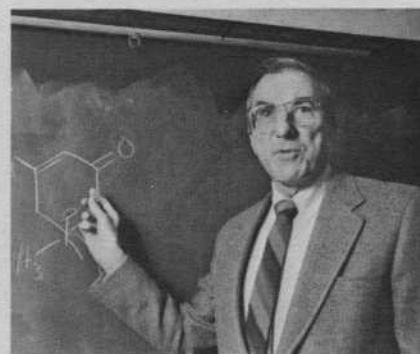


THE GOESSMANN GAZETTE

A publication of the Chemistry Department, University of Massachusetts at Amherst

Spring 1986

We are pleased to announce the appointment of Louis D. Quin as Professor of Organic Chemistry and Head of the Department. Lou comes to us from Duke University where he has held a James B. Duke Chair in Chemistry since 1981. We are including a statement from Lou along with his biographical sketch as a landmark in the Department's march toward excellence. Robert L. Rowell, Acting Head



A Personal Statement—L.D. Quin December 16, 1985

I have learned much about the University of Massachusetts and its Chemistry Department during the last few months, as I wrestled with the decision to make a major personal upheaval. In the end, a persuasive factor was the very positive view I had developed of the opportunities for growth and further development of both entities. I found a university administration that is committed to progress and that is aggressively working to this end. The Chemistry Department is prominent in their planning and already funds are being provided to upgrade instrumentation, add some badly needed young faculty members, improve the support package for graduate students, etc. The critical shortage of space that has prevailed for several years is soon to be relieved; the Biochemistry Department will be moving from the Graduate Research Center in about two years, and a significant part of their space has been committed to Chemistry. The long-range view is even brighter; plans are far along for a separate building for the Polymer Science and Engineering Department and its Institutes, and thus even more space can be foreseen. Equally persuasive was the high quality and spirit of the present faculty, which clearly recognizes that the opportunity is at hand to push on to even greater heights and seems eager to cooperate in the reorganization and modernization that might be required. I sense the same spirit in the graduate student body and the support personnel. During the first few months after I arrive in Amherst, we will all be busy working together and developing plans for the future. We will be addressing such problems as the directions we should take in research as new faculty are added, what further improvements need to be made in departmental instrumentation and its maintenance, how to expand the graduate student body while simultaneously strengthening it, how to maintain high quality in the instructional program yet improving research productivity, how to accomplish the vital task of increasing the amount of external financial support for the Department, which is the key to success in many of the areas mentioned above. Our long-range goal is direct: To develop the University of Massachusetts Chemistry Department as a vital, progressive

center for modern chemistry, with a national and international reputation for excellence.

Biographical Sketch

Born in Charleston, S.C. in 1928, and lived there until receiving the B.S. degree in Chemistry at The Citadel (the Military College of South Carolina) in 1947.

Graduate degrees from University of North Carolina (Chapel Hill) in 1949 (M.A.) and 1952 (Ph.D.)

Professional experience includes two stints with industrial labs (American Cyanamid, Stamford, Conn. 1949-50; FMC Corporation, Charleston, W. Va. 1952-54), several consultancies, and service in the U.S. Army Chemical Corps (First Lieutenant, 1954-56).

Academic career started at Duke University in 1956; became Professor in 1967, given a James B. Duke Chair in Chemistry in 1981. Served as Director of Graduate Studies (1965-70) and Chairman (1970-1976).

Sabbatical leaves have been spent doing research at Woods Hole Oceanographic Institution here in Massachusetts, and the University of London, and as a visiting professor, University of North Carolina.

Current research interests are primarily in phosphorus and sulfur chemistry (about 150 research papers, mostly on synthesis, stereochemistry, multinuclear NMR).

International activities include service on Scientific Boards of two international conferences, Editorial Board of "Phosphorus and Sulfur," organizer of International Conferences on Phosphorus Chemistry, Duke University, 1981; lectureships in Poland and China, many seminars elsewhere.

