

## Obituary

### Prof. Ansel C. Dunham, 1938–1998

Ansel Charles Dunham retired through ill-health as Professor of Industrial Mineralogy at the University of Leicester (1988–97) less than three weeks before he died of cancer on 18th January, 1998, aged 59. He was a past Vice President (1986–87) of the Society, member of Council (1984–87) and of the Applied Mineralogy Group (AMG) Committee (1983–86). At the time of his death he was Chair of AMG. He joined the Society in 1961 during his student years.

He researched and published in many areas of mineralogy and petrology, more notable contributions being on the acid rocks of Rum, the Whin Sill, the Skye lavas, accuracy and precision in electron microprobe analysis, the mineralogy and geochemistry of the Oxford Clay, and archaeological mineralogy. In his later career, however, he concentrated much of his efforts on industrial rocks and minerals and his broad portfolio of publications and consultancies included fluorite, baryte, limestone and dolomite, borates, olivine, kaolin, bentonite, manganese minerals, chromite, zeolites and the stability of aggregates. He was most proud of his work on the time-temperature-transformations of clays into bricks, establishing for the first time the precise mineralogical changes taking place during the firing of British brick clays. He showed that most bricks could be made successfully by firing for much shorter periods giving considerable energy savings. The Minerals Industry Research Organisation awarded him the John Phillips Medal for this work. Several of his publications are in *Mineralogical Magazine* or *Clay Minerals*.

He was born in Newcastle-upon-Tyne on 2nd August, 1938, and following school in St Albans, he graduated from Cambridge in 1959. He moved to Oxford for his DPhil, supervised by Malcolm Brown, on the Northern Marginal Complex of Rum. He then moved to Durham University, working for his father, Sir Kingsley Dunham, on the Rookhope Borehole. Not only did this work

prove the Caledonian granite beneath the Northern Pennines, it also added much to the debate on the origin of the mineralisation in the overlying Carboniferous strata.

Following two years at Harvard, he moved to Manchester University in 1966, becoming Lecturer in 1969 and Senior Lecturer in 1976. Here, with Fred Wilkinson, he developed the electron microprobe facility to support the considerable amount of experimental and other petrology research going on at that time. It was one of the best and much sought after microprobe facilities in the UK at the time. He had a visiting Professorship to Brazil in 1970. In the face of stiff competition he was appointed to a newly



Prof. A. C. Dunham

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 high-quality researchers from many countries. The calibre of his work earned him visitorships to top-level 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.