

# UMSL CHEMIST

APRIL 1977

## LETTER FROM THE CHAIRMAN:

It is a great pleasure to bring greetings to our UMSL Chemistry alumni in this, our first departmental newsletter. We are anxious to learn of your response to this project and to receive your advice as to future editions.

I want to take this opportunity also to acknowledge the efforts of Professor Kenneth Barnett who spearheaded the project.

We are hopeful that our next edition will include a section based on your responses, perhaps entitled "About the Alumni and Alumnae".

We at the University are proud of our graduates and we hope to share the accomplishments of our graduates with their former student colleagues through this Newsletter.

Sincerely,

Robert W. Murray  
Professor & Chairman, Chemistry

## ABOUT THE DEPARTMENT:

Since this is the first issue of the "UMSL Chemist" and since many of our alumni have not been in touch for some time, news items covering the past few years are included here and in other sections. As the publication becomes a yearly "happening" we will revert to bringing you up to date on the activities of the previous twelve months. It is the intention of the Department to publish the newsletter each Spring, a fact which should be borne in mind if you, the alumni, wish to submit news items, a change of address, etc. Please address all correspondence to "UMSL CHEMIST" in care of the Department of Chemistry.

An item which is sure to be of interest to all former students is that after twelve years of dedicated service, Dr. Charles W. Armbruster stepped down as chairman of the Chemistry Department in 1975. The new chairman is Dr. Robert W. Murray.

Mr. Jack Coombs, Storeroom Manager, retires in May after fourteen years of service to the Department. To say that he will be missed by one and all is the rankest of understatements. Aside from the meticulous execution of his day-to-day duties, we will all retain memories of his personal kindnesses. A retirement party in his honor is planned for late May.

The purchase of the Marillac College Campus by the University and the opening of the new Administration building hold promise for expansion of the space

occupied by the department. Although the quarters are still cramped, you may find it possible in the near future to visit in groups rather than one at a time! In 1975 the department obtained a former classroom on the fourth floor of Benton Hall for use as a reading room. The main collection remains in the Thomas Jefferson Library, but donations from external sources and the placement of private journal collections in the reading room by faculty members make this a valuable addition to our resources.

The graduate program "came of age" in 1976, as the first advanced degrees were awarded. Several other students are nearing the completion of M.S. and Ph.D. degree requirements and these programs continue to grow at a modest rate. A fact which should be of interest to those of you who remain in the St. Louis metropolitan area is that most graduate courses are taught in the evenings or on Saturdays. A significant portion of the students in the graduate program are employed full-time and pursuing the M.S. degree on a part-time basis. If you or any of your colleagues are interested in the opportunities offered by this program, please contact the department for further details.

Professor Eric Brunngraber, who is head of the Biochemistry Department at Missouri Institute of Psychiatry (M.I.P.), has become an adjunct professor of chemistry in the department. M.I.P. is located in the state hospital on Arsenal St. and is a part of the UMC School of Medicine. Our arrangement with M.I.P. and Professor Brunngraber and his associates permits us to add neurochemistry as an additional specialty within our graduate program.

The emergence of the graduate program has not lessened the department's commitment to undergraduate research. During 1976-77 approximately 20 undergraduates pursued independent projects with faculty members and the National Science Foundation awarded Undergraduate Research Participation grants to the department during the Summers of 1975 and 1976. A total of 24 students were supported through these programs.

The family of Michael Longcor presented a gift to the department in his memory in the form of a slide carousel projector and tape player for laboratory instruction.

#### ABOUT THE FACULTY:

Professor C.W. Armbruster and Professor A.F. Berndt are writing an introductory text for use in the Chemistry 11-12 sequence. The book will be published by Prentice-Hall and should be available in mid-1978.

Professor K.W. Barnett served as a member of the International Advisory Committee for the New York Academy of Sciences' conference "The Role of Transition Metals in Organic Synthesis" held in New York in November 1976 and presented seminars at UM-Rolla, UM-Columbia and Gulf Research and Development Co., Pittsburgh. Professor Barnett will be on sabbatical leave at the University of Illinois during the 1977-78 academic year.

Professor L. Barton presented the paper "Stability and Reactions of Some Boron-Oxygen Ring Systems" at the Third International Meeting on Boron Compounds in Munich, Germany, July 1976 and was elected a Director of the St. Louis Section of the American Chemical Society. Professor Barton will spend the academic year 1977-78 on sabbatical leave at the Ohio State University.

