

## Christian Sucksdorff

\* 8/2/1928 + 23/10/2016

**PROFESSOR CHRISTIAN SUCKSDORFF**, Department Head of the Finnish Meteorological Institute and a member of the Finnish Academy of Science and Letters, died on 23rd October 2016. He was born in Sodankylä on 8th February 1928 and received his schooling at the Finnish Coeducational School in Helsinki, from which he matriculated in 1947. He graduated from the University of Helsinki with a degree of Candidate in Philosophy (main subject: physics) in 1956 and completed his doctoral thesis in geophysics in 1968.

His choice of career as a research scientist was influenced to a very great extent by his father Eyvind Sucksdorff (1899-1955), who was head of the geophysical observatory run by the Finnish Academy of Science and Letters at Sodankylä during the period 1927–1945, before taking up a post as a geophysicist at the Finnish Meteorological Institute with responsibility for geomagnetic measurements and mapping. Work in this field has been initiated as early as the 1910s by the legendary director of the Finnish Meteorological Institute, Jaakko Keränen (1833-1979). Eyvind Sucksdorff in turn trained his son Christian, so that he gained his initial knowledge of geomagnetism, scientific methods and measurement techniques from his father.

The study of geomagnetism involves the making of precise and highly demanding measurements and the recording of magnetic events in an observatory in order to monitor temporal variations in the Earth's magnetic field. The Finnish Meteorological Institute has been making observations in this highly specialized branch of science ever since its foundation in 1838.

Christian Sucksdorff began his career of more than 40 years at the Finnish Meteorological Institute in 1948, and when Eyvind Ducksdorff died suddenly in 1955 all the work and duties associated with geomagnetism were left to him. His principal tasks were to develop the geophysical observatory at Nurmijärvi and to take responsibility for magnetic field measurements throughout the country.

New duties were nevertheless imposed on the Finnish geophysical community by the International Geophysical Year of 1957–1958, including soundings of the ionosphere and seismic recordings, all to be carried out at the Nurmijärvi Observatory, and Christian Sucksdorff had an important part to play in these. It was also during the Geophysical Year that the Finnish Meteorological Institute began photographing the northern lights in Lapland with a movie camera as part of the work of the international scientific community. Sucksdorff had already had something to do with the northern lights at his childhood home in Sodankylä, as his father had begun photographing these phenomena with an ordinary black-and-white camera, but he now set about developing cameras suitable for this purpose on the basis of those available commercially. This work was continued, and studies on northern lights remain an important part of the Meteorological Institute's space research. Quality was the top priority in this work of developing new types of camera, and it could well be said that it was with this experience in mind that the Finnish Meteorological Institute set out on its later contribution to space research in the 1980s. A number of doctoral theses have been produced on the material acquired with such cameras, and they remain important as sources of data in this field even today.

Sucksdorff was closely involved in international collaboration from the very beginning of his career, because there were not very many people in Finland working in the fields that he represented, so that inspiration had to be sought from the major centres for research in these fields, such as those in the USA. One notable scientific community was the International Association of Geomagnetism and Aeronomy (IA-GA), which held meetings in different parts of the world at two-year intervals, and Sucksdorff took part in all of these meetings from the 1950s onwards. In this way he earned the respect of scientists in this field and was appointed an honorary member of the organization in 1993.

The geomagnetism group within the Finnish Meteorological Institute was still very small in the 1950s, only a few people in addition to Sucksdorff, but it gradually grew into a Magnetism Department (in 1970) and a Department of Geophysics (in 1985). Eventually Sucksdorff emerged as Department Head of the Finnish Meteorological Institute with the title of professor. By that time staff numbers were approaching 30. The traditions that guide the institute's space research nowadays are still those that derive from the units that Christian Sucksdorff ran in his time. Sucksdorff himself retired in 1991.

Sucksdorff took an active part in the work of various Finnish scientific organizations. He was twice chairman of the Geophysical Society of Finland and was chairman of the Finnish national committee within the International Union of Geodesy and Geophysics (IUGG) from the 1960s until the early 1990s. This latter committee was responsible for coordinating international collaboration in the subjects concerned. He was also a member of the Finnish Academy of Science and Letters (as of 1976) and the Finnish Society of Sciences and Letters (as of 1986).

Sucksdorff supervised a number of doctoral thesis and other academic dissertations in the field of geomagnetism and was a docent in geophysics at the University of Helsinki. He also published several dozen papers in scientific journals, mainly on geomagnetic measurement techniques and the processing of the resulting data. Perhaps the most lasting of his works, however, will prove to be the handbook and guide to the performing of measurements in geomagnetic observatories and under field conditions that he wrote together with a Polish colleague, which is still widely used as a basic work on this topic.

Christian Sucksdorff was a reserved, warmly polite man with a strong sense of duty. As a broadly educated natural scientist he was an inspiring conversationalist and debater. Although a precise and well disciplined person, he was able to relax with friends and relatives and transform himself into a refined and generous host whose attention to the wellbeing of his guests will never be forgotten.

> Obituary by Heikki Nevanlinna