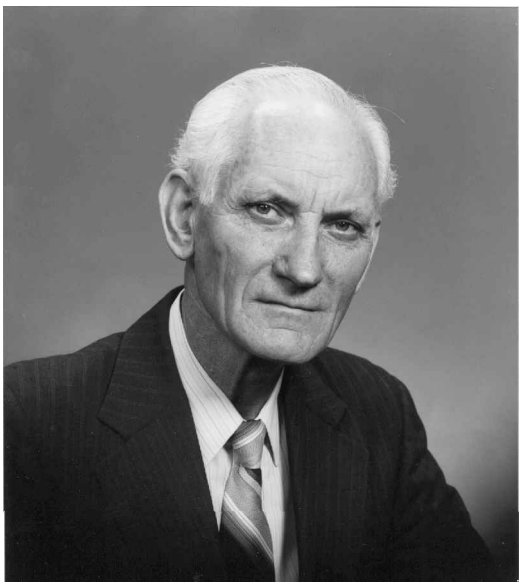
# Obituaries

## Professor Allan Fraser Wilson, 1921–2001



Allan Fraser Wilson who died on 28 May 2001 in Brisbane, Queensland at the age of 80 was born at Croydon Park, Adelaide, South Australia on 15 May 1921. He was the third child of Alexander Wilson, a Church of Christ minister and his wife Ruby. The family subsequently lived in the Strathalbyn area of South Australia where Allan completed his primary and secondary schooling at Naracorte and Strathalbyn. Allan was passionate about science and education and studied simultaneously at the University of Adelaide and the Adelaide Teachers College. During this time he came under the influence of the explorer-scientist Sir Douglas Mawson who was Professor of Geology and Mineralogy at Adelaide. In 1944 Allan obtained his Teaching Certificate and also graduated from the University of Adelaide with a BSc in geology with first-class honours. Mawson was impressed by Allan's boundless energy and his flair for mineral identification and encouraged him to continue his studies. Allan shared Mawson's dual interests in fundamental science and exploration and they collaborated in the search for uranium and other strategic minerals in South Australia and the Northern Territory. During his MSc research Allan taught primary and secondary school classes, lectured casually at the university and was also involved in a number of Christian organizations. It was through the latter that he met Betty Skinner who shared his strong religious convictions. They were married in 1946. Allan completed the MSc under Mawson's supervision in 1947 and was appointed a lecturer in geology at the University of Adelaide in the same year. His first publications were on the charnockitic and associated high-grade metamorphic rocks in the Musgrave Ranges, central Australia, upon which he continued investigations throughout his long career. This was truly pioneering work with fieldwork completed under rigorous conditions in high summer, using camels and trucks, and on foot. Allan noted that the fieldwork would have been impossible without the assistance of the staff and aboriginal people of the Ernabella Mission with many of whom he formed lasting friendships.

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When Rex Prider was appointed Professor of Geology at the University of Western Australia in 1949 he recruited Allan to fill the then vacant senior lecturer position in the Department of Geology. Allan greatly enjoyed his time at the University of Western Australia where he was recognized for the breadth of his research interests and the quality of his teaching. These interests included the mineralogy and petrology of high-grade metamorphic rocks as well as gemmology and archaeology. In addition to his university undergraduate lectures Allan was Diploma lecturer in the Western Australian Division of the Gemmological Association from 1951 to 1959. He was made an honorary life member of the association in 1959 and subsequently served two terms as Federal President. Allan was popular with the undergraduate and Diploma students because his lectures were an unorthodox mix of anecdotes, demonstrations and solid science coupled with some terrible puns. In 1955 Allan was promoted to Reader in Petrology and awarded a Doctorate in Science by the University of Western Australia for his work on the structure and petrology of the Precambrian rocks of central and southwest Australia. Although Allan published extensively in international journals including *Mineralogical Magazine*, much of his regional geological work appeared first in the journals, transactions and special publications of the Geological Society of Australia and various state royal societies, of which he was an active member. It was at the University of Western Australia that Allan's love affair with isotopes really began. The results of a fruitful collaboration between Allan and the Department of Physics (W. Compston, P.M. Jeffrey and G.H. Riley) established a basic subdivision of the Australian Precambrian based on U-Pb, Rb-Sr and K-Ar age dating in a paper referenced to this day. The hallmark of this and subsequent work in a number of metamorphic terranes was the combination of mineralogy, petrology and isotope geochemistry with systematic field mapping.

