

OBITUARIES

JOHN KAYE CHARLESWORTH, the geologist, died of a stroke in Ballycastle, Northern Ireland, on 26 January 1972. He was born in Leeds on 3 January 1889 and took his first degree at the university there in 1910. He later studied in London and Germany and was given a PhD by the University of Breslau in 1914 for work on Devonian corals. Leeds University gave him a DSc in 1921 for further research. In 1914, he was appointed assistant in geology in Queen's University, Belfast. In 1919, he spent a season in Svalbard with an expedition of the Scottish Spitsbergen Syndicate, his only field work in the polar regions. From Svalbard, he went to the University of Manchester, but was there only two years before being recalled in 1921 to Queen's as professor of geology, a post he held for 33 years until his retirement in 1954.

Charlesworth published many useful papers on the historical and glacial geology of Ireland and Scotland, based to a large extent on his unusually energetic and ambitious field work. But his fame rests chiefly on *The Quaternary era with special reference to its glaciation* (London, Edward Arnold, 1957), a monumental work of two volumes with 1 700 pages and more than 3 000 bibliographical references. His university gave him an honorary DSc for this achievement and the Geological Society of London its Prestwich Medal. In 1957, also, he was made CBE for his public services.

Alan Cooke

VICTOR H. CZEGKA, a member of two Antarctic expeditions, died in Ipswich, Massachusetts, on 2 February 1973. He was born on 21 May 1880 in Landsdron, northern Bohemia (present-day Czechoslovakia) and is said to have decided at the age of 12 to become an explorer and, thereafter, to have trained himself by hiking and weight lifting. In 1899, he attended the Institute of Technology at Prague, but appears not to have finished his course there.

In 1904 he visited the St Louis Exposition and decided to stay in the United States. In 1905, he enlisted in the US Marine Corps, in which he served intermittently until he finally retired from it as chief warrant officer in February 1942. In 1928, he joined Byrd's first Antarctic expedition, 1928-30, as a machinist, and he proved so useful that Byrd engaged him as manager and supply officer of his second expedition, 1933-35. During both expeditions, his ingenuity triumphed over the difficulties of designing and building apparatus in Antarctic conditions. He made an improved model of the Nansen cooker and, for the second expedition, he built a new type of dog sledge of greatly increased capacity and efficiency. Later, he assisted in the support services of Byrd's third expedition, 1939-41. Before his death, he deposited his papers of polar and personal interest in the Center for Polar Archives, Washington DC.

Vic Szegka was a loyal friend and one never afraid to acknowledge the other fellow's abilities and contributions. He was dedicated, dependable, and always gave his talents without stint. Perfection was his goal, and he despised shoddy work and a person giving less than 100+ per cent in any endeavour. Inventive, Admiral Byrd called him a mechanical genius, yet realistic, so it was easy for us to discuss the needs of the expeditions in all their aspects with complete understanding. In a sense, we worked together almost like father and son, and I

consider it an honour to have served with him in a common cause. The memory of our close association during 1932-35 will always be a high spot in my life. In the last months of his life, we recalled, by the hour, our many experiences together, and we both knew it had been a good relationship for both of us.

Stevenson Corey

WILLIS L. TRESSLER, Antarctic oceanographer, died on 9 September 1973 after a stroke. He was born on 30 September 1903 in Madison, Wisconsin. He took all of his degrees at the University of Michigan, obtaining his PhD in 1930. From 1930 to 1940, he taught at the University of Buffalo and from 1940 to 1946 at the University of Maryland. During World War II, he was granted leave from his university post to serve with the Office of Strategic Services and, after the war, he served in the newly formed Central Intelligence Agency. He joined the US Naval Oceanographic Office in 1950. In 1954, he participated in the joint Canada-United States expedition to Beaufort Sea, then joined the US Navy Antarctic Expedition, 1954-55, and Operation "Deep Freeze II", 1956-57. During 1958-59, he was scientific leader at Wilkes station, and he participated in the US Antarctic Research Program at McMurdo Sound from 1959 to 1961. In 1962-63, he was director of education and training in the US Naval Oceanographic Office. In 1965, he retired to Grand Lake, Colorado, where illness prevented his finishing an autobiography. His books and papers have been deposited in a number of universities and in the Center for Polar Archives, Washington DC.

His great interests were the taxonomy and ecology of Recent and post-Tertiary marine and freshwater Ostracoda and inshore and Antarctic oceanography. His published papers that relate to Antarctica are mainly devoted to ice conditions and currents, which he had studied with time-lapse photography, and to marine bottom productivity and seasonal changes in it. A colleague in the US Naval Oceanographic Office, John Recknagel, has written that he was a "shy, quiet, unobtrusive personality" and that "his great love for those white frozen lands knew no bounds, and he availed himself of every opportunity to join expeditions to that inhospitable part of the world with joy and enthusiasm".

Alan Cooke

MIKHAIL MIKHAYLOVICH SOMOV, the Soviet oceanographer and leader of expeditions to both the Arctic and Antarctic, died in Leningrad on 30 December 1973, aged 65. He was associated with the Arctic Institute (later the Arctic and Antarctic Institute) for virtually the whole of his working life.

