



### PROFESSOR LAURI A. VUORELA 60 YEARS OLD

Lauri A. Vuorela was born in Kuopio, in the Lake Region of Finland, on 27th February 1913. Here he spent his childhood and went to school. After leaving senior secondary school in 1932, he trained as a radio telegraphist and served in this capacity at sea. In 1935 he entered the University of Helsinki and read meteorology, geophysics, physics, mathematics and chemistry.

In the early stages of his studies Vuorela came into contact with Professor Vilho Väisälä, who was then designing his radiosonde. Vuorela went to work on this project, which marked the beginning of his career in meteorology. In 1939, just before the war, he took part in a meteorological expedition to the tropical waters of the Atlantic. This expedition had a great influence on his later research.

After the war, in which he served as a meteorologist, Vuorela was first engaged at the Finnish Meteorological Institute and then (1946—

50) at the Swedish Meteorological and Hydrological Institute in Stockholm. During his time in Sweden, he worked on his doctoral thesis »Synoptic aspects of tropical regions of the Atlantic Ocean, West Africa and South America», for which he received a Ph.D-degree from the University of Helsinki in 1951. In 1950—58 Vuorela was research assistant to Professor Erik Palmén at the Academy of Finland. From 1954 he simultaneously lectured at the university as a reader in meteorology. A long, unbroken period of intensive work began in 1958, when Vuorela was appointed professor of meteorology and chairman of the Department of Meteorology at the University of Helsinki. This period lasted until 1971 when he assumed his present position as Director-in-Chief of the Finnish Meteorological Institute.

Vuorela has investigated various aspects of tropical meteorology, dynamic meteorology and the general circulation of the atmosphere. His doctoral thesis, referred to above, was an important contribution to tropical meteorology: it threw fresh light on the little-known behaviour of the atmosphere in tropical oceanic regions. Later studies extended to the distribution of deformation and vertical velocities in extratropical disturbances. Also well-known and often cited in his research on mean meridional circulation and the associated meridional flux of heat in the Northern Hemisphere.

By initiating and organizing several scientific projects, Vuorela has made an important contribution to meteorology in Finland. He was the Finnish prime mover in the Swedish-Finnish-Swiss expedition to Spitsbergen during the International Geophysical Year in 1957/58. As professor at the University of Helsinki, Vuorela started numerical weather prediction in Finland in 1964. Later he organized an extensive project to study the use of radar in meteorology.

Much of Vuorela's research has been made abroad. In 1952 and 1953 he worked at the International Meteorological Institute of the University of Stockholm as a member of a team developing numerical methods of weather forecasting under the direction of Professor C-G. Rossby. In 1955 he took part in a research project (directed by Herbert Riehl) at the University of Chicago, studying the general circulation of the atmosphere. In 1965 he worked by invitation at the National Center for Atmospheric Research in Boulder, Colorado. Apart from research, Vuorela has contributed to international scientific collaboration as a member of the International Commission for Polar Meteorology of the International Association of Meteorology and Atmospheric

Physics, COSPAR Working Group 6, and of WMO/CIMO Working Group on Satellite Meteorology.

Professor Vuorela is a man of many parts. This fact came to light during his years at Helsinki University. Under his chairmanship the Department of Meteorology went through a period of vigorous expansion and development in personnel, facilities, curricula and research alike. And not only in meteorology: the University has profited in many other ways from Vuorela's energy and versatile talents. From 1960 to 1969 he was the Associate Dean and from 1969 to 1971 the Dean of the Section of Mathematics and Natural Sciences, Faculty of Philosophy. Furthermore, he made an outstanding contribution to the work of several administrative boards, on many of which he served as chairman.

As Director-in-Chief of the Finnish Meteorological Institute since 1971, Vuorela has continued his dedication to the field and initiated new branches of activity.

Vuorela's achievements outside meteorology are numerous. He is a member of several Finnish and foreign scientific societies; since 1970 he has been the Secretary General of the Finnish Academy of Science and Letters. His activity in the Geophysical Society of Finland deserves special mention. He has twice been President of the Society (1960 and 1966). Of particular value to the Society is his excellent work as Editor of *GEOPHYSICA* since 1953.

The picture would be incomplete if no mention were made of the fascinating impression he makes on those who meet him, no matter what the circumstances. Quite apart from being a scientist and an efficient organizer, he is keenly interested in arts and humanities in general. As a scientist, humanist and artist, he is a person whom few forget.

The Geophysical Society of Finland joins the numerous friends of Professor Vuorela in wishing him many happy returns on the occasion of his sixtieth birthday and continuing success in all his activities.

*E. H.*