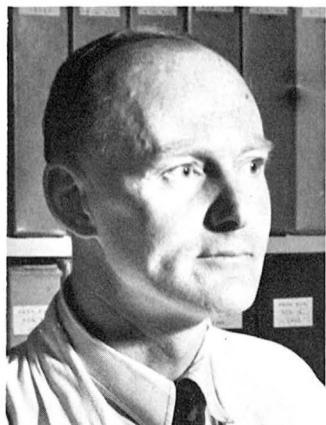


Memorial to Colin Osborne Hutton 1910—1971

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Colin Osborne Hutton, professor of mineralogy at Stanford University for 24 years, died on December 13, 1971, after an illness of eight months.

Dr. Hutton was born on January 10, 1910, in Dunedin, New Zealand, the son of John Forfar Hutton and Janet Alexander Holms Hutton, both early settlers of Maple Bush Estate at Fortrose in the Southland region of New Zealand. He showed his scientific bent when, at the age of eight, he built a two-way crystal radio set and at times was able to get stations as far away as the West Coast of the United States. He attended school in Dunedin, where he graduated from John McGlashan College in 1929. He was awarded both the Senior Science Prize and the Senior Athletic Cup for his ability in the decathlon. In 1933 he obtained his B.S. degree in chemistry and geology at the University of Otago, graduating as Senior Scholar in both fields. He continued his studies and in 1934 was awarded the M.S. degree in chemistry and geology. Again he was Senior Scholar in geology. Also in 1934 he was awarded the Duffus Lubecki Scholarship in Applied Science by the University of Otago and the Sir Julian von Haast Prize by the University of New Zealand.

From 1934 to 1936, Dr. Hutton was acting lecturer at the University of Otago and in 1936 he was awarded the first Shirtcliffe Fellowship by the University of New Zealand. This fellowship, for a two-year period, enabled him to attend Cambridge University, England, where he received a two-year External Research Studentship. While at Cambridge he was privileged to work with several eminent faculty members, notably Professor C. E. Tilley. In 1937 he was the recipient of the Hamilton Prize, awarded by the Royal Society of New Zealand. In 1938 he gained the Ph.D. degree in mineralogy and petrology at Cambridge. His thesis, entitled "Metamorphism in the Lake Wakatipu Region, Western Otago, New Zealand," is a superb example of geologic research. It was published as Memoir No. 5 by the Department of Scientific and Industrial Research of New Zealand.

From 1938 through 1946, Dr. Hutton served as chief mineralogist and petrologist of the New Zealand Geological Survey. From 1942 to 1946 he was officer-in-charge of radioactive mineral research. He was also officer-in-charge of the scientific personnel aboard the *New Golden Hind* on cruises of geologic exploration. In 1942 he was one of the founders of the New Zealand Association of Science, which later made him an honorary member.

From 1943 to 1946, Dr. Hutton was honorary lecturer in mineralogy and petrology at the University of Victoria, in Wellington, New Zealand. During the same period he

was a member of the Council of the Wellington Branch, Royal Society of New Zealand. From 1942 to 1946 he was associate editor of the *Transactions of the Royal Society of New Zealand*. In 1946–1947 he was senior lecturer in geology and mineralogy at the University of Otago, and from 1943 to 1947 he served as broadcaster for scientific subjects in the New Zealand Broadcasting Corporation. He also served as secretary of the University of Otago Staff Common Room and in 1947 was elected to membership on the Executive Council of the Royal Society of New Zealand.

Dr. Hutton met his wife Mary (May) Piggot while working on geological studies at Queenstown. They were married in Dunedin in 1940. Colin and May were devoted to one another and shared a great many interests in common, including a delight in travel. They had no children. Mrs. Hutton lives in Portola Valley, California. In addition to his wife, Dr. Hutton is survived by a sister Tui, Mrs. John Todd, a talented teacher in sole charge of the Roslyn School of Music in Dunedin, New Zealand.

In 1947 Dr. Hutton came to Stanford University as associate professor of mineralogy, and in 1948 was made professor, a position he held until his death. At Stanford, Dr. Hutton was widely recognized as an outstanding and dedicated teacher whose standards were unalterably high. He firmly believed that students should devote their time to study and that the primary function of the faculty was to teach. To this rule he strictly adhered. His laboratories were always available to interested students and he would gladly devote any amount of time to help a sincere student. His one rule, strictly enforced, was that laboratories be left clean and neat. His lectures were superbly organized and he was widely recognized as a rigorous, exacting, and always fair teacher. Students who were privileged to take his courses had to work long and hard, but they agree without exception that they learned their mineralogy and optics.

Dr. Hutton was always ready to serve others. From 1953 until his death he acted as external examiner of D.Sc. theses at the University of New Zealand. He also served, from 1957 on, as a judge of the mineral displays at the annual California State Fair.

The mineral collections at Stanford were Dr. Hutton's pride. During and after his days at Cambridge he took many trips through Europe, where he made extensive mineral collections from the classic localities. This material was later added to the Stanford collections, thus greatly increasing their value and completeness.

Dr. Hutton's scientific reputation is international. His work tended toward the determination of precise constants and chemistry of both synthetic and natural crystalline substances. During the Second World War many of his efforts were concentrated on the study of uranium and its alteration products. After coming to Stanford his interests gradually changed to the mineralogy of beach sands, and in 1961 he started a detailed study of the mineralogy of the volcanic products in the West Indies; this study he continued for the rest of his life. His main interest was directed toward the mineralogy of the island of Nevis, though he visited most of the other islands in the Caribbean. At the time of his death he had nearly completed an exhaustive study of the volcanic products of Nevis, a project that had been supported by three National Science Foundation research grants.

In 1953–1954 Dr. Hutton was the recipient of a John Simon Guggenheim Fellow-

ship which he used to finance a trip around the world. On this trip he visited universities and talked with mineralogists everywhere. He also took the opportunity to add to the mineral collections.

Outside of his professional field Dr. Hutton was a man of remarkably broad interests. He enjoyed the mountains and during the early years of his life tramped over most of the mountains of New Zealand. In later years he visited northern Malaya and southern Thailand and he explored the mountains of the Leeward Islands and those of surrounding islands. He loved flowers and spent many enjoyable hours in his truly lovely garden; his great interest was landscape gardening. He and his wife both enjoyed the study of music, especially that of the 17th and 18th centuries. Also Dr. Hutton became fascinated early in his life by the life and history of the Polynesians, especially those of New Zealand, the Chatham Islands, the eastern part of the Fiji Islands, and the Cook Islands. His knowledge in these fields was little short of authoritative.

Dr. Hutton was a Fellow of The Geological Society of America and was also affiliated with the Royal Society of New Zealand, the Geological Society of London, the Mineralogical Society of America, the California Academy of Sciences, the Cambridge Natural History Society, the Mineralogical Society of Great Britain, the Mineralogical Society of Canada, and the Mineralogical Society of Japan. Among his many honors was the conferral of the Sc.D. degree in 1952 by Cambridge University. This, the highest degree awarded at Cambridge, was a well-earned reward which is given only for truly outstanding work.

In addition to his academic duties, Dr. Hutton gained recognition in both industry and government. He was a long-time consultant to the United States Atomic Energy Commission and to many corporations. He was careful, though, never to let outside work interfere with his teaching or his basic research.

Those of us who were privileged to work with Dr. Hutton, and those who studied under him, cannot help but feel that his going leaves a void that will not be filled. We shall especially miss his quiet assurance, his clear thinking and willingness to help, and his truly superb teaching.

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