Beginning in 1929, while a student in the shipbuilding faculty of the Far Eastern Polytechnic College, and later while an associate of the Pacific Institute of Fish Economy and Oceanography, he participated in expeditions to the Sea of Japan and Sea of Okhotsk. He became interested in oceanography and, in 1934, he was admitted as a second-year student to the Moscow Hydrometeorological College, from which he graduated in 1937. After two years, 1937-38, with the Central Weather Institute in Moscow, he joined the Arctic Research Institute of the Main Board of the Northern Sea Route Administration and soon became a leading figure in Arctic oceanography and sea ice studies.

During World War II, Somov was engaged in ice forecasting and other operations connected with ship movements in the Arctic Ocean and White Sea.



Mikhail Somov

Photo: Novosti Press Agency

In 1942, he was at the polar station on Ostrov Diksona in the Kara Sea when it was attacked by the German battleship *Admiral Scheer*. In 1945, he was given the Order of the Red Star and, in the same year, he presented for a Candidate of Science Degree a paper on the processes of ice formation in the Kara Sea. From this time forward, he took a leading part in the organization of polar research expeditions. In 1946, he was scientific chief of an expedition to the seas of the eastern Soviet Arctic in the icebreaker *Severnnyy Polyus*. In 1948 and 1949, he participated in expeditions sent out by the Arctic Institute to investigate unexplored parts of the central Arctic basin and, among the important results of this work, was the discovery of the Lomonsov Range. In 1949, he received the Order of Lenin.

In 1950-51, he commanded "North Pole-2", a research station set up on the drifting pack ice of the Arctic Ocean, and so started the series of such stations that have continued, almost without interruption, until the present. His own work during this expedition concentrated on oceanographical aspects of the eastern part of the central Arctic Ocean and on experiments for preserving airfields on ice during the melting season. This work brought him the highest state award, Hero of the Soviet Union. He received also many foreign honours, among them the Patron's Medal of the Royal Geographical Society and the Vega Medal of the Swedish Royal Society of Geography and Anthropology.

In 1951, Somov was appointed a deputy director of the Arctic Research Institute, a post he held for 13 years. In 1954, he submitted a doctoral dissertation on the preparation and preservation of airfields on drifting ice. When, in 1955, the Soviet Union decided to undertake Antarctic exploration, thereby showing the first Russian interest in that region since Bellingshausen's expedition in 1819-21, Somov was chosen to lead it. This expedition, which lasted until 1957, set up Mirny, Oasis, and Pionerskaya stations. In 1963, he returned to the Antarctic as header of the summer party of the Ninth Soviet Antarctic Expedition.

Somov published more than 20 major works and a large number of shorter papers, and, beginning in 1958, he edited the first 40 issues of *Informatsionnyy Byulleten' Sovetskoy Antarkticheskoy Ekspeditsii*, a series that still continues and is fully translated into English.

Apart from his responsibilities in organizing Soviet Antarctic research, Somov took an active part in coordinating that research with the work of other nations, and he was the first Soviet delegate to the Scientific Committee on Antarctic Research. In this role, he did much to establish the atmosphere of friendly cooperation that has led to such excellent practical results. As a man, he was greatly liked and respected by his colleagues, both internationally and in his own country, for his judgment, integrity, and humanity.

Gordon Robin

WOLF V. VISHNIAC, a microbiologist, fell to his death in the Asgaard Range, about 130 km north-west of McMurdo Sound, Antarctica. He was born in Berlin of Latvian parents and with them immigrated to New York, where he became a naturalized United States citizen in 1946. His father, Dr Roman Vishniac, a photomicrographer, was famous for his photographs of European Jews during the Nazi era.

In 1945, Wolf Vishniac graduated from Brooklyn College of the University of the City of New York. He earned an MSc degree in zoology from Washington University in St Louis, Missouri, in 1946 and a PhD in biology from Stanford

University in 1949. From 1952 to 1961, he was on the staff of Yale University; in 1961, he joined the Department of Biology of the University of Rochester and was chairman of the department from 1965 to 1969. Since 1965, he served in various capacities as a consultant to the US National Aeronautics and Space Administration, most recently with NASA's Lunar and Planetary Missions Board. He had also for many years been associated with the Committee on Space Research (COSPAR) and was a member of its executive council, representing the International Union of Biochemistry. He was keenly interested in the possibilities of extra-terrestrial life, and it was in this connexion that he turned to Antarctica, where he demonstrated that microorganisms could multiply in the most barren of natural habitats. He first studied the soils of the dry valleys of Antarctica during the austral summer 1971-72, and it was in continuation of this work that he died in 1973. A colleague, searching for him, reported that he had apparently left a marked trail and had fallen about 150 m down a steep mountain slope. His body was recovered by helicopter. He leaves his wife and two sons. The Executive Secretary of COSPAR, Mr Z. Niemirowicz, has written that he was "a live and inspiring teacher and colleague, filled with enthusiasm to learn more about the secrets of possible life in space. His knowledge of biology was exceptionally broad, his appreciation of the interactions between different kinds of organism, and between organisms and environment, was quite out of the ordinary for one who had specialized in microbiology and chemistry".

Alan Cooke