

obituary

Gordon Miller Bourne Dobson, CBE, ScD, FRS, former reader in meteorology in the University of Oxford, died at the age of 87 on March 10. After school at Sedbergh he went up to Gonville & Caius College, Cambridge. The post he held from 1911–1913, as student-assistant at Kew Observatory, followed by the Lectureship in Meteorology at the Central Flying School at Upavon, established the broad interest in the physics of the atmosphere which dominated his long and productive life. During his period at the Royal Aircraft Establishment, Farnborough, in the First World War, he was invited by Professor F. A. Lindemann to join him at the Clarendon Laboratory, Oxford, where he was appointed University Lecturer in 1920.

Their discovery, from the study of meteor trails, of a warm region in the atmosphere at heights of ~50km, and the inference that the source of heat must be the absorption of solar ultraviolet radiation by ozone, set Dobson on the researches which he carried out so energetically and fruitfully to the end of his life: the physics of the stratosphere in general and in particular the behaviour of ozone.

Fortunately Dobson has left us with a full and entertaining account of his own work up to 1966: Forty years' research on atmospheric ozone at Oxford: a history, *Applied Optics*, 7, 387–405 (1968). After that date he continued making substantial contributions to the study of atmospheric ozone, involving thousands of observations on 'No. 1', the prototype photoelectric photometer built with his own hands in 1927 and only slightly modified since (photomultiplier and electronics). His work was done almost

entirely at his home, and to a great extent financed out of his own pocket. There was a regular pattern of morning work, in the study if necessary but preferably in the workshop or observing hut, gardening in the afternoon (all weathers), further work after tea and reading (mainly scientific but in his last years general and voracious) after supper. If this regime sounds monastic, he was no hermit, and visitors to Watch Hill were always welcome; after tea or morning coffee Dobson was always eager to discuss some new observations, demonstrate some new apparatus, or discuss the recent literature.

His gift of going directly to the heart of a problem made him an outstanding speaker and his enthusiasm was infectious: his lectures on the atmosphere at the Clarendon Laboratory were always packed.

In the ozone community he seemed a permanent fixture and we are still staggered by his leaving us; for those who were privileged to work closely with him there are treasured memories and deep gratitude for his life and example.

C. D. Walshaw

Karl Weissenberg was born in Vienna, Austria on 11th June 1893 and attended many different schools in Austria, Germany and France before matriculating in Frankfurt a/Main at the age of sixteen and a half. He subsequently studied at the Universities of Vienna, Berlin and Jena, taking Mathematics as his main subject, with Physics and Chemistry as subsidiaries, touching also upon Law and Medicine. He became a Privat-Dozent and, later, Professor of Physics at the University of Berlin.

In 1922 he joined the research team of M. Polanyi at the Kaiser Wilhelm

Institute für Faserstoffchemie in Dahlen, Germany, and there, for a period of about six years, worked on X-ray crystallography. His fame in this field rests on his invention of a new X-ray goniometer, which allowed for the first time, a unique determination of 3-dimensional crystallographic structure. The idea was only slowly adopted, and it was not until after the war that the Weissenberg X-ray Goniometer, as it is known, came into general use. By 1929 his attention turned from crystallography to rheology and he presented a general analytical method for finding the shear rate at a capillary wall, now widely used.

Just before the war, Weissenberg took up residence in Britain, and his wartime work on flame thrower fuels stimulated his curiosity and interest in the so-called anomalous liquids, and hence in the field of liquid rheology itself. He also demonstrated, by means of rubber and fabric sheets, the importance of rotation of the embedded co-ordinate system in a flowing continuum. He had much earlier conjectured that certain fluids were elastic and now came the inference of the existence of a tension along the streamlines, since amply demonstrated. At this time, too, the essence of the Weissenberg Rheogoniometer was established. The principle behind this second major invention was that it allowed the stresses around the full solid angle in a flowing continuum to be experimentally determined.

In addition to a deep and sensitive appreciation of a range of natural phenomena, Karl Weissenberg was an entirely engaging and unselfish person. His accord with nature was faithfully mirrored in that with his fellow human beings. He was notable in his scientific achievements and noble in personal qualities.

John Harris

announcements

Awards

The American Society for Microbiology has awarded:

The **Wyeth Award** in Clinical Microbiology to **Edwin H. Lennette** of the California Department of Health.

The **Eli Lilly and Company Award** to **Ronald W. Davies** of Stanford Univer-

sity School of Medicine.

The **Carski Foundation Distinguished Teaching Award** to **Elizabeth R. Hall** of Washington State University.

The Biochemical Society has given: The **BDH Award in Analytical Biochemistry** to Professor John Landon of St Bartholomew's Hospital.

The **Colworth Medal** to Dr W. J.

Brammar of Edinburgh University.

The **Keilin Medal** to Dr S. M. E. Magnusson of the University of Aarhus.

Meetings

July 7–9, **Annual Meeting of the Biochemical Society**, London (The Meetings Officer, The Biochemical Society,