Matthew Platz

University of Hawaii Hilo

Matthew S. Platz obtained B.Sc. degrees in chemistry and mathematics from the State University of New York at Albany in 1973 and a Ph.D. in chemistry from Yale University in 1977 under the mentorship of Professor Jerome Berson. Following a post doctoral year at the University of Chicago with Professor Gerhard Closs, he joined the faculty of The Ohio State University as an assistant professor of chemistry in 1978. Platz was promoted to associate professor in 1984, to full professor in 1990 and served as department chair from 1994-1999. He has won university awards for distinguished teaching and research, and in 2001 he was named Distinguished University Professor of Chemistry. He has also served Ohio State as a Vice Provost and Dean. He served as Director of the Division of Chemistry of the National Science Foundation from September 2010-January 2013. He was instrumental in developing the SUSChEM and INFEWS programs and a partnership with the EPA as Chemistry Division Director.Platz retired from the Ohio State University in January 2013 and moved to the University of Hawaii Hilo as Vice Chancellor for Academic Affairs. He returned to the faculty ranks in Hilo on August 1, 2017.

The Platz laboratory has enjoyed funding from the National Science Foundation, the National Institutes of Health and the private sector. His research has been recognized by the James Flack Norris Award, the Cope Scholar award of the American Chemical Society and the Remsen Award. He has mentored well over a hundred undergraduate, graduate and post doctoral research students, published over 300 peer reviewed papers, edited three books, delivered over 200 invited lectures and holds over a dozen patents in the use of photochemistry to eradicate pathogens present in transfusable blood products.

Fifty Years of Carbene Chemistry: A Personal Perspective

In this lecture, Dr. Platz will review the state of the art in carbene chemistry in the 1960s, what chemists thought then and why, and the questions that intrigued them. The mechanistic paradigm that existed then, based on chemical analysis of reaction mixtures, will be presented. The lecture will emphasize the symbiosis of magnetic resonance spectroscopy, time resolved spectroscopy and theory over the decades, and how the field evolved from qualitative to quantitative understanding of simple alkyl, aryl and carbonyl carbenes. Several surprises and serendipitous results will be illustrated. Similarities and differences between simple carbenes and nitrenes will be made. Time will not permit a discussion of organometallic carbenes.