNC Chemistry Dedication

Number of tickets _____ x \$20 = _____

Plan to present a contributed poster:

yes no

Please give the title and authors below (underline author in attendance) and submit a double-spaced abstract of not more than one page. Availability of space may limit the number of posters.

Authors _____

Title _____

Please mail this form to: Ms. Evelyn Kidd
Department of Chemistry
University of North Carolina
Chapel Hill, NC 27514

Registration material must be received by October 21.

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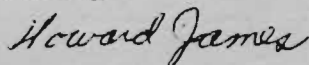
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American Chemical Society
P.O. Box 3337
Columbus, Ohio 43210

Changes in membership status also should be submitted to the above address.

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