

Memorial to Jack Aaron Simon (1919–2005)

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The geological profession lost a staunch supporter, a respected scientist, an admired administrator and a valued friend when Jack A. Simon, former chief of the Illinois State Geological Survey passed away unexpectedly 17 December 2005 at Clark-Lindsey Village in Urbana, Illinois. Jack had become widely known nationally and internationally despite the fact that he lived most of his life within a 3-mile radius of the Survey. Jack was an Urbana-Champaign native. He was born in Burnham Hospital in Champaign, the middle son of Abraham Simon, an immigrant from Russia, and Lenore (nee Levy), an immigrant from Turkey. His brothers were Harold and Robert. Their parents met in Urbana, where Abraham owned a furniture store. Jack lived in the same house—his parents’—for 72 years before moving to Clark-Lindsey Village, an Urbana retirement community, in 1996. He was active in Boy Scouts and school activities, especially with the school newspaper and as manager for Urbana High School athletic teams. He was a National Honor Society student and graduated as president of his class in 1937.



Before graduating from Urbana High, Jack applied for a position at the Illinois State Geological Survey (ISGS), encouraged by his next-door neighbor, Gilbert H. Cady, an eminent coal geologist and head of the Coal Section at the Survey. Jack was hired as a student assistant during his senior year in high school. Jack’s intention was to enroll at the University of Illinois and work part time at the Survey. During his first summer as field assistant, the Survey vehicle in which he was riding as a passenger skidded on wet pavement, caught the soft shoulder, hit a culvert and rolled completely over. Both occupants were thrown from the car and survived, but Jack’s right arm was broken. With his first university term about to commence, Jack learned to write left-handed. The broken arm was just one of many difficulties he overcame with his grit and determination. Jack went on to get his B.A. and M.S. degrees in geology at the University of Illinois in 1941 and 1946, respectively.

Between these two dates, Jack served in the Army Air Force during World War II, rising to 1st Lieutenant as a B17 navigator. During his 27th mission over Germany, his plane was shot down near Berlin along with the nine other planes in his squadron. After bailing out, Jack was captured and interned as an American officer POW near Nuremberg. He survived several forced moves by his captors to keep ahead of the Allied Forces and was liberated by U.S. Army forces from his final camp at Moosburg. He remained a POW in Germany for 3½ months, from 14 January in the bitter cold of winter to 29 April 1945. In July 1945, in response to a request from his two brothers, Jack wrote a “40-page” letter graphically describing his experiences in the war. Throughout his service from 1943–1945, G.H. Cady, always the caring mentor, kept in contact

with him, writing several times a month with news from the home front.

After returning from the war, Jack completed his graduate studies and continued his work with the Survey. Appointed as an assistant geologist in the Coal Section under Cady, Jack steadily worked his way up to associate geologist, and in 1953, when Cady retired, Jack was named geologist and head of the Coal Section. In 1967, he was appointed principal geologist and head of the Geological Group. He was named assistant chief in 1973, and took over as acting chief upon the retirement of John C. Frye in 1974. In 1975, the Board of Natural Resources and Conservation appointed him chief, a position he held until he stepped down following a major stroke in 1981. He retired as chief emeritus in 1982. He had also held joint appointments at various times at the University of Illinois as a professor in the engineering and geology departments.

Jack's recovery from his stroke was remarkable. In his therapy, he worked with such determination and progressed so well that he was named Mercy Hospital's 1982 Rehabilitant of the Year. Jack wrote in his Holiday Season Letter to Friends that initially his right side had been paralyzed and he suffered from the loss of intelligible speech. Before leaving the hospital, he had regained much of the use of his right arm and leg (using his left hand to write, a feat he had learned some 45 years before), and his speech was nearly normal.

Jack's contributions to science and its administration are manifold and diverse. As a field assistant, Jack helped to map and sample coal deposits. In the late 1930s, he turned his hand to assist Cady and Charles Boley in the Survey's early entry into electronic data processing using IBM punch cards to record and organize the rapidly expanding database on Illinois' coal resources. Later, as Cady compiled his groundbreaking 1952 report, *Minable Coal Reserves in Illinois* (Illinois State Geological Survey Bulletin 78), Jack played a major role, helping Cady assemble the results of his lifetime of work.

