

Memorial to John C. Ludwick, Jr. 1922-1992

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John C. Ludwick was a gentleman respected by all who had the pleasure of his acquaintance. Jack died at the age of 70 after a battle with lung cancer. His death was mourned by friends, students, and colleagues around the world.

John C. Ludwick, son of Margretta Rouse Ludwick and John C. Ludwick, Sr., was born on April 25, 1922, in Berkeley, California. Jack's formative years were spent in the Los Angeles, California, area where he obtained his primary and secondary education. Between 1942 and 1946 he served his country in the Pacific theater with the USAAF Weather Service. In 1947, he earned a bachelor's degree in geology from the University of California at Los Angeles. The groundwork for Jack's career in geological oceanography began at Scripps Institution of Oceanography, where he earned a master's degree in 1949. As a graduate assistant he organized and led cruises to the continental borderlands off southern California. His principal professor for his doctoral research at Scripps was Francis P. Shepard. In 1950, he earned his Ph.D. at Scripps for his work on deep-water sand layers off San Diego.



Jack began his career as a managing research sedimentologist with the Gulf Research and Development Company in 1950. He hired and managed staff, and equipped ships at marine geology and oceanography laboratories at Houston, Texas, and New Orleans, Louisiana. Between 1950 and 1956 he led numerous multidisciplinary investigations in the northeast Gulf of Mexico. Sedimentological, geochemical, and oceanographic studies ranged from deltaic deposits to shelf-edge algal reefs. In 1956, Jack became a senior research scientist with Gulf and moved to Pittsburgh, Pennsylvania. At Pittsburgh he supervised the stratigraphic analysis section until 1967; his group worked on special problems submitted by domestic and foreign operations of the Gulf Oil Company.

After almost 18 successful years with Gulf, Jack took on the challenge of building an Institute of Oceanography at Old Dominion University in Norfolk, Virginia. During the twelve years between 1968 and 1980 he built the institute from a staff with a director and one faculty member to a faculty of ten, with more than 100 graduate students. The institute was given Ph.D.-granting status in 1973 and became a Department of Oceanography in 1980.

The early days of the institute were difficult ones. Curricula had to be developed, enrollment had to be built, a suitable research vessel had to be obtained, and an adequate building had to be found on campus. After Jack stepped down from the chairmanship in 1980, he continued to guide, teach, and direct advanced degrees in oceanography until he retired in 1987. We called him the father of oceanography at Old Dominion University. Upon his retirement, he was awarded professor emeritus status and continued to advise students on research and serve on committees.

Jack's research credentials have been acknowledged in many ways. In 1957, he was awarded the American Association of Petroleum Geologists Presidents Award for best paper in

the *AAPG Bulletin* written by authors under age 35. In 1963, he received Honorable Mention for Excellence, awarded by the Society for Economic Paleontologists and Mineralogists for the 1963 volume of *Sedimentary Petrology*. In 1968, he became a Slover Professor of Oceanography at Old Dominion University and in 1974 was designated an eminent scholar at Old Dominion University. In 1987, he was honored with the university's Tonelson Award for outstanding achievements in teaching and research. Jack had been a long-standing Fellow of the Geological Society of America since 1954. He was a recognized scholar in the geological oceanography of the continental margins and had served on the editorial board of *Marine Geology* since 1975 and *Continental Shelf Research* since 1981.

In the 1970s, Jack developed an international reputation for his research on sand waves. His steadfast and dedicated search for understanding the relations between gradients in fluid power and sea-bed response gained him great respect among his students and colleagues. Jack was a very conservative, thorough, and precise scientist. He obtained and read all of the literature on research problems. He could never be accused of rediscovering the wheel; he clearly believed in building on the continuum of scientific knowledge in the structuring of new knowledge.

His vast experience with Gulf Research and Development brought enthusiasm to the classroom, and although he was a very demanding teacher, he was known for his fairness. He demanded that his Ph.D. students were quantitative scientists and used precise and accurate nomenclature. His students beamed with pride when they acknowledged studying under him or even taking one of his courses. Jack continued to keep in contact with all of his students throughout their careers.

In the early days of the small department, Jack encouraged participation in coffee breaks primarily because they enhanced collegiality among the faculty. As a close friend and colleague, my fondest memories of Jack are the scientific discussions we shared during our coffee breaks at the drugstore lunch counter. Jack was a truly sophisticated and elegant scholar who encouraged intellectual scientific discussions. His decorum was never compromised; no matter how strongly he disagreed with a point, he would never raise his voice or offer a demeaning comment. His most critical words were "I think we have an honest difference of opinion." He was always a gentleman, with a gift for making you feel comfortable in his presence.

John C. Ludwick married Norah Sutherland in 1957. Norah lives at their home in Norfolk, where she and Jack lived together for 24 years. Jack's ashes are resting on a hillside beside Norah's mother in Scotland.

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