

## Memorial Resolution of the Faculty of the University of Wisconsin-Madison On the Death of Professor Emeritus Edwin Vedejs

Emeritus Professor of Chemistry Edwin Vedejs died at the age of 76 on December 2, 2017 in Madison.

Ed was born on January 31, 1941 in Riga, Latvia. His family left Latvia in 1944 because of the impending Soviet takeover and lived for six years in displaced persons camps in Germany before emigrating to the United States in 1950. The family settled near relatives and a Latvian community in Grand Rapids, MI. Ed completed his undergraduate studies at the University of Michigan (B.S. Chemistry, 1962) and received a Ph.D. in Chemistry from the University of Wisconsin (1966), working with organic chemist Hans Muxfeldt as an NSF Fellow. Following one year of postdoctoral research with E. J. Corey at Harvard, Ed returned to Madison to join the chemistry faculty at the University of Wisconsin (1967). In 1999, he moved to the University of Michigan as the Moses Gomberg Professor of Chemistry.

During 32 years as a faculty member at UW-Madison, Ed built an internationally recognized program in synthetic organic chemistry and established himself as one of the preeminent scholars of his generation. Vedejs' research combined topics that have long been central in organic chemistry, including development of new methods to construct molecules, total synthesis of molecules originally isolated from natural sources, synthesis of heterocycles (ring compounds in which carbon and non-carbon atoms are combined in a cyclic array), manipulation of stereochemistry (the three-dimensional arrangement of atoms within molecules), and the elucidation of reaction mechanisms. Early studies focused on processes featuring carbon bonded to the metal palladium, species that display unusual and useful reactivity. Other early topics reactions in which heating causes a rearrangement of atoms within a molecule, and synthetic techniques for adding elements such as oxygen, sulfur or nitrogen to carbon-rich molecules. Ed's early studies in phosphorus chemistry resulted in the detection of critical transient intermediates in a process known as the "Wittig Reaction" that leads to formation of new carbon-carbon double bonds (Wittig later won the Nobel Prize for this discovery). Ed showed that these so-called "oxaphosphetane" intermediates could be characterized at low temperatures. Subsequent work on the chemistry of phosphorus, sulfur and nitrogen compounds led to new reactions that were valuable for the total synthesis of many natural products. Ed's persistent fascination with stereochemistry spurred his group to develop strategies for controlling the three-dimensional arrangements of bonding partners (i.e., relative and absolute configuration) about carbon, nitrogen, phosphorus and boron atoms. He published more than 230 research articles.

At Wisconsin, Ed received many honors in recognition of his scholarly accomplishments. He was named a Fellow of the Sloan Foundation in 1971 and a Romnes Fellow by UW-Madison in 1984. On the international stage, Ed received an Alexander von Humboldt Senior Scientist Award (Germany) in 1984, he was named Professore a Contratto at the University of Bologna (Italy) in 1988, and he received the Paul Walden Medal from Riga Technical University in 1997. Later UW-Madison honors included a Helfaer Professorship, 1991-96; Ed was named the Robert M. Bock Professor in 1997. In 2004, Vedejs received the H. C. Brown Award for Creative Research in Synthetic Methods from the American Chemical Society, in recognition of research that had been conducted largely at UW-Madison.

Ed was recognized as a superb lecturer and an outstanding instructor in the classroom. At Wisconsin, he taught undergraduate and graduate courses in organic chemistry. His course in organic synthesis was renowned among graduate students. At the undergraduate level, he frequently taught the one-semester course in organic chemistry for non-science majors (Chem 341), and he developed a new laboratory course (Chem 342) as a companion to the lecture course. In 1996, Ed received the Pharmacia & Upjohn Teaching Award from the UW-Madison Department of Chemistry in recognition of his contributions to our instructional mission.

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Ed was a tireless steward of the chemistry community, serving in a variety of national and international organizations. Highlights include service on the Board of Editors of Organic Syntheses (1979-1987), on the Medicinal Chemistry Study Section of the National Institutes of Health (research proposal reviews; 1987-1991) and as Chair of the Division of Organic Chemistry of the American Chemical Society (2002-2004). Ed was an Associate Editor of the Journal of the American Chemical Society from 1994 to 1999. Perhaps this role, more than any other, demonstrates the regard in which Ed's judgement was held by the large community of organic chemistry scholars, because this Journal is the flagship among American Chemical Society publications and has long been regarded as the premier organ for publication of significant results in organic chemistry. Based on Ed's broad contributions in research and scholarly service, he was named a Fellow of the American Chemical Society in 2008.

Ed retired from the University of Michigan in June 2011. To celebrate his retirement, which coincided with his 70th birthday, his former students, most of whom are alumni of UW-Madison, organized a symposium in Ed's honor in Madison.

Ed was appreciated at UW-Madison for his teaching and his devotion to mentoring scores of graduate students and younger colleagues. His lectures on his laboratory's research were models of clarity and intellectual rigor. Many of his UW doctoral students went on to illustrious careers in academia and in the pharmaceutical industry, and they appreciated his ongoing interest in and support of their professional development.

Ed had a deep commitment to the chemical community in his native Latvia. He worked to promote high scholarly standards by sponsoring many graduate students and professors to study at UW, by helping Latvian institutions gain access to the scientific literature, by joining forces with Latvian collaborators to seek research support and by teaching at Riga Technical Institute. These extraordinary efforts were recognized by Latvia when Ed received the country's national service award, Order of the Three Stars. Ed took great pride in the fact that his grandfather had received this natural honor decades earlier. Ed also reclaimed his family's ancestral home in Cesis which he passionately and meticulously renovated. He treasured having visitors to this home, proudly sharing the complex history of the home and homeland.

Ed had many interests beyond chemistry, involving music, history and other topics. He was an enthusiastic outdoorsman. Ed was deeply devoted to his family; travels around the world with his wife Pat Anderson (often associated with scientific conferences) were of special pleasure. In addition to his loving wife, Ed's survivors include his son Michael (Trudy Davis) Vedejs; daughters Christina (Jacques) Mersereau, Jesikah (Dominick) Cordova and Julia (John) Vander Meer; and brother Arthur Vedejs. He will be missed by many dear colleagues and friends in the US, Latvia, and elsewhere.

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