During the 1950s and 1960s, under Jack's guidance, information was gathered and published establishing the resource potential of surface minable coals in Illinois. Jack, himself, pursued research on sulfur in coal. Following Cady's lead, Jack, H.J. Gluskoter and M.E. Hopkins developed a mapping technique to help locate lower sulfur coal deposits; a report of this research was published in 1968. With severe budgetary restraints in state appropriations from 1972 to 1976, both Frye and Simon sought to increase the proportion of non-state funding through grants and contracts. Simon continued the environmental program started under Frye and expanded the Survey's investigations on the potential for groundwater contamination from coal wastes and solid and hazardous wastes and the potential for air pollution from coal combustion facilities. He encouraged the study of mineral matter in coal and the forms of sulfur in coal. Jack also promoted research on finding ways to clean higher sulfur coal, expanding the Survey's coal washability studies in the 1960s and 1970s.

When the Arab Oil Embargo of 1973–1974 threatened oil supplies and led to an energy crisis, Jack served as panel chairman of the Technical Committee of the Illinois Energy Commission, and in 1977, he published recommendations regarding a long-range energy program for Illinois. In his report as chairman, Simon reviewed the status of Illinois' coal reserves, new and developing technology on mining and coal utilization, and constraints on mining and utilizing Illinois coals. Simon noted that no Illinois coal could meet the Environmental Protection Agency regulations and emphasized the need for further research on removing sulfur from coal. Additionally, he provided recommendations on coal liquefaction and gasification. This particular report quietly and effectively displayed the depth and scope of the activities of his Survey. On 6 July 1977, the State of Illinois Energy Resources Commission awarded Jack a certificate of appreciation for his special efforts.

Shortly thereafter, Jack obtained assistance from the U.S. Geological Survey (USGS) to begin an extensive assessment of Illinois' coal resources resulting in 1978 in the first fully

computerized estimates of Illinois' deep-minable and strippable coal reserves and resources. Led by Simon as chairman of the local organizing committee, the ISGS hosted the technical sessions of the Ninth International Congress of Carboniferous Stratigraphy and Geology in 1979, the first meeting of the Congress held in the United States. On 23 June 1979, a resolution, passed by Illinois' Eighty-First General Assembly recognized the achievements of the ISGS and Jack Simon in bringing the prestigious convention to the University of Illinois campus. This was followed by another symposium, "Perspectives in Geology," organized by Simon and staff in 1980 as they celebrated the Survey's 75th Anniversary. By then, Jack was leading a total staff of 175 including some 90 professional scientists and engineers. From the time Jack led the Coal Section through his tenure as chief, he continued to be a faithful reviewer of coal-related manuscripts. Jack was an eminently fair, but formidable editor and critic of scientific thought. Inevitably, the manuscript was returned with abundant corrections and comments in red, a condition known to all in the Coal Section as "Simonized." The editing was uniformly good and cogent and often led to spirited discussions between the authors and Jack, resulting in both parties understanding just which conclusions were warranted.

Jack was not only active in advancing the Survey's scientific program but also in furthering coal geology in other state and national organizations, either by serving on committees or in official capacities, that drew on his wealth of knowledge. For example, he served the Illinois Mining Institute at various times in the 1960s and 1970s as secretary-treasurer and Executive Board member, becoming an honorary life member in 1968, vice-president in 1979 and president in 1981. He provided broad support to the Geological Society of America, especially to its Coal Geology Division, serving in the late 1950s and 1960s as secretary, vice chairman, and chairman. He was on the GSA Council from 1979 to 1981. Jack also held offices in the American Association for the Advancement of Science, American Institute for Mining and Metallurgical Engineers (AIME), and American Institute of Professional Geologists and was active as a member of the Association of American State Geologists (AASG), and other professional organizations. He also served on a large number of state and federal panels. Additionally, Jack provided broad encouragement to many young researchers in coal geology. Jack's influence was far reaching.

A number of awards were bestowed on Jack honoring his lifelong series of achievements. The most prestigious was GSA's Gilbert H. Cady Award, which was presented to him on 21 October 1975. The award included an engraved silver platter that read "...in Recognition of His Outstanding Contributions in the Field of Coal Geology." In 1981, Jack also received an Honorary Degree of Doctor of Science from Northwestern University where Jack had completed two years toward his Ph.D. in 1947-1949. In 1982, he was presented with the AIME Percy W. Nicholls Award, noting Jack's outstanding character, dedicated service, and accomplishments. Also in 1982, Southern Illinois University at Carbondale awarded Jack its first Coal Day Appreciation Award in recognition of his scientific work and his service to the coal industry, the citizens of Illinois, and his profession. Having been a significant contributor to the affairs of the Association of American State Geologists from 1974 to 1981, the AASG elected Jack an honorary member upon his announced retirement from the position of state geologist of Illinois in 1982. In 1991, Jack was presented with the American Association of Petroleum Geologists Eastern Section Gordon H. Wood, Jr., Memorial Award in Pittsburgh, Pennsylvania. In 1994, Jack became the first recipient of the University of Illinois Department of Geology's Alumni Achievement Award; and in 2004, he was honored with a distinguished achievement award by the AASG.

