

Memorial to Doris M. Curtis 1914–1991

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Early in the morning of Sunday, May 26, 1991, Doris M. Curtis gave up her valiant attempt to live—and to present her Presidential Address at the Annual Meeting of the Geological Society of America (October 1991) in San Diego, California.

Doris was the first woman president in the Society's 103-year history and was determined to be one of the very best presidents—if not *the* best. She planned to attend every GSA Section meeting, to personally contact their officers in order to discuss GSA's dynamic programs, and to make frequent trips to headquarters to sort, sift, revise, and fine-tune programs. She was deeply involved in these activities when, on March 12, she was diagnosed as having acute leukemia. In spite of this devastating news, and operating on frequent blood transfusions, Doris made trips to Baltimore, New York, Washington, D.C., Indianapolis, and San Francisco.



On April 4 (her doctors refused to let her make one more journey), she entered M. D. Anderson Hospital, Houston, Texas, to begin treatment. On April 13, she sent a lengthy upbeat letter to her friends and colleagues via SEPM (the Society for Sedimentary Geology, formerly Society of Economic Paleontologists and Mineralogists), describing in detail her condition and treatment. Her spirits were exceptionally high, her will was strong. "I feel just great!... I'll be outta here in several weeks more—middle of May is my guess," she wrote.

Doris Sarah Malkin was born and raised in the Bay Ridge area of Brooklyn, New York. Her father, Meyer Malkin, was a dentist; and her mother, Mary Berkowitz Malkin, was his secretary and clinical assistant. These fine, wise people set the examples early in Doris's life for her learning habits and pursuit of excellence.

From her elementary school days on, Doris was a joiner and participant. She dearly loved the Girl Scouts, of which she was an avid troop member and later an equally enthusiastic leader and counselor. The Scouts made a significant impression on her. This was obvious from the frequent references to her scouting days and the many tales she told, especially about summer camp.

Doris attended Erasmus Hall High School in the Flatbush area of Brooklyn, and by graduation, her interests were highly diverse. During her undergraduate years at Brooklyn College, she decided on her major field, geology. She received her B.A. from there in 1933 and entered the graduate program at Columbia University in New York. She received her M.A. in 1934 and stayed on for her Ph.D.

This is when and where I met my friend Doris. She had just survived her Ph.D. oral examination when I walked into Schermerhorn's hallowed halls. In not too many weeks, we were great pals, double dating, cutting Journal Club, and starting our weekends early. By 1938, when I left with M.A. in hand for Houston to seek a job, we were dearest friends.

In 1939, after Doris completed all required course work, examinations, and most of her field work for her Ph.D., she also went to Houston to seek her fortune in the petroleum industry. By then I had a good position, and after a few weeks Doris found employment with an independent. We started collaborating, applying our good geological training to Gulf Coast problems.

In 1941, Doris went to work as a paleontologist for Shell Oil Company in Houston, and I

moved to New York with my new husband. Doris and I continued our studies, and our collaboration was ongoing until she died (we were outlining our next big scoop at that time).

From 1942 to 1950, as exploration emphasis shifted, Shell Oil relocated Doris to offices in Baltimore, Tallahassee, and New Orleans as stratigrapher and geologist. During this phase of her career, she dusted off her thesis notes and finished her field work in Maryland, with her mother as field assistant. From then on, Doris assumed responsibility for her mother's care. "Momma Malkin," as we called her, lived with Doris or in an attached house or apartment until 1979 when nursing-home care was required. Columbia University awarded Doris her Ph.D. in 1949, and her dissertation was published in 1953.

In 1950 in New Orleans, the first phase of her Shell career ended when she married a Shell engineer from Houston. At that time, nepotism laws precluded her continuing in the company, and thus she moved into academia, joining the earth science faculty of the University of Houston.

Two years later, remarried to a geologist, she joined Scripps Institution of Oceanography, La Jolla, California, as associate research geologist to participate in the American Petroleum Institute Project 51. Her contribution to the project is a comprehensive study of the biofacies of Ostracoda assemblages of the northwest Gulf of Mexico shelf.

In 1954, when her work at Scripps was completed, she and her husband moved to Norman, Oklahoma, Doris to teach at the university and her husband to continue his research. From 1954 to 1959, as instructor, assistant professor, and associate professor (tenured), Doris taught sedimentary geology. Her courses were so popular that enrollment had to be restricted. Her infectious enthusiasm and wide-ranging grasp of the earth sciences inspired many of her students to pursue professional careers.

After five years of teaching and another divorce, Doris returned to her first love, the petroleum industry. She was assigned to a special studies group at Shell's Baton Rouge Exploration office. In 1960, this group was relocated to New Orleans, where Doris initiated regional studies of time-synchronous sandstone deltas in the petroleum-rich Miocene of coastal Louisiana. In 1970, a synthesis of this seminal research was published in SEPM Special Publication No. 15.

