established Chair in Industrial Mineralogy at the University of Hull in 1978. Here he built up a thriving research school and enabled the already established MSc Course in Industrial Mineralogy to develop further. He was Head of Department from 1980-83 and Dean of the School of Earth Resources from 1987–88. More than 150 masters and doctorate graduates for Hull (and subsequently Leicester) are now practising throughout the world. In 1988, even though there were two successful Masters programmes in geology and the largest graduate school in the Faculty of Science, the then UGC Earth Science Review Panel forced the closure of the Department at Hull. Most of the staff were transferred elsewhere. The industrial mineralogy team moved to the University of Leicester, with 12 tonnes of rock and much equipment. Ansel's genial personality ensured they integrated well into the newly expanded Geology Department.

At Leicester he contributed significantly to the BSc Applied Geology and MSc Mineral Exploration and Mining Geology programmes and to fieldwork in the Department, as well as taking on more masters and PhD students in Industrial Mineralogy. He did his work on brick clays at Leicester. He was involved in the setting up of an industrial mineralogy teaching and research programme in the University of the Punjab, Pakistan, a research link with the University of the West Indies, and was Head of Department from 1992–95.

At his retirement presentation in December 1997, Ansel was described as a true 'gentleman'. He always had time to discuss any aspect of geology and mineralogy with students and staff alike, putting forward suggestions and ideas if required, and always providing friendly support and much encouragement. He had a very positive outlook, such that only three months before his death he was discussing with me ideas for the future direction and activities of AMG. His wife Helen provided much support throughout his long illness. She survives him along with his two sons, Tim and Peter, and daughter, Lucy. He is also survived by both of his parents.

> PETER W. SCOTT, Camborne School of Mines, University of Exeter.

Prof. Alan D. Edgar, 1935–1998

A Canadian national, Professor Alan D. Edgar was born in Scotland in 1935 and spent his childhood in Glasgow, where at an early age he acquired an agile mind on his daily trek to school through the notorious Gorbals district. A faculty for science and astringent humour were also his Scots inheritance, and he shared with his native compatriots the adaptability and drive that ensured success in the New World, being the first member of his family to find work when they arrived in Canada. After completing his MSc in geology at McMaster in 1961, he returned to Britain to gain his Ph.D. at Manchester in a record two years' time. The interest begun then, in ultra-alkaline igneous rocks and the application of pressure-temperature experiments to their varied and exotic mineralogy and unusual chemistry, lasted his lifetime and was realised in a prodigious 105 papers in journals and books, and numerous presentations to international conference audiences.

He became a lecturer at the University of Western Ontario in 1963 and a full professor in

1978, a post he held until his death. There he established an international reputation for the high-pressure experimental unit, attracting highquality researchers from many countries. The calibre of his work earned him visitorships to toplevel institutions worldwide. It would hardly be an exaggeration to say that Alan's life was his work, and all that it gave he returned with an evangelistic zeal in recruiting research students and inspiring collaboration with established researchers. It is typical of Alan that his single book, published in 1973 and still very apposite, is a basic text on techniques in experimental petrology aimed at research students.

For more than twenty years at the University of Western Ontario, Alan and his research associates have contributed significantly to mantle metasomatism and mantle heterogeneity; to the mineralogy and phase chemistry of kimberlite and ultrapotassic rocks; and to the sources of halogens and incompatible and high-field-strength elements in potassic volcanics. A high-profile researcher, Alan received a number of fellowships from the Royal Society, Nuffield Foundation and the British Council, as well as a Senior Gledden Fellowship. A new Fe, Nb sulphide mineral was named 'Edgarite' in his honour and has been accepted by the IMA Commission on New Mineral Names. He was a Fellow of both the Mineralogical Society of America and the Geological Association of Canada, and had been Member of the Mineralogical Society of Great Britain & Ireland since 1962.

Alan's research record speaks for itself. Lesswidely appreciated perhaps was his unassuming courage and persistence in the face of chronic ill health. A diabetic from his youth, he suffered increasingly from those complications that accompany the illness long-term, including serious deterioration of vision. He made no concessions to his health, nor expected others to make any. Knowing how much his work meant to him, there is some consolation in the fact that death from heart failure intervened before he became unable to meet his own high standards. In January 1998 he died at his home in London, Ontario, with his family at his side.

Those of us who work in the engaging field of potash-rich mafic volcanics will sorely miss his participation, but he leaves us a legacy of enthusiasm and will to persist as well as a valuable deposit of experimental knowledge.

> FELICITY E. LLOYD PRIS, Reading University

Prof. G. Tunell (1900–1996)

George Tunell died on July 4, 1996 in his retirement community at Montecito, California. His wife Ruth had preceded him in death by four years; they had no children. His long and eminent career produced major advances in the X-ray crystallography, physical chemistry, and thermodynamic analysis of minerals, particularly of mettallic ores. His outstanding achievements were recognized by the Mineralogical Society of America by electing him President of the Society (1950) and by awarding him the Roebling Medal, its highest honour, in 1973. He also served as President of the Geochemical Society (1962-1963). His many publications and his training of a generation of earth scientists at the University of California stand as an enduring legacy.

George Gerard Tunell, Jr. was born in Chicago, Illinois on April 4, 1900. His father was a prominent railway engineer who served on local and national planning commissions and as an adjunct faculty member of the University of Chicago. His mother died when George was seven years old. As a consequence, young George travelled extensively with his father on the Santa Fe Railroad, and acquired a lifelong love of trains. While on a visit to Arizona, a miner gave George a small collection of minerals and ores. In so doing, the kindly man stimulated a distinguished career in mineralogy. In following years, George spent many afternoons in the Geology Department of the Field Museum of Natural History in Chicago, where the scientific staff



Prof. G. Tunell