Throughout Jack's career, others expressed admiration for his levelheaded approach and noted that he infused a real esprit de corps into his research organization and administered it so as to produce consistently high quality results. In 1986, Larry Sloss, then on the Survey's governing Board of Natural Resources and Conservation, wrote that Jack "combined hard work,

an able mind, and an engaging personality to become the acknowledged preeminent figure of his generation among coal workers in this country.” In directing a large number of geologists, chemists, and engineers along their scientific and professional career paths, Jack impressed on all the necessity for scientific and personal integrity. Dallas Peck, Director of the USGS, noted in 1987 that Jack was a leader with humor, kindness, and consummate compassion for others without compromise of human, scientific, or professional values.

Most importantly Jack’s own staff held him in high esteem. Hal Gluskoter, speaking for the ISGS staff in a 1967 letter, remarked, “I realize I do not have to tell you of the tremendous affection and respect that we all have for Jack, as a warm human being as well as a good, knowledgeable scientist and effective administrator.” Upon Jack’s retirement, the ISGS Coal Section Staff and Alumni honored him with a unique plaque emblazoned with a miner’s lamp, crossed axe and pick, and an ISGS #1 dog tag. He was acclaimed separately by others at the Survey and by friends in an outpouring of respect and good will at his retirement party held on 28 March 1982. They considered him a team player.

Jack was profoundly modest and rarely talked about his accomplishments, but he proudly recalled those of others with the ISGS. He spoke with humility but with the strength of his convictions. He had a positive outlook and a gentle sense of humor. He was generous and thoughtful, always a gentleman. Jack obviously had the character and qualifications to lead a very successful Survey. He retained these traits, including his humor, in his later years while serving as mentor to so many. When asked how he was doing or how he was, he would sometimes respond, “Well, I don’t dance as well as I never could” or “Compared to what?” One time, he was quick to respond to a query as to how he was able to find a certain item saying, “Well, I follow a simple rule. I look first where it isn’t, and then I find it where it is, and it works every time.”

Jack died at the age of 86. Rabbi Norman Klein offered touching remembrances in his eulogy read at the burial site. Jack obviously maintained close ties with his brothers and their families throughout his life. He was buried at Mount Hope Cemetery in Urbana next to his parents in a grave visible from the windows of an office he occupied at the ISGS as head of the Coal Division before he became chief—a fitting setting for one whose career was built upon his aspirations and accomplishments at the Survey. All agree with his brother Robert’s observation that Jack “remained the same wonderful son, brother, uncle, and devoted friend and caring associate throughout his life.”

SELECTED BIBLIOGRAPHY OF JACK A. SIMON

(Not included in this bibliography are reports by Simon and others on “Descriptions of Coal Seams” in the *Keystone Coal Industry Manual* published annually from 1970 to 1981 by McGraw Hill.)

- 1946 (and Cady, G.H.) Stratigraphic position of the Shoal Creek and Carlinville Limestones in Southwestern Illinois [abs.]: *Geological Society of America Bulletin*, v. 57, no. 12, pt. 2, p. 1231.
- 1956 (with Lamar, J.E., and Armon, W.J.) Illinois oil shales: Illinois State Geological Survey Circular 208, 22 p.
- 1958 (with Marshall, C.E., Harrison, J.A., and Parker, M.A.) Petrographic and coking characteristics of coal: Laboratory study of Illinois coal seams Nos. 5 and 6: Illinois State Geological Survey Bulletin 84, 120 p.
- 1960 (with Kosanke, R.M., Wanless, H.R., and Willman, H.B.) Classification of the Pennsylvanian Strata of Illinois: Illinois State Geological Survey Report of Investigations 214, 84 p.