In 1975, Shell transferred Doris to Houston, her original petroleum turf, as staff geologist in their International Venture Group. Later, she moved to a research assignment at Shell Development Company. Doris retired from this position in 1979, and she and I formed a geology consulting partnership. When she died, Doris was engaged in this partnership, Curtis and Echols, and was also an active adjunct professor of geology at Rice University.

Doris wrote more than 30 papers published in professional journals, on paleoecology, biostratigraphy, ostracods, transgressive-regressive sedimentation, deltas, and the source and migration of hydrocarbons in the Cenozoic of the Gulf of Mexico basin. She took a very active part in all professional organizations of which she was a member and strove to improve public understanding of the petroleum industry.

Doris's outstanding achievements in her service to scientific and professional organizations earned her many honors. She was a member of Sigma XI, the Gulf Coast Section of SEPM (and an honorary member of SEPM), the American Association of Petroleum Geologists (AAPG), the Houston Geological Society, the American Institute of Professional Geologists (AIPG), and the 28th International Geological Congress. She was named distinguished professional by the Houston Federation of Professional Women; received the Matrix Award in Houston for Women in Community Service; and earned the distinguished alumna, Brooklyn College, CUNY Award. She is listed in *American Men and Women of Science* and *Who's Who in America*.

An achievement of which Doris was especially proud was her participation as shipboard sedimentologist on two legs of the Deep Sea Drilling Project on the *Glomar Challenger* (Leg 58, Yokohama, Japan, to Okinawa, Japan, December–January 1977–1978; Leg 82, Ponta Delgada, Azores, to Balboa, Panama, September–November 1981).

From Girl Scout counselor to president of the GSA, Doris's life exemplified her immense personal satisfaction and triumphs at working within and generally emerging as leader of diverse groups. Her enthusiasm and leadership skills ensured her prominence in any gathering she joined. She was a Fellow of the American Association for the Advancement of Science (AAAS) and chairman of Section E, Geology and Geography (1979–1980); in the American Association of Petroleum Geologists (AAPG), she was the first woman Distinguished Lecturer (1983–1984), a member of the advisory board for the *Treatise on Petroleum Geology* (1986–), and a member of the House of Delegates (1987–1991); for the American Geological Institute (AGI), she was on the board of governors (1977–1980) and served as president (1980–1981); in the American Institute of Professional Geologists (AIPG), she was on the executive committee (1980–1982), chairman of the Committee on Professional Development (1985–1987), and chairman of the Committee on Membership Services (1989–1991); she was a member of the Association of Geologists for International Development (AGID); she was a Fellow of the Geological Society of America (GSA), a member of several committees, general co-chairman and treasurer for the 1967 GSA Annual Meeting in New Orleans; a councilor (1983–1985), vice-president (1990), and president (1991). Doris was also a member of the International Association of Sedimentologists; in the International Union of Geological Sciences, she was secretary-treasurer of the Committee on Sedimentology (ad hoc, 1980–1985); she was on the Scientific Committee of the International Geological Correlation Programme of the International Union of Geological Sciences and UNESCO (1980–1985); for the National Academy of Sciences, she was a member of the U.S. National Committee on Geology (1979–1982) and chairman (1981–1982); a member of the U.S. National Committee for the International Geological Correlation Program (1983–1985), the Committee on Global and International Geology, the Board on Earth Sciences (1982–1985), the Committee on Undiscovered Oil and Gas Resources, Board on Earth Sciences and Resources (1988–1990); in SEPM, she was a member and chairman of numerous committees, secretary-treasurer (1964–1966), president (1978–1979), and president of the SEPM Foundation (1989–1991).

While working in Oklahoma, Doris became active in the League of Women Voters and served as president of that chapter. She continued working in this organization, in both New Orleans and Houston. As a member of the Environmental Quality Committee, she presented facts about industry's role in conservation and its contribution to pollution control. Her achievements with that committee and her professional reputation led to her appointment in 1967 as one of four U.S. delegates on an exchange visit to the USSR.

An intrepid leader even in a rearguard fight against cancer, Doris, from her command post in the chemotherapy sealed chamber, asked that all phone calls be held unless, she joked, someone "wants me to run for president of the U.S."

Although Doris had no children, she loved and adopted her friends' offspring. She could not have been more interested in their achievements, education, love affairs, and growing pains if they had been her own. Her nieces and my children and grandchildren were her "kids." Not only was she interested in their welfare but, as was her wont, she became involved with their lives.

