

## Obituary

**Mikhail Mikhailovich Yermolayev**, one of the most distinguished figures in the study of the geology and physical geography of the Soviet Arctic, died in St Petersburg on 24 November 1991. His remarkable career followed a pattern of repression that was all too common, but should not for that reason be allowed to be forgotten.

He was born into a noble family in St Petersburg on 29 November 1905. On leaving school in 1922 he was influenced by R.L. Samoylovich, a notable Arctic scientist who later married Yermolayev's sister. It was through Samoylovich that Yermolayev first did field work in the Soviet Arctic, which he continued throughout the period 1925–38, including participation in a series of ship-borne expeditions along the Northern Sea Route. A major work of this period was his notes on the geological map of the USSR, a 400-page paper published in 1937. He was associated at this time with the prominent Russian geographer L.S. Berg.

It was during this period that Yermolayev made a memorable sledge journey, which was little reported at the time, especially in English. The journey took place on the north island of Novaya Zemlya in the spring of 1933. The polar station of *Russkaya Gavan'* had just been set up to take part in the 2nd International Polar Year, when failure of normal transport media created a situation in which a resupply of food and equipment became vitally necessary for settlements farther north. Yermolayev was leader of the team at *Russkaya Gavan'*, and it was up to him to organise relief. The only way it could be done was by crossing the icecap, using the party's aerosledge (a motor sledge driven by an airscrew). Accordingly Yermolayev, Vladimir Petersen (a mechanic), and Kurt Wölcken (a German geophysicist), set out to make the journey to Mys Zhelaniya, a distance of 200 km, which they hoped to cover in 24 hours. But the motor broke down, the runners froze to the ice surface, and then a week of blizzard prevented all movement. They started again and had reached the halfway point when the motor again broke down and they were obliged to continue on foot. After four days Wölcken could walk no further and begged the others to leave him behind. Yermolayev replied 'either we all get through, or none of us does.' He and Petersen were able to build a makeshift snow house in which they left Wölcken while they hurried on the next 40 km to Mys Zhelaniya. There they found help, and were able to bring in Wölcken.

The adventure with the elements was over, but other kinds of adventure were to come. Wölcken returned in due course to Germany, was arrested by the Nazis, escaped to Argentina, and was for a long time director of a geophysical observatory in Buenos Aires. Yermolayev was awarded the Red Banner of Labour for his work in the Arctic, but in 1938 fell victim to the Stalinist purges. Accused of anti-Soviet activity and wrecking, he was sent to labour camps in northern European USSR. The authorities realised,

however, that his skills could be used, especially in developing the new Pechora coal-mining area. He remained a prisoner, but he also worked as a geologist. Only after the 1953 amnesty was he fully released, and he continued his work in the north, often as a field geologist. He was a Reader and Professor in the Department of Physical Geography at Leningrad University from 1958 to 1970.

In 1971 Yermolayev was asked to set up the first Soviet Department of Marine Geography at Kaliningrad University, and this took his attention away from the north. He was Pro-rector for Science in 1972–74. He was an outstanding university teacher and the author of 95 papers, including five monographs. He retired in 1983 with many awards and medals, including the Gold Medal of the Geographical Society of the USSR. Shortly before his death he visited England, where his son is a physicist, and paid a visit to the Scott Polar Research Institute.

Terence Armstrong

**Trevor Hatherton**, chief scientist of the New Zealand Antarctic Research Expeditions 1956–59 and leader of the IGY Group at Scott Base 1957–58, died of cancer on 2 May 1992 in Wellington, New Zealand.

Hatherton trained as a geophysicist at Imperial College, London, where he received his PhD in 1954 and DSc in 1973, before moving to the Geophysics Division of the Department of Scientific and Industrial Research (DSIR) in Wellington. This led to his involvement and lifelong interest in Antarctic research. His work at Scott Base during the IGY led to publications in seismology, glaciology, permafrost, and auroral studies. He was awarded the OBE and Polar Medal in 1958 for his leadership of the group. While his subsequent geophysical work covered plate tectonics and other fields, he maintained a strong interest in Antarctic science. This is shown by two major publications, *Antarctica* (1965) and *Antarctica — the Ross Sea Region* (1990), along with many papers.

Hatherton's influence on Antarctic research during his 18 years as Director, Geophysics Division, DSIR, was considerable and led to other responsibilities. He was a member of the New Zealand government's Ross Dependency Research Committee from 1958–88, Vice Chairman of it 1970–83, and Chairman 1983–88. He was President of the Royal Society of New Zealand 1985–89 and, as Past-President in 1990, he gave a stimulating opening talk at the New Zealand–United Kingdom (SPRI) Symposium on Antarctica and Global Climatic Change in Cambridge.

Hatherton's interest in geophysics, along with his Yorkshire characteristic of forceful, thoughtful, humorous, and kind speech, endeared him to his many colleagues. It also gave a special flavour to his Presidency of the RSNZ. He will be missed by all of his Antarctic associates.

Gordon Robin.