A MEMORIAL
to
JOHN E. "JACK" KATON

Modest, Dedicated, Knowledgeable, Honorable, Easy going, Persistent. These are but a few of the many adjectives used to describe our friend and colleague, John E. "Jack" Katon. Jack, a son of Ohio from Henry County, was born in Toledo on January 5, 1929, the son of Arnold and Doris Helen Graf Katon. He graduated from Grand Rapids High School and entered Bowling Green State University, earning a Bachelor of Arts Degree in Chemistry in 1951. He then entered the graduate program at Kansas State University where he earned a master's degree in Organic Chemistry. During his tenure at KSU he became friends with Bill Fateley, Bob Jakobsen, and Dr. Ellis Lippincott. Each of these people, including Jack, would become pioneers in the rapidly developing field of infrared spectroscopy. This technique is one of the primary methods employed today for the identification of unknown materials. It was also at KSU that he met his future wife, Jeanette. When Dr. Lippincott moved to the University of Maryland, Jack followed earning a doctorate in Physical Chemistry in 1958. Also in 1958, Jack joined the Monsanto Chemical Company in Dayton as a Senior Research Chemist. He had served this company as a research scientist during his graduate education at Maryland. In 1961 Jack was promoted to Research Group Leader and served in this position until his academic calling in 1968. At this time he joined the Department of Chemistry at Miami University and its fledgling doctoral program. Jack helped build the program and the department through continued collaborations with Monsanto and later with the Wright Patterson Air Force Laboratories. He was promoted to full professor in 1972. Rather late in his career (1984), Jack was instrumental in forming the Molecular Microspectroscopy Laboratory. In 1996 Jack took medical leave from the University due to illness.

Of the many positive qualities of Jack, he is probably remembered most as an excellent mentor and a man of unquestionable integrity. As a professor and mentor, Jack felt strongly that the apprentice should be challenged to take the initiative. The apprentice would need to come prepared to reason through an exercise to complete it successfully; Jack would provide the essentials. He was always accessible should a snag be encountered and would offer direction to a plausible solution. It was during these interactions that the breadth of his chemical knowledge would become blazingly apparent. Although he was a stickler regarding detailed written reports, most students looked back on these experiences with a better understanding of the topic at hand. On the graduate level, Jack mentored eleven master's students, nine Ph.D. students, and several postdoctoral students. Several of these students are making significant contributions in the field of molecular spectroscopy today.

As a colleague, Jack could always be counted on to speak his mind no matter what the consequences. There was no dancing, just straightforward answers or opinions that had been carefully

considered from every point of view. His interests were not focused to the gains of his own research, but to how that research could benefit teaching, academics, and the world as a whole. Most notable of these areas included the use of molecular microspectroscopy in analytical chemistry, archaeology, and art. One particularly interesting project involved the authentication of an early Gospel from the book of Mark. The Gospel was believed to be from the middle ages, however, careful analysis proved it was fabricated in the 17th century.

Jack was one of the first few people in the country to recognize the benefits of strong academic/industrial relations. He saw the much larger picture as a way to maintain academic leadership in research while simultaneously coupling this effort to real world industrial needs. His quiet persistence and dedication convinced the University to establish a laboratory dedicated to the development and implementation of molecular microspectroscopy, with direct ties to industry and other non-academic entities. As a result, the Molecular Microspectroscopy Laboratory was formed. For the last twelve years of his life, Jack built this laboratory into one recognized throughout the world, and one that stands as a testament of his dedication to excellence in science. Industry benefitted from state-of the-art equipment and expertise, students benefitted by exposure to real world problems and cutting edge technology, users and potential users of the methods benefitted by the research and annual training courses he held, and the field of molecular spectroscopy benefitted with each of these involvements.

During Jack's scientific career, which spanned some forty years, he pioneered the use of low temperature and polarized molecular spectroscopy for the study of single crystals and molecular microspectroscopy for materials characterization. His early days at Miami were highlighted by significant research contracts with Monsanto and the Wright Patterson Air Force Laboratories. Over his career he published 135 major works, 32 briefs, and gave 163 presentations. Jack was a member of, and served, numerous societies including the Society for Applied Spectroscopy, serving as president in 1976, Applied Spectroscopy Book Editor 1977-1995, and receiving its Distinguished Service Award in 1995; the American Chemical Society, receiving the Cincinnati chapter's Outstanding Chemist Award in 1979; the Coblentz Society; the Spectroscopic Society of Pittsburgh; the Microbeam Analysis Society; and many other professional organizations.

On a more personal level, Jack was an avid sportsman and a worthy competitor. He worked hard and played hard. He enjoyed hunting and fishing at KSU with Bob Jakobsen and Bill Fateley. He also loved baseball. Jack excelled early on in softball as the department's third baseman. Although a knee injury hampered him, he knew how to place the softball in the right position whether he was fielding or hitting. As time moved on, Jack turned his attention to golf and bridge. He was a weekly participant in the men's golf league at the country club and a formidable player in the local bridge club. This latter activity he enjoyed with Jeanette and many friends outside the Department of Chemistry. Besides chemistry, his knowledge of sports was equally impressive. If someone would try to outwit Jack with some trivia, they would soon realize who the master really was.

Jack's dedication was not only to his chosen profession but to the local community as well. He served as a scout master in the Dan Beard Council, Boy Scouts of America, and was a member of the

Presbyterian Church. As a longstanding member of the Kiwanis Club of Oxford, most of us will remember Jack in front of Kroger selling peanuts or flipping pancakes on pancake day. His major responsibilities with the Kiwanis were the annual blood drive and the membership committee. Whatever was asked of Jack in these capacities, he fulfilled the responsibility without question or complaint.

In 1955 he married Jeanette, who survives him and currently lives in Oxford. Together they had two daughters, Linden of Cincinnati and Alison of Chicago, and a son, Kent of Colorado. Jack is also survived by his sister, Marilyn Kilgore of Los Angeles.

Memorials may be sent to the Department of Chemistry in Jack's name.

Contributors:

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