In Houston on the 30th of June 1991, Roberto Alanez and his wife, Monica Vaughan, opened their home and hearts and helped us celebrate Doris's life. It was a wonderful party; Doris would have loved it. People came from far and wide. Those who were unable to attend, and almost all who did come, wrote notes—special tributes and fond memories of their association and friendship with Doris. So it seems fitting to me to sum up a remarkable lady's life with a few letters and excerpts from some of these remembrances. I can think of no higher tribute for a life well spent than to have your friends say such wonderful, poignant, meaningful things about you.

Those of us who knew Doris will recognize her in the following insightful poem written by Monica, Roberto's wife, after what she calls the most magical moment, when she met Doris Curtis.

Doris Curtis

I walked in, nervous
to meet new people
at a business party:

out of place,
I feared, among the hired
and acknowledged.

Among the stuffy surface
talk

I might seem silly
and peculiar...

among the men
(my partner an exception).

"Did you see the moon last night?"
she asked.

My shoulders melted.

From deep behind my head
I drew a smile across my face
as introduction to this seated
beaming woman.

"Doris Curtis"
my partner said,

his voice in awe,
inspired by years of admiration for
her work, her strength, her witty age,
her partnership with Dorothy Echols.

All these combined to form
a circle of respect inside his breath
now whispered as her name to me.

"Oh yes! Most full!"
I touched her knee
as bold in spirit I became.

"I saw it skinny-dipping
in my pool," reflected she,
"a perfect place to be!"

I fell in love...

with courage, directness:
her shared reality.






Some Remembrances

"Doris Curtis and I were friends and geological peers for more than 50 years. She was not only a professional woman, she was also a classic lady, and an eminent geologist. She was mostly gentle and kind but she could be tough as nails when necessary. She was witty, with a great sense of humor, sociable, intellectually stimulating, and just plain fun to be around. One of my fondest recollections is that of five-foot Doris on a drilling rig in south Louisiana 'straightening out' a burly, 6.5-foot-tall roughneck regarding the fine art of collecting samples.


"Through the diligent and thoughtful applications of her knowledge of fundamental geological principles, Doris pioneered new concepts and understandings about local and regional interrelationships of paleontology, stratigraphy, and eustasy, especially in the Gulf Coastal province of the U.S. and Mexico. Her work provided me and others many stimulating ideas in these regards. Doris's career epitomizes my idea of a professional geologist. She displayed keen interest in academia, including research, teaching, and the contribution of knowledge to the profession; she was significantly involved in industrial exploration and development of oil and gas resources; and she gave generously of her time and abilities to her profession, as well as to public activities and causes. Her great wisdom and good counsel in many matters were of inestimable value to me and to the profession. She shall stand forever as an exceptional role model, and she will always be one of my heroines in geology.

"Election by her peers as the first woman president of SEPM, the SEPM Foundation, AGI, and GSA provides ample testimony that she was eminently successful. Geology and geologists have benefited measurably for her having been here. Indeed, she was a very special colleague! I admire her! I respect her! I salute her! I shall miss her!"



"... I have many fond thoughts about Doris, both as a knowledgeable professional colleague and as a warm, friendly, cheerful, and helpful person. I am sure there are many other splendid activities in which Doris was closely involved; however, I knew her as a person dedicated to promoting the geological sciences. In particular, she had the nicest way of aiding and encouraging her many geological friends.... Doris worked hard to make geology more easily understood by those who were affected by geology, especially those in public office and decision-making positions, but who were themselves not necessarily geologists.

"Everyone who knew her was impressed by her great energy and quiet, effective enthusiasm.... I had the feeling that Doris possessed an inner desire to be busy with the people in her profession and to be deeply involved in the activities of that profession. She had the interest and foresight to become a major contributor in terms of her time and energies in the operations and business side of many geological organizations. At one time or another, she served most of them in important offices, helping to guide them with her kind touch and full, thoughtful attention. For all of the honors and many recognitions bestowed upon her, Doris remained firmly down to earth, and a very practical, very approachable, considerate person who listened well and spoke wisely. In ever so many ways, Doris was a leader, a pioneer, and, perhaps more importantly, a role model and support person for young people coming into geology. In a field that was dominated by men when she first entered the geological profession, she saw and encouraged many of the changes that have taken place in old stereotype attitudes. She set a fine example herself."



“Doris Curtis was a remarkable lady, with many talents and many accomplishments. In her profession as a petroleum geologist, she was the noted authority in Gulf Coast biostratigraphy. She had the ability to analyze faunal and facies data from existing well samples and interpreting these data for us to use in oil and gas exploration. Doris was a helpful counselor for scientists involved in exploration investigations. She was a good listener and a good advisor. Her business expertise and executive skills were used to manage scientific organizations like SEPM and GSA. Doris had a knack for inspiring staff and volunteers to do their best.