Author of "Heterocyclic Chemistry of Phosphorus" (Wiley, 1981), "C-13 NMR Spectral Data of Heterocyclic Phosphorus Compounds" (Texas A and M University, 1983), "Phosphorus Chemistry" Volume 171 of ACS Symposium Series (1981); presently completing (with John Verkade) a research monograph "Phosphorus-31 NMR Spectroscopy in Stereochemical Analysis" (VCH Publishers, 1986).

Active in American Chemical Society (Chairman, North Carolina section 1983-84; member of national Publications Committee, 1982-present).

ALUMNI NOTES

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Dr. Augustine Silveira, Jr., Distinguished Teacher Professor and Chairman, Department of Chemistry at the State University of New York at Oswego, is the principal chemistry investigator of a \$502,700 National Science Foundation Grant entitled "Increasing the Effectiveness of Chemistry and Biology Instruction Through Research Application." The NSF award is the largest nonmatching grant awarded to SUNY, Oswego and will involve Dr. Silveira giving a series of workshops and working with high school science teachers on how to improve teaching over a three-year period. Recipient of over 30 grants and awards, Dr. Silveira has published his research results extensively in the major chemical journals in addition to giving invited presentations of his work at universities and symposia throughout the United States. Dr. Silveira has previously served a four-year term as a member of the University of Massachusetts at Amherst's Chemistry Department Alumni Advisory Council.

FACULTY NOTES

The Sunday Times (London) on July 10, 1984 highlighted the work of **Dr. James Chien** and his British colleague **Dr. Joseph Schlenoff** on polyacetylenes and their application to the fabrication of a lightweight, high current capacity storage battery.

Professors Bernard Miller and **J.C.W. Chien** are investigating ways of linking food dye molecules to polymeric materials, so that the polymer-dye combination will not be absorbed in the intestinal system. This would eliminate carcinogenic properties of useful dyes.

Marion Rhodes is the Director of the Optical Microscopy Laboratory in the Chemistry Department. The instrumentation available provides transmission and reflective modes for bright field, polarization phase, and several types of interferometry including Mirau, Nomarski, and holographic. Data recording and analysis is available from photography, video, and the computer; all with the option of image analysis. The lab has an instructional program as well as a consulting service.

In August of 1985, **Dave Curran** participated in a Scientific Exchange with the People's Republic of China. A group of 16 American analytical chemists met with Chinese scientists in five cities in China: Beijing, Xian, Shanghai, Fuzhou and Guangzhou (Canton). Most of the sites visited were research institutes of the Chinese Academy of Sciences. Of course, there was also some sightseeing as well, and Dave can now say that he has walked on the Great Wall of China and seen the terra-cotta soldiers at Xian.

Sharon Palmer received her Ph.D. in 1985 from Northwestern in Inorganic Chemistry. She did postdoctoral work with Professor Ragle during the Fall semester 1985 and is serving as a visiting lecturer in the general chemistry program for the Spring semester 1986.

Professor Peter Lillya

My group of about 10, including two undergraduate honors students, is working on new organic reactions and reactive intermediates, liquid crystals, and polymer chemistry. Two Ph.D.s left during the past year, **Tom Sarubbi** to Hunt Chemical in East Providence, Rhode Island and **Richard Gooding** to Union Carbide in Bound Brook, New Jersey. Extra administrative activities this past year have included service as a chemistry representative to the operations committee of the High Field NMR Laboratory of Chemistry and PS&E, a member of the Department Head Search Committee, and a seven-week stint as acting Department Head during Bob Rowell's trip to China and Australia.

Robert Rowell who has served the Department as Acting Head since February 1983 will return to full-time teaching and research in August when the new Head, Professor Louis Quin, joins the Department. Bob has served as Chairman-Elect of the Colloid Division of the American Chemical Society in 1985 and is Chairman of the Division for 1986. In January 1986 he accepted the post of Associate Editor of *Lanmuir*, the new ACS Journal of Surfaces and Colloids. The Department was in the capable hands of Professor Lillya while Bob was away on a seven-week lecture and research trip to China, Taiwan, and Australia last Fall.

