Kathleen Lonsdale

A biographical memoir by
Dorothy M. C. Hodgkin, O.M., F.R.S.

Born in the year the Wright brothers first flew an aeroplane, Kathleen Lonsdale lived long enough to see moon-landings appear almost commonplace. The problems attendant on such spectacular advances in science and technology were among her most constant preoccupations, because she felt that scientists do have a special responsibility to try to ensure that science as a whole is rightly used.

After graduating from Bedford College in 1922 at the age of 19 with high marks in physics, she joined W. H. Bragg's research team at University College London to work in the new and exciting field of X-ray crystallography. She went with Bragg's group when they moved to the Royal Institution, and remained active in this field until her death almost 50 years later. In recognition of her outstanding contributions to the study of crystals, Kathleen Lonsdale became one of the first two women ever to be elected into the Fellowship of the Royal Society.

In 1927 she married a fellow scientist, Thomas Lonsdale, whom she had met at University College. Coming from different religious denominations, and exercised by the proper moral framework within which to educate their three young children, Thomas and Kathleen eventually became Quakers by conviction in 1935. Kathleen was imprisoned for reasons of conscience in 1943, an experience which not only broadened her own outlook, but also gave her a lifelong interest in penal reform. She was active in many areas of concern to the Society of Friends, and wrote and edited lectures and pamphlets on Quaker themes. She also travelled widely among Friends.

Returning to University College in 1946, she became a Professor of Chemistry in 1949. She not only continued her own researches and developed crystallographic teaching but implemented her concern for the right use of science in many ways, becoming, among other things, the first woman President of the British Association for the Advancement of Science.

This account of her life includes a complete bibliography of her scientific works, her own list of her travels abroad, and a note of her more substantial non-scientific publications.

Dorothy Hodgkin, the first Englishwoman to win a Nobel Prize, and the first one since Florence Nightingale to belong to the Order of Merit, is herself a distinguished crystallographer well known for her active interest in social problems and international affairs, and was the obvious choice to prepare this sympathetic appraisal of Kathleen Lonsdale's life and work.

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