Vernon “Jack” Shiner Jr, aged 95, passed away peacefully at home on May 26, 2021, with children and grandchildren at his side. Jack was born in Laredo, Texas in 1925 to Vernon Jack and Mildred Shiner. He grew up in towns along the Texas-Mexico border and graduated from El Paso High School, where he played the trumpet and was a member of the tennis team. He began studying chemistry at Texas Western College of Mining (now UTEP), where he met his future wife Reva. He enlisted in the Navy during WWII and served as a radar technician on a destroyer in the Pacific. After the war he completed his B.S. in chemistry in 1947. Jack earned his Ph.D. in organic chemistry at Cornell University in 1950. He spent 1950-51 as a Fulbright postdoctoral fellow at University College, London, working
with Sir Christopher Ingold. From 1951-52, he worked with Paul Bartlett as a senior postdoctoral fellow at Harvard.

Jack joined the Department of Chemistry at Indiana University Bloomington in 1952 as an instructor and rapidly advanced to full professor in 1960 on the basis of his innovative research in the developing area of physical organic chemistry. Jack was recognized as one of the world’s experts on solvolysis and elimination reaction mechanisms, where he used the effects of uncommon isotopes of the usual elements, often deuterium, on reaction kinetics to elucidate detailed pictures of such transformations at the molecular level. His expertise in kinetic isotope effects was of significant importance in collaborations with a number of other scientists in their studies of a variety of chemical, biochemical and geochemical reactions.

Jack was known for training his numerous Ph.D. students and postdoctoral associates in the rigors of detailed, precise science at both the experimental and theoretical levels. He advised 29 Ph.D. recipients and 8 M.S. recipients. Shiner was a co-author on 112 research articles, book chapters, and conference proceedings, providing an extensive reporting of his group’s research. From 1959-60, he held a coveted Sloan Research Fellowship and joined his international isotope colleagues at the University of Zagreb as a Fulbright Distinguished Scholar in 1985.

Jack served as chair of the Department of Chemistry twice, first from 1962 to 1967, where he oversaw its unprecedented growth: a doubling of the research faculty, a major increase of the research facilities with the opening of the 1964 addition and, most important to him, the establishment of a superb set of electronic, computational, machine and glassblowing shops to enhance the new research programs. He was called to serve as chair
again from 1982 to 1988 to supervise the construction of the east and west Chemistry annexes and renovation of the original Chemistry building and the 1964 addition, all of which completes the current chemistry teaching and research complex. His administrative skill and vision were also employed by the College of Arts and Sciences where he served with distinction as dean from 1973 to 1978. Jack continued to teach undergraduate courses until his retirement in 1995.

He loved traveling, gardening, sports cars and was a wine enthusiast. With his wife Reva, he appreciated and patronized the theater and fine arts, in particular, the activities of the National Society of Arts and Letters and the Bloomington Playwrights Project.

Jack is survived by son David and his wife Leslie, daughter Diane and her husband Eric, son-in-law Gilbert and grandchildren Eva and Nathan Wong and Clare, Miles and Jane Allsopp-Shiner. Jack joins his wife Reva and children Lora and Paul.

We request that this memorial tribute to Jack Shiner be presented to the members of the Bloomington Faculty Council, that it be preserved in its minutes and archive, and that after its presentation copies be sent to members of his family.

Jonathan Karty, Senior Scientist

Caroline Chick Jarrold, Class of 1948 Herman B Wells Endowed Professor

Jack Crandall, Professor Emeritus

Joe Gajewski, Professor Emeritus

All of Department of Chemistry, Indiana University Bloomington