

OBITUARY



SIGURDUR THORARINSSON—1912–1983

The Grand Old Man of geoscience in Iceland, Sigurdur Thorarinsson, died in Reykjavik on 8 February 1983, at the age of 71. He was an Honorary Member of the International Glaciological Society and Iceland's internationally best-known geoscientist.

Sigurdur Thorarinsson played an important role in research and education in Iceland for many years and obtained international renown for his contributions to glaciology, geomorphology, volcanology, and tephrochronology. For fifty years he described the nature of Iceland and its continuous changes, documented volcanic activities, glacier variations, jökulhlaups, and earthquakes, dug out concealed data from past centuries and re-evaluated historical documents, reported on the continuous struggle of the Icelandic nation against the powers of Nature. He educated and entertained his colleagues, students, and the public with everlasting enthusiasm, assisted foreign visitors with devotion, and spread knowledge about Iceland in much praised lectures all over the world.

Sigurdur obtained his early scientific training in Stockholm in the 1930s where he became inspired by the internationally famous scientists Gerard De Geer, Lennard von Post, and Hans W:son Ahlmann. His first studies in glaciology were made in Swedish Lapland in the summer of 1933 and on Skeiðarársandur in Iceland after the jökulhlaup and the Grimsvötn eruption in 1934. In 1936–38 he worked with Hans W:son Ahlmann, the Icelandic meteorologist Jon Eythorsson, and Carl M:son Mannerfelt in the Swedish–Icelandic Vatnajökull expedition, in which they mapped the accumulation, the ablation, and the position of the firn line on Vatnajökull. The Grimsvötn tephra layer from 1934 formed a unique reference level in the pit and core studies. In 1939, Sigurdur obtained his fil. lic. for his studies on the movement and drainage of Hoffellsjökull and the ice-dammed lakes in Iceland with particular reference to their value as indicators of glacier oscillations. In 1940 he published a comprehensive review on present glacier shrinkage and eustatic changes of sea-level and in 1943 he added his paper on the oscillations of the Iceland glaciers in the last 250 years. He wrote about fifty papers on glaciology, mainly on jökulhlaups,

glacier variations, surges, and reports on expeditions to Vatnajökull. In 1974, 40 years after his first studies of Skeiðarársandur, he published a book on the history of jökulhlaups and volcanic eruptions from Grimsvötn. From 1957 he was one of the editors of *Jökull* and was Chairman of the Iceland Glaciological Society from 1969, after the death of Jon Eythorsson. Sigurdur was elected an Honorary Member of the International Glaciological Society in 1973.

Volcanology was Sigurdur's other main field of research, often combined with glacier–volcano interaction. He was blessed with more volcanic eruptions than any other Icelandic geologist and actively studied all of them: Hekla 1947–48, 1970, 1980, 1981; Askja 1961; Surtsey 1963–67; Heimaey 1973, and the Krafla activities since 1975. Furthermore, he developed tephrochronology to be a powerful tool which he successfully used in studies of the eruption history of various volcanoes, archaeology, changes in vegetation cover, studies of soil erosion, periglacial phenomena, and glacier fluctuations. He first applied this dating technique in studies of Icelandic bogs in 1934 and in the co-Nordic archaeological investigations in Thjórsárdalur in 1939. In 1944 he obtained his fil. dr. from the University of Stockholm for his classical work “Tephrochronological studies in Iceland: Thjórsárdalur and its destruction”. In 1949 he published the paper “Some tephrochronological contributions to the volcanology and glaciology of Iceland” (*Geografiska Annaler*, Årg. 31, Ht. 1–4, 1949, p. 239–56). Now, after almost fifty years of tephrochronological research he had recorded in detail the history of eruptions in Grimsvötn, Katla, and Óraefajökull in historical times and in Hekla for the last 6 000 years.

But this is far from being a complete description of Sigurdur's contribution to science. Altogether he wrote more than 200 scientific papers, including important papers on physical geography and geomorphology, periglacial phenomena, plant-bearing interglacial sediments, earthquakes, and geological problems in connection with the development of hydroelectric power, as well as on the population changes in Iceland since the time of settlement. He was a pioneer in nature conservation in Iceland, debated day-by-day issues in the newspapers (such as whether the City Hall and a jet fountain should be placed in the lake in the Reykjavik city centre), and attacked the various superstitions which continuously seem to break out among his fellow countrymen. He wrote a great number of literary reviews and even assessed the artistic value of Icelandic films. He translated Bellman's songs and “epistles” and wrote songs which reached the “top ten” on the Reykjavik radio.

Sigurdur was a keen researcher of Nature and endowed with a rare intuition of her processes. He contributed basic information on many topics in geoscience upon which future work has to be built. His main contributions are classical, his output of work astonishing, and his versatility and artistic abilities those of a genius.

Sigurdur settled in Iceland in 1945 at the end of the Second World War and worked for two years as a geologist for the National Research Council and the Institute of Industrial Research. In 1947 he became the head of the Geography and Geology Department of the Museum of Natural History. He held this post until 1969 when he became Professor of Geography and Geology in the University of Iceland when a Chair in geosciences was established in the Department of Engineering and Science. Further, he was elected the first head of the Geoscience Section of the Science Institute of the University of Iceland.

Several organizations, societies, and committees benefited from Sigurdur's capabilities. He was Chairman of the Iceland Science Fund from 1958 to 1978, first Chairman of the Geoscience Society of Iceland 1966–68, on the Board of the Iceland Tourist Society 1957–77, President of the Icelandic Natural History Society 1950–51, and editor of *Náttúrufræðingurinn* 1950, 1952–55. He had been on the Board of the Nordic Council's Advisory Commission for Science since 1972, on the Board of the Nordic House in Reykjavik since 1970, on the Board of the Icelandic Council of Nature Conservation since 1956. He had organized and guided the annual Nordic Geology Excursions to Iceland since 1964, and had been on the Board of the Nordic Volcanological Institute in Iceland since its foundation in 1974.

Sigurdur was elected a Fellow of the Icelandic Science Society in 1946, the Geological Society of London in 1954, Det Kongelige Danske Videnskabernes Selskab in 1957, Deutsche Akademie der Naturforscher Leopoldina 1961, Kungliga Vitterhetssamhället in Göteborg 1968, Kungliga Fysiografiska Sällskapet in Lund 1969, Det Norske Videnskaps Akademi in Oslo 1971, Kungliga Vetenskapsakademien in Stockholm 1971, Suomalainen tiedeakademia in Helsinki 1975, the Explorers' Club in New York 1978. He was elected Honorary member of the Iceland Student Organization in Stockholm in 1951, Det Norske Geografiske Selskap 1961, Sydsvenska Geografiska Sällskapet 1967, Geological Society of America 1973, International Glaciological Society 1973, Iceland Tourist Society 1977.

He was awarded a Doctorate honoris causa by the University of Iceland in 1961, received the

Spendiaroff Prize during the 21st International Geological Congress in 1960, the Black Prize of the Royal Geographical Society in 1967, the Vega Medal in 1970, the Asa Wright Prize in 1970, and the Vitus Bering Prize in 1976.

Sigurdur Thorarinsson was a man of gentle presence, witty and playful, boyish, even shy, and appeared to be unaware of his eminence. He worked very hard; he never retired. Throughout his whole life, he was fortunate to keep his scientific curiosity, his tremendous vitality, and his sublime imagination. He was an artist at heart, both as a scientist and a poet. He enriched and inspired the lives of his colleagues and friends. They mourn him and miss his advice, imagination, charm, and humanity.

HELGI BJÖRNSSON