“Doris was an outstanding lecturer. She had a talent for weaving science and art into communication that was meaningful, comprehensible, and effective. What fun to be with Doris on social occasions. At any function—professional dinners—student organizations—committee meetings—picnics—field trips—she would enrich the occasion with her wit, her widespread knowledge, her genuine interest in any subject.

“We are thankful to Doris for the scientific treasures she uncovered, the geologic paths she cultivated and nurtured, the sense of order and rightness she established in our organizations, and for being such a dear friend.”



“Doris has been my friend, confidant, mentor, colleague, and so many more roles for over 40 years. When I moved to Houston (at the ripe old age of 19) with a B.S. in geology, I had never met or seen a female petroleum geologist. Enter Doris, who was not only an active member of the profession, but already highly respected. She encouraged and guided me—not in a didactic, know-it-all way, but with a smile, a lot of warmth, and an ‘of-course-you-can-do-it’ way. Doris maintained a joie de vivre, youth, vigor, energy, and a genuine interest in others long after most people start to focus on the SELF and only that. My daughter, who was almost 50 years her junior, established a warm kinship with Doris; she adored and admired her. Her departure leaves a huge gaping abyss in my life. But her fortitude and courage, coupled with a natural modesty, will always inspire me.”



“...When I think back on all the significant contributions Doris made to the profession, I am always impressed by what she accomplished. By her native ability and skillful use of her abundant knowledge, she did much to not only advance paleontology, but to increase the stature of the various geologic societies of which she served as an important officer.... She has taken her place along side those great American geologists who by their leadership brought the profession to its present status.”



“My association with Doris spanned several decades of serving in various capacities with SEPM. Over those years of seemingly endless committee and council meetings, I always was impressed by her enthusiasm. She seemed to me to be operating at full throttle in everything she undertook. No doubt this energy and commitment contributed to the success she achieved. Doris and I did not always agree, although I do not recall ever having a quarrel with her. She had firm convictions and did not hesitate to articulate them. However, she was able to alter her course in the face of a convincing argument without rancor. I never experienced any activity on her part that was self-serving.... Although her exact words escape me, she in essence lectured those of us on the [SEPM] council to stick to matters of substance and not to play word games. We will miss her counsel in the future, but we are the better for having had it for so long.”



"Her memory will be there for us all always, a special bright light of energy and cheerful smiles, no matter the challenge. We ... are grateful that she touched our lives scientifically and was a close friend as well. We will miss her."



"She had such a strong, enduring spirit of hope in life and faith in people. She had a way of analyzing situations and clarifying them so that new solutions could be found.... She always had something good to say about everyone."



"As president of GSA, what a pity she couldn't have experienced the full term of office. And what a pity GSA has lost what would have been her mark on the office, [an office that] she so well deserved."



"Dear Doris, ... I am not ready for you to be gone from my life. I want a few more wonderful drives to Laramie, Wyoming, with you ... talking for hours about our careers, our loves, our failures, and our successes. What rich moments those were ... you with 25 years of experience ahead of me, but sharing like we were college coeds! That experience led to many more, lunches in Houston, dinner in Calgary, picnics in Denver. Your youthful spirit had us intoxicated with the idea that maybe we won't have to grow old, maybe we can live forever, maybe we won't die. Now, we have to face the truth ... we don't have forever ... we will die someday, too. But until then ... I'll miss you. I'll frequently think of things you would have enjoyed sharing ... jokes you would have laughed at, injustices you would have also been outraged at, love you would have cheered for.... Goodbye, Doris."



In August 1991, the GSA staff honored Doris's memory by planting a Colorado blue spruce at headquarters. Her ashes are interred beneath its branches. "The roots of the tree go deep into the earth, as did Doris's interests. Its trunk is strong and straight, and down to earth, as was Doris. Its branches spread out in all directions and will continue to grow—as will Doris's influence on all whom she touched.... We all share a sense of enrichment in having known Doris Curtis." GSA Past-President Raymond A. Price spoke those words at the Presidential Tribute to Doris at the 1991 GSA Annual Meeting, San Diego, California. It was a beautiful ceremony, upbeat, sincere, and so appropriate for Doris. It brought tears and smiles to all of us. She would have been pleased, and she would have loved the music.

On March 20, 1992, the Department of Geology and Geophysics of Rice University presented a symposium on the "Evolution of the Gulf of Mexico Basin" in memory of Doris. This half-day session was an outstanding lecture series by Theresa F. Schwarzer, Albert W. Bally, James Lee Wilson, and John B. Anderson. To a packed hall of enthusiastic geologists, John concluded the tribute by announcing that the name "Curtis" would grace Rice's recently discovered submarine sand bank in the Gulf of Mexico. Curtis Bank lies off the coast of Texas beside Shepard Bank. Doris would be tickled.

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