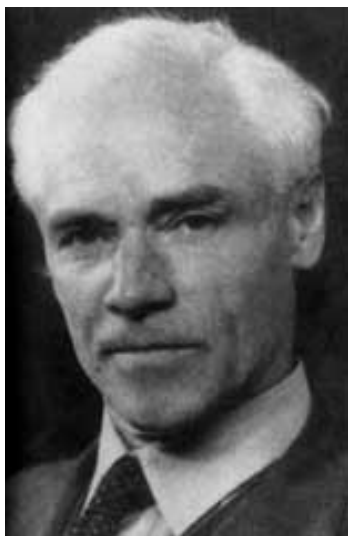


Lawrence Wager

Lawrence Rickard Wager was one of the leading petrologists of his generation, known for his exploratory geological work in eastern Greenland and as a member of the 1933 Mount Everest expedition. He also carried out extensive research in the Hebrides, South Africa and the West Indies.

Wager's academic career

Born in 1904, Wager graduated from Pembroke College, Cambridge, where he was a pupil of Alfred Harker and others. He became a lecturer in Petrology and Mineralogy at Reading University before distinguished war service in the RAF photographic reconnaissance



branch. In 1944 he was appointed Professor of Geology at Durham, in succession to Arthur Holmes, being elected FRS in 1946. In 1950 he assumed the Professorship of Geology at Oxford, and was responsible for transforming a somewhat modest department into one of the leading research institutions of its kind.

What is 'Learning more'?

'Learning more' presents a series of articles about the Museum and its collections. It is designed for older students, teachers, researchers, and anyone who wants to find out more about particular aspects of the Museum's work and its history.

This article introduces the life and work of Lawrence Wager whose extensive collections now form part of the petrology holdings at the Museum.

'Learning more' articles are free, and available to all for educational, non-profit purposes. The Museum retains copyright of all material used in this leaflet.

Wager's research

Wager discovered the Skaergaard basic igneous intrusion during Gino Watkins' British Arctic Air Route Expedition of 1930-1. Further field studies were undertaken in 1932 and during the thirteen-month expedition he organised with W. A. Deer in 1935-6. The classic memoir describing the intrusion, published in *Meddelelser om Grønland* in 1939, immediately became a milestone in petrological research, the first detailed structural, mineralogical and petrological study of a layered basic intrusion.

After the end of the war, Wager travelled on a further expedition with Deer and others in the summer of 1953. This added further field observations and, importantly, much more research material, enabling new and fundamental investigations of the mineralogy and geochemistry of the rocks to be undertaken. These included major studies of the pyroxenes and opaque oxide and sulphide minerals, and of the distributions in rocks and constituent minerals of many trace elements. Wager died in 1965.

Wager's collections at the Museum

Apart from his major Greenland collections, Wager amassed collections from Skye, Rum and other parts of the Hebridean Tertiary Igneous province, including the remote island of St. Kilda; from the Bushveld Complex in South Africa; and from the 1933 Mount Everest expedition.

Wager also acquired many important specimens of suites of rocks from classic localities around the world, illustrating the work of geologists who had collected and described them. These were assigned to his 'T' (Temporary) Collection, with a view to their being ultimately incorporated into the new accession series of the Oxford department.

The main contents of the Wager Collection can be seen by visiting the online databases of the mineralogy and petrology collections, or by contacting the Museum.

Wager's ascent of Everest in 1933

The Museum has a fascinating set of 244 rocks collected by Lawrence Wager from Mount Everest. Wager climbed the mountain in the unsuccessful attempt of 1933. On 29th May, along with P. Wyn Harris, he managed to reach 28,100 feet, less than 1,000 feet short of the summit. On this assault they found an ice axe belonging to Irvine who had perished with Mallory in the attempt of 1924.

A complete list of the specimens Wager brought back can be seen by visiting the online databases of the mineralogy and petrology collections on the Museum's website.



Tin goggles box, filled with fossiliferous lacustrine clay samples from the river traverse approaching Jikyop. Note specimen number '80' and the drops of candle wax.

Further reading

Wager's collections are listed as part of a series of online databases located in the mineralogy and petrology collections pages of the Museum's website.

F. S. Smythe (1937), *Camp Six*, Hodder & Stoughton

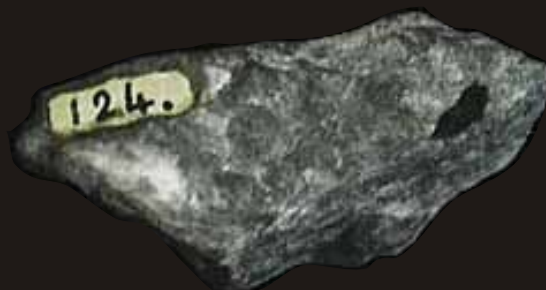
Hugh Rutledge (1934), *Everest 1933*, Hodder & Stoughton

L. R. Wager (1939), The Lachi series of North Sikkim and the age of the rocks forming Mount Everest, *Rec. Geol. Surv. India*, LXXIV, 171-188.

L. R. Wager (1965), Injected granite sheets of the Rongbuk Valley and the North Face of Mount Everest, *Dr D. N. Wadia Commemorative Volume, Mining & Metallurgy Institute of India*, 358-380.

The Everest collection

The following illustrates a few of the specimens that are now held by the mineralogy and petrology collections.



Specimen 124

Grey metamorphosed limestone from the First Step at 27,890 feet. This rock forms much of the topmost part of the mountain, around the summit. The specimen is approximately 3cm across.



Specimen 125

Yellow-weathering metamorphosed limestone of the Yellow Band. This rock is the first encountered after climbers leave the highest Camp Six at 26,900 feet. The specimen is approximately 3cm across.



Specimen 137

From near Camp III. Boudinaged limestone and metapelite. Situated on the lateral moraine of the East Rongbuk Glacier at 21,300 feet, this camp is the highest of the main camp sites. The specimen is approximately 8cm across.