In 1960 Allan was appointed Professor of Geology and Mineralogy at the University of Queensland where he remained until his retirement in 1986. It was his intention, subsequently realized, to establish a comprehensive isotope geochemistry laboratory in the Department of Geology and Mineralogy. This was greatly facilitated by the award in 1962 of a Carnegie Grant that allowed Allan to visit stable and radiogenic isotope laboratories in the USA, Canada, UK and France. Important contacts were established during this six month tour which greatly enhanced his academic reputation and led to invitations to participate in UNESCO sponsored field studies in West Africa and Brazil. Allan had readily embraced the controversial idea of wandering continents and was to apply it to understanding the geology and distribution of mineral resources in South America, West Africa, India, Antarctica and Australia. He was a prodigious traveller both alone and accompanied by his wife and four children and in increasing demand as a lecturer and consultant to government agencies and industry worldwide. The Queensland University Stable Isotope and K-Ar Laboratory was initiated in 1966 with the purchase of a gas and solid source mass spectrometer for joint use by the Departments of Geology and Mineralogy and Chemistry. A technician and successive postdoctoral fellows constructed K-Ar dating and stable isotope extraction facilities and several additional mass spectrometers were commissioned so that, by the middle 1970s, the laboratory was the most advanced in Australia. Allan focused his efforts initially on oxygen isotope geothermometry of granulite-facies metamorphic rocks and showed that oxygen isotope exchange during cooling destroyed the isotope record of peak metamorphic temperatures but, in conjunction with age dating, provided valuable information on the retrograde *P-T* paths for granulites. Through the 1970s and 1980s Allan and his colleagues and students also applied stable isotope geochemistry and K-Ar dating to granite and volcanic petrogenesis and the genesis of hydrothermal ore deposits, most notably Archaean lode gold deposits of the Yilgarn Craton and the Bougainville porphyry copper deposit.

Allan retired in 1986, his professional standing evidenced by membership at fellow level of professional societies in Australia, the United Kingdom and USA and numerous biographical references dating as far back as 1962 that recognized his contributions in science, education and community service. He continued with his research as an Emeritus Professor, was founding chairman of several public mineral exploration companies, consulted to industry and pursued his interests in archaeology, gemmology, cycads and Biblical interpretation. His interest in mineralogy and gemmology was ongoing right up until the last few months of his life and had resulted in

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many papers in the scientific and popular literature on unusual minerals, their chemistry, structure and occurrence. Like his first mentor Sir Douglas Mawson he had an almost uncanny capacity for mineral recognition and a sense of when something was not quite right with the properties of a particular mineral sample. In retirement Allan was also able to dedicate more time to community organizations, church affairs and the Kenmore Christian College with which he had been involved since its foundation. His memorial service on 9 June 2001 in the Westside Church of Christ was notable for the diversity of the large congregation that had known Allan variously as educator, scientist, horticultural enthusiast and Christian leader. Allan was devoted to his family and is survived by his widow Betty, his sons Murray and Ian and daughters Gwenda and Marion. He will be remembered above all else as a pioneering geologist and inspiring educator who interested many in the Earth Sciences. Allan will be missed by all who experienced his great generosity of spirit.

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# Brian Albert Sturt, 1933–2000

Brian Albert Sturt passed away, on 15 September 2000, within a stone's throw of his home in Trondheim, Norway. Born in Leicestershire, Brian graduated from the University of Wales, Aberystwyth, and then moved to a lecturing position at Bedford College, University of London (1958–1970). It was during a part of his time in London that Brian served three years (1966–1968) on the Council of the Mineralogical Society. Although his early research years, including doctorate studies, were spent in the Dalradian of Scotland, he was soon to transfer his main fields of interest to the coastal areas of northern Norway, and almost always in the accompaniment of his close friend and colleague, Professor Donald Ramsay. It was during one of his early summers in Norway that Brian met his devoted wife Sidsel.

The many challenges presented by the Scandinavian Caledonides finally enticed Brian to permanent residence in Norway, in 1970, to the chair of geology at the University of Bergen. There, within just a few years, his dynamism and commitment helped tranform the department into a vibrant research school. With his many international contacts, more notably with geoscientists of high standing in Appalachian geology, and with his postgraduate students then conducting mapping and structural studies in many parts of the Caledonides, Brian was a

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