Professor A.F. Berndt continues teaching and research duties in the department in addition to his position as Assistant Dean of the Graduate School and Assistant Director of the Office of Research.

Professor E. Block received a \$24,000 grant from the Petroleum Research Fund to support his research on diheterocyclobutanes and is the author of a book titled "Reactions of Organosulfur Compounds" to be published by Academic Press in late 1977. Professor Block presented seminars at Princeton, Iowa State, Delaware, Nebraska and Iowa during the 1976-77 academic year.

Professor J.S. Chickos coauthored papers presented at the American Chemical Society meetings in San Francisco and Kansas City in Fall 1976 and also attended the Joint ACS/CIC meeting in Montreal. Professor Chickos presented talks at UM-Rolla, Xerox Corporation and to the ACS St. Louis Section's Organic Topical Group.

Professor E.R. Corey spent the calendar year 1975 on sabbatical leave at Wayne State University and is co-investigator with Professor J.Y. Corey in an investigation of "Silicon Analogs of Imipramine and Amitryptiline", funded by the National Institutes of Health.

Professor J.Y. Corey was on sabbatical leave at Princeton University in 1974-75. Professor Corey presented a seminar at the University of Wisconsin in February, 1976 and gave an invited lecture at the Tenth Organosilicon Award Symposium in Windsor, Ontario.

Professor D.L. Garin is the recipient of a Faculty Course and Curriculum Development Fellowship for Summer, 1977, and presented a paper, "Enhancement of Optical Activity by Fractional Sublimation" at the University of Kentucky and the National A.C.S. Meeting in New Orleans, March, 1977.

Professor H.H. Harris attended the Gordon Research Conference on the Dynamics of Molecular Collisions in Plymouth, New Hampshire, and a NATO Advanced Study Institute on High Energy Chemical Spectroscopy and Photochemistry in Breukelen, Holland. Professor Harris and Professor J.J. Leventhal of the Physics Department have attracted research grants totalling more than \$150,000 from the Naval Office of Research and the Energy Research and Development Administration.

Professor M.T. Jones was on sabbatical leave during 1975-76, spending six months each at the University of Groningen (The Netherlands) and the University of Sheffield (Great Britain). Upon his return he assumed the post of Associate Dean of the College of Arts and Sciences. Professor Jones presented a seminar at the University of Illinois-Chicago Circle and is presently Chairman-elect of the St. Louis Section of the American Chemical Society.

Professor D.W. Larsen presented papers at the 12th A.C.S. Regional Meeting in Kansas City and the International Conference on Magnetic Resonance held in Banff, Alberta, Canada. In addition, he gave seminars on NMR relaxation studies at UM-Rolla and Southwest Missouri State during Spring 1977.

Professor J.A. Miller was elected Chairman of the Division of the History of Chemistry of the American Chemical Society and President of the Missouri Library Association and spoke at the St. Louis Award Symposium sponsored by the St. Louis A.C.S. Local Section.

Professor R.W. Murray has received a three year, \$90,000 grant from the National Science Foundation. The subject is "Oxidation with Singlet Oxygen and Ozone: Approaches to Air Pollution Chemistry". Professor Murray presented invited lectures at Oklahoma State University, the joint ACS/CIC meeting in Montreal and before the St. Louis Council on World Affairs.

Professor R.E. Penn has received a grant from Research Corporation to support his studies of hydrogen bonding by microwave spectroscopy. In addition he presented papers at the 31st Ohio State Symposium on Molecular Structure and Spectroscopy, the Sixth Austin Symposium on Gas-Phase Molecular Structure, the 12th Midwest Regional Meeting of the American Chemical Society.

Professor R.A. Rouse has resigned his position at UMSL to join the staff at Washington University's Data Processing Department.

Professor R.E.K. Winter spent the 1975-66 academic year on sabbatical leave at the Eidgenössische Technische Hochschule, Zurich, Switzerland. In collaboration with Professor D. Arigoni he conducted research on a variety sesquiterpene hydrocarbons. Professor Winter attended the Burgenstock Euechem Conference on Stereochemistry, Luzern, Switzerland in Spring, 1976 and chaired a session at the 12th Midwest A.C.S. Meeting in Kansas City.