

DOCUMENTS OF THE GENERAL FACULTY  
**REPORT OF THE MEMORIAL RESOLUTION COMMITTEE FOR  
 JOSEPH JOHN LAGOWSKI**

The special committee of the General Faculty to prepare a memorial resolution for Joseph John Lagowski, professor emeritus, Department of Chemistry and Biochemistry, has filed with the secretary of the General Faculty the following report.



Hillary Hart, Secretary  
 General Faculty and Faculty Council

**IN MEMORIAM  
 JOSEPH JOHN LAGOWSKI**

Joseph "Joe" John Lagowski was born in Chicago, Illinois, on June 8, 1930, and passed away on April 29, 2014, at the age of eighty-three.

After attending public schools in the western suburbs of Chicago, Dr. Lagowski enrolled at the Champaign-Urbana campus of the University of Illinois and graduated with a Bachelor of Science degree in 1952. His graduate work was carried out at the University of Michigan where he was awarded an M.S. degree in 1954. Following this he moved to Michigan State University where he was appointed a Du-Pont Fellow, and received a Ph.D. degree in 1957. His Ph.D. thesis entitled "Acid-Base Equilibria in Liquid Ammonia" was supervised by Professor R. N. Hammer. While in graduate school Joe's reputation as an outstanding chemist came to the attention of Professor Robbin Anderson (1914-2000) who taught physical chemistry at The University of Texas at Austin from 1939 to 1967. Professor Anderson interviewed Joe and kept him in mind for a possible future appointment in our department. Joe also met his wife Jeanne while in graduate school. After receiving his Ph.D., Joe spent the next two years in the Cambridge Laboratories of Professor H. J. Emeléus carrying out research on perfluoroalkyl mercurials, for which work he was awarded the degree of Ph.D. (Cantab) in 1959. During this time at Cambridge he was a Marshall Scholar, one of twelve, a member of Sidney Sussex College, an assistant demonstrator at the Lensfield Road Laboratories and a supervisor in inorganic chemistry for undergraduate tutorials.

Joe joined the faculty of The University of Texas at Austin in 1959 as an assistant professor and was promoted to full professor in 1967. In 1973, he was also appointed professor of education. At UT Austin, he supervised a research group of graduate and undergraduate students working on a wide variety of problems in both chemistry and education. In 1979, he became the editor of the *Journal of Chemical Education*, a position that he held until 1996. Joe also served as a member of the committee that defined the need for, and the characteristics of, the Institute for Science and Mathematics Education at The University of Texas at Austin. He served as the director of this institute from 1993 through 1996.

During the course of his career Joe developed broad interests both in fundamental chemistry as well as in chemical education, and he made many important contributions to both of these areas. He studied solution phenomena in non-aqueous solvents with a special emphasis on liquid ammonia, and his work in organometallic chemistry focused on understanding how the nature of the organic moiety determined the properties of the metal site. He published over one-hundred and fifty papers that included studies of liquid ammonia solutions, metal-ammonia solutions, electrochemistry, non-aqueous solvent systems, perfluoroalkyl mercurials, metal  $\pi$ -complexes, borazines and fullerenes. Joe was particularly proud of his work on the strange spectroscopic and electrochemical behavior of cesium and gold solutions in liquid ammonia. This work was published in the *Journal of the American Chemical Society* in 1978 and confirmed the existence of the auride ion  $\text{Au}^-$  (the "gold minus anion"), which is a rare example of a single noble metal anion.

In the 1960s, well before the advent of the personal computer, Joe recognized the importance and potential that interactive computing could have in the educational process. Accordingly, he began the process of effectively introducing computer-based methods into chemistry courses at the freshman level. In this respect, he was

significantly ahead of his time. Furthermore, he maintained a very active interest in education and computing throughout his career and published over forty papers in the areas of chemical education, computer-based methods of instruction, instructional aids, and laboratory instruction. In addition, he authored or co-authored eighteen books on a variety of chemical subjects, and served as the editor for a series of undergraduate textbooks. He was elected editor-in-chief of the *Encyclopedia of Chemistry* (1997, Macmillan Pub. Co.). In his role as editor for the *Journal of Chemical Education* (1979-1996), he published two-hundred and six editorials, a truly remarkable record, roughly an editorial every month for seventeen years. In addition to his research and writing, Joe presented over four-hundred and seventy talks at both national and international venues. During the latter part of his career Joe took a special interest in helping to develop chemistry programs in the Middle East and Asia. Countries where he lectured on various topics in chemical education include Egypt, Jordan, Qatar, United Arab Emirates, Pakistan, South Korea, Malaysia, Singapore, China, Turkey, and Ukraine as well as Mexico.

Joe also served the scientific community in numerous other ways. For example, he served as the program chairman for two Southwest Regional American Chemical Society meetings and he was also a co-organizer of four Colloque Weyl International Symposia on metal-ammonia solutions. During the period 1961-1970 he served in various capacities on the ACS Subcommittee on Inorganic Graduate Level Examinations. Moreover, he served on several national evaluation panels, and was elected general chairman of the 5th Biennial Conference on Chemical Education. Additionally, in 1998, Joe served as chair elect of the Division of Chemical Education of the American Chemical Society, and he chaired that division in 1999. Joe was appointed secretary of the Committee on Teaching Chemistry (CTC) of the International Union of Pure and Applied Chemistry (IUPAC) during the period 2000-2001. Finally, he was elected president of the Southwest Region of the American Chemical Society for 2001-2002.

In 1981, Joe received the Chemical National Manufacturing Association Award for Excellence in Chemistry Teaching. As a result of his service to the professional community, he won the 1989 ACS Award in Chemical Education, sponsored by the Union Carbide Corporation. He was also the recipient of the 1996 Southwest Regional ACS Award and the 1999 recipient of the James Flack Norris Award for Outstanding Achievement in the Teaching of Chemistry from the ACS Northeastern Division. In 2003, Joe was the recipient of one of the two Outstanding Service Awards from the Division of Chemical Education of the American Chemical Society.

Given the foregoing, it is clear that Professor Joe Lagowski enjoyed a long and very rewarding career at The University of Texas at Austin. It is said that, "*a man's legacy is not what he has done, but what the people he has taught have done.*" From the continued success of his many students and coworkers, Joe has left a particularly rich legacy of both teaching and research.

This memorial resolution was prepared by a special committee consisting of Professors Richard A. Jones (chair), Alan H. Cowley and Alan Campion.

Distributed to the dean of College of Natural Sciences on September 23, 2016, and posted under "Memorial Resolutions" at <https://wikis.utexas.edu/display/facultycouncil/Wiki+Home>.