

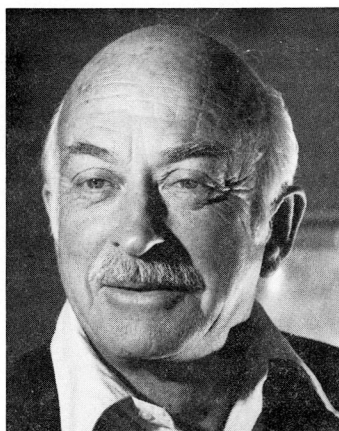
Memorial to Charles M. Gilbert

1910–1988

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Charles M. Gilbert, a Fellow of the Geological Society of America, died on February 26, 1988, at the age of 77. Charles, known by his colleagues as Gil, was born on May 22, 1910, in Washington, D.C. His father was employed at the Carnegie Institution of Washington, and Gil was exposed at an early age to scientists. He frequently attended lectures at the National Geographic Society, which whetted his interest in science. He was influenced by Elias Lowe, from Oxford University, to attend Deep Springs College, in the Basin and Range terrain of southeastern California. He went to Cornell University in his junior year and received his A.B. degree in 1933.



Gil went to the University of California at Berkeley for graduate work and received his Ph.D. in 1938. His dissertation was “The Cenozoic Geology of the Region Southeast of Mono Lake,” supervised by C. D. Hulin. Gil had been an outdoors boy, and he developed an everlasting love of field geology and the area of Mono Lake.

Gil was appointed instructor in the Department of Geology at the University of California in 1938; he was made assistant professor in 1942. During World War II he was employed as a geologist by the U.S. Geological Survey, working in the Globe-Miami district of Arizona. He returned to the University of California in 1946 and was advanced to associate professor in 1948. In 1951 and 1952 he worked as a field geologist with R. P. Epis and R. L. Langenheim, Jr., for the Shell Oil Company in southeast Arizona and southwest New Mexico. In 1954 he was made full professor and he received a Guggenheim Fellowship for geological studies in the Appenines and in Britain.

At Berkeley, Gil developed a deep and abiding interest in sedimentary petrology. His publication with the most lasting impact in this field was the sedimentary petrography part of the Williams-Turner-Gilbert textbook *Petrography*, published in 1954. This popular book remained in print until 1982, when a revised edition was published. Both versions were translated into Russian.

Gil’s real geologic love was the area around Mono Lake, and it was here that most of his research was based. His description and analysis of the Bishop Tuff, a part of his dissertation, was a landmark paper at this early stage in the study of ignimbrites. He showed how characteristic features of the Bishop Tuff were imposed by its mode of origin, great volume, high temperature, and slow cooling, and by the gases that rose through it after emplacement. A later study, with M. N. Christensen, K. R. Lajoie, and Y. Al-Rawi, on the geologic history of the Mono Basin, showed that it is of structural origin, rather than a volcano-tectonic depression as had been suggested by some others. This study was supported by 68 K-Ar dates, which provided a basis for determining ages and rates of deformation. Gil and Mark Christensen recognized that Black Top Volcano, of late Pleistocene age, had been erupted beneath Lake Russell, the deep-water pluvial lake in the Mono Basin. They suggested this flat-topped subaqueous volcano as a possible analogue for the origin of deep-sea flat-topped sea mounts, or guyots. Gil’s final study of his

favorite area, with Mitch Reynolds, was north of Mono Lake and documented the development of Basin and Range structure over the past 22 m.y.

Gil was one of the rare professors who enjoyed teaching undergraduate courses. His were carefully organized and effectively presented. He was a thoughtful person with much common sense, and he was a pillar of strength in the geology department and in the university. He was a member, and often chairman, of innumerable committees. He served as chairman of the department from 1958 to 1963, a demanding period during which the department grew, and moved from Bacon Hall into the newly built Earth Sciences building.

He retired in 1977 but continued geological field work for several years. His last work, with Gail Mahood and Ian Carmichael, was on volcanic rocks of the Guadalajara area in Mexico. He was a good golfer and reached that goal of many golfers—to shoot his own age—a few years before his death.

Gil was a gentle, modest, and courtly person who was loved by many and respected by all. He is survived by his wife Lora, whom he married in 1964; by Jane, David, Douglas, and Stephen, his children from an earlier marriage; and by 14 grandchildren.

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