

MEMORIAL RESOLUTION

ALBERT J. RUDMAN

(November 14, 1928 – September 21, 2013)

Albert Rudman, Professor Emeritus of Geological Sciences, died at his home in Bloomington on September 21, 2013, following a long and storied career with Indiana University. He was a devoted teacher, mentor, and research scholar in the field of geophysics. He leaves a legacy of a long and diverse record of scientific publications in applied geophysics, as well as several generations of devoted students who studied under his mentorship.

Rudman was born Albert Rudnyanszky in New York City on November 14, 1928, the son of Hungarian immigrant parents Sandor and Rose Rudnyanszky. He grew up in Chicago, graduating from St. Philip High School in 1945. At age sixteen he enrolled in Indiana University, majoring in journalism. After one year he enlisted in the U.S. Army at the age of seventeen and served fourteen months in Italy. Al was honorably discharged in 1947, receiving the Army of Occupation and World War II Victory Medals.

Following his service, Rudman returned to Indiana University in 1948. Thoroughly excited by a first course in geology (taught by IU Professor Charles Vitaliano), Rudman decided to focus his academic studies on Geological Sciences. He received his B.S. degree in 1952 and his M.S. degree in 1954, specializing in the field of geophysics. While a student, Al married Bertina Blauch, and in the following years they had three children, Philip (now deceased), David and Lynn (Newton).

After completing his masters training, he accepted a position with Carter Oil Company (now Exxon) working in oil exploration for three years in the southern states. Although that was the end of his formal work with the energy industry, it began a lifelong interest in “exploration geophysics”—the application of sophisticated geophysical methods to petroleum and gas exploration.

Al Rudman returned to Bloomington in 1957 and worked as a geophysicist with the Indiana Geological Survey (IGS) from 1957 to 1965. While working with the IGS he received his Ph.D. degree in 1963 under the mentorship of Professor Judson Mead. In 1965 he accepted a faculty position with the IU Department of Geology (now Geological Sciences).

Albert Rudman was a faculty member for thirty-three years and was highly regarded as a teacher and researcher in the field of applied and exploration geophysics. He published over seventy papers and abstracts and directed the thesis research of numerous graduate students. Even after retirement he taught occasional courses, served on graduate thesis committees, and regularly attended geophysics seminars.

Rudman’s research interests were broad and highly varied. He was drawn to almost any area of geoscience research that included mathematical and computational approaches to

geological problems. His publications included application of a diverse array of geophysical tools—including thermal, electrical, magnetic, gravitational, radar, and seismic methods—for studying the deep, largely inaccessible, portions of Earth’s crust. He was a pioneer in applying a number of state-of-the-art computational methods, such as neural networks, geophysical inverse methods, and synthetic seismogram computation to problems in solid Earth geoscience. Among his most important contributions was his early work on the geophysical properties of the deeply buried “basement rock” beneath the sedimentary strata of the Midwest based on the limited geological and geophysical data available at the time. His extrapolations were remarkable and have stood the test of time.

Rudman had a deep academic and personal connection with the Hawaiian Islands, having spent many summers and a number of sabbatical leaves working with colleagues at the University of Hawaii’s Hawaii Institute of Geophysics (now part of the School of Ocean and Earth Science and Technology). He collaborated closely with geophysicists Neil Frazer, Fred Duennebier, and Peter Bromirski on research related to active tectonic and volcanic processes in Hawaii.

In the course of Rudman’s thirty-three years of service to Indiana University, he mentored twenty four masters and Ph.D. students and numerous undergraduate student researchers. He was well known for his teaching of advanced methods of applied and exploration geophysics, his energies directed primarily at advanced geology majors and graduate students. In the classroom, he had a reputation as a patient, caring, thoughtful professor, who helped students struggle through the challenges of applying mathematical methods to earth science problems. He had a disarming sense of humor and an infectious laugh that helped set everyone at ease in his classes.

Al Rudman was an intensely social person, innately aware of the social network in which our scientific world operates. In our scientific community, Al often served as a “connector”, always striving to help fellow researchers find collaborators, his students find employers, and to make personal connections within the university that spanned across disciplinary boundaries. He was a great storyteller, with a fanciful way to work a humorous anecdote into almost any academic discussion. But even more characteristic was Al’s gift as a fully engaged listener, always making every student, colleague, and visitor who crossed his path feel that their story was important and worthy of sharing. He was a supportive mentor to many generations of IU students, who sought his advice on every topic, from academic to personal.

After retirement Rudman’s last years were happily spent at Indiana University events, rarely missing an IU basketball or football game, playing bridge, tennis, jogging, visiting his family and travelling with his longtime partner Joan Lauer. Of special importance to Al were frequent visits with his grandchildren. Al’s friends remember him as energetic with a sense of humor and an enthusiasm for life.

He is survived by his sister Jo Stockwell of Florida, his son David of Boulder, Colorado, his daughter Lynn Newton of Santa Barbara, California, his partner of twenty-five years, Joan Lauer, and his five grandchildren Andrea, Peter and Sam Rudman and Daniel and Benjamin Newton.

In recognition of Professor Albert Rudman's many contributions to the scientific and scholarly life of the Department of Geological Sciences and to the university at large, be it resolved that this memorial resolution become part of the permanent records of the proceedings of the Bloomington Faculty Council, and that copies be sent to the following people: Larry Singell, Dean of the College of Arts and Sciences; Lisa Pratt, Chair of the Department of Geological Sciences; Joan Lauer; David Rudman; and Lynn Newton.

Michael Hamburger
Professor of Geological Sciences