- 1961 Shipping Coal Mines Map of Illinois—1961: Illinois State Geological Survey Map Series.
- (with Potter, P.E.) Anvil Rock Sandstone and channel cutouts of Herrin (No. 6) Coal in west-central Illinois: Illinois State Geological Survey Circular 314, 12 p.
- (with Wier, C.E., Gray, H.H., Clegg, K.E., Doyle, F.L., and Willman, H.B.) Geologic map of the Indianapolis 1° × 2° Quadrangle, Indiana and Illinois, showing bedrock and unconsolidated deposits: Indiana Geological Survey.
- 1963 (and Smith, W.H.) Increasing the effectiveness of diamond drill core exploration for coal: 1962 Proceedings, Illinois Mining Institute, p. 83–97 (Illinois State Geological Survey Reprint Series 1963-E).
- 1964 (with Gluskoter, H.J.) Occurrence of sulfur in Illinois coals: Preprint American Chemical Society Division of Fuel Chemistry, v. 8, no. 3, p. 159–171.
- 1965 Illinois pioneers in coal geology research: Coal Mining and Processing, p. 31–35 (Illinois State Geological Survey Reprint Series 1975-M).
- 1966 (and Hopkins, M.E.) Sedimentary structures and morphology of Late Paleozoic sand bodies in southern Illinois: Illinois State Geological Survey Guidebook Series 7, 67 p. (Prepared for Semi-Centennial Meeting of the American Association of Petroleum Geologists Annual Meeting, St. Louis, Missouri).
- Shipping coal mines map of Illinois – 1966: Illinois State Geological Survey Map Series.
- 1967 (with Willman, H.B., Frye, J.C., Clegg, K.E., Swann, D.H., Atherton, E., Collinson, C., Lineback, J.A., and Buschbach, T.C.) Geologic map of Illinois. 1:500,000: Illinois State Geological Survey.
- 1968 (with Gluskoter, H.J.) Sulfur in Illinois coals: Illinois State Geological Survey Circular 432, 28 p.
- (with Willman, H.B., Lynch, B.M., and Langenheim, V.A.) Bibliography and Index of Illinois Geology through 1965: Illinois State Geological Survey Bulletin 92, 373 p.
- 1969 (and Smith, W.H.) An evaluation of Illinois coal reserve estimates: Proceedings of the Illinois Mining Institute, p. 57–68 (Illinois State Geological Survey Reprint Series 1969-E).
- 1970 Memorial to John Albert Harrison: Proceedings of the Geological Society of America for 1967, p. 215–217.
- (with Helfinstine, R.J., Shimp, N.F., and Hopkins, M.E.) Sulfur reduction of Illinois Coals—Washability tests: Illinois State Geological Survey Environmental Geology Notes 34, 12 p.
- 1972 (and Major R.L.) The impending energy crisis: A look at the coming decade, *in* Illinois Business Review, v. 29, no.6, June, p. 6–8.
- 1973 (and Hopkins, M.E.) Geology of coal, *in* Elements of Practical Coal Mining: Society of Mining Engineers of the American Institute of Mining, Metallurgical, and Petroleum Engineers, p. 11–39 (Illinois State Geological Survey Reprint Series 1973-H).
- 1974 Memorial to Gilbert Haven Cady: 1882–1970: Geological Society of America Memorials, v.3, p. 42–52.
- (with Hopkins, M.E.) Coal resources of Illinois: Illinois State Geological Survey Illinois Minerals Note 53, 24 p.
- (with Helfinstine, R.J., Shimp, N.F., Hopkins, M.E.) Sulfur reduction in Illinois coals—Washability studies: Illinois State Geological Survey Circular 484, 32 p.
- 1975 (with Willman, H.B., Atherton, A., Buschbach, T.C., Collinson, C., Frye, J.C., Hopkins, M.E., and Lineback, J.A.) Handbook of Illinois stratigraphy: Illinois State Geological Survey Bulletin 95, 261 p.
- 1976 (and Malhotra, R.) Place of coal in the total energy needs of the United States: Illinois State Geological Survey Illinois Minerals Note 63, 14 p.

- (with Malhotra) Illinois coal: Development potential: Illinois State Geological Survey Illinois Minerals Note 65, 20 p.
- 1977 Illinois' major fuel resource: Panel Chairman's Report to the Technical Committee of the Illinois Energy Commission, 166 p.
- Memorial to Hubert Elias Risser 1914–1974: Geological Society of America Memorials, v. 6, p. 1–4.
- 1978 The Impact of the Geosciences on Critical Energy Resources (Burk, C.A., and Drake, C.L., eds.): Coal: AAAS Selected Symposium 21, p. 49–59.
- 1979 (with Wood, G.H.) World coal to the year 2000 (1979 in press): Talk presented at the IX Congress of Carboniferous Stratigraphy and Geology.
- 1981 Relation of process mineralogy to energy issues, (Summary) *in* Process Mineralogy, AIME Conference Proceedings, p. 449–451.
- 1982 Illinois State Geological Survey—The next quarter century: Talk presented at the Illinois State Geological Survey 75th Anniversary Symposium, October 8, 1980: Illinois State Geological Survey Circular 515, p. 1–5.
- 1985 Memorial to George Miller Wilson, 1915–1983: Geological Society of America Memorials, v. 15, p. 1–3
- 1989 Memorial to Walter Henry Voskuil, 1892–1984: Geological Society of America Memorials, v. 19, p. 51–56.
- 1991 (and Atherton, E.) Memorial to Harold Bowen Willman, 1901–1984, Geological Society of America Memorials, v. 21, p. 57–64.

