Charles Barton, IUGG Fellow

AUSTRALIA

Dr Charlie Barton graduated in Physics and Mathematics from the University of Bristol in 1963, has a Diploma in Education from the University of East Africa, and is a Graduate of the Institute of Physics. He worked in Africa for ten years - teaching in Kenya and Uganda, exploring for oil in the Sahara using seismic techniques, and later using African lake sediments for magnetic field and climate reconstruction. At the Australian National University he completed a Ph.D. in geophysics (palaeomagnetism) in 1978. He held research posts at the University of Edinburgh (Geophysics Department) and at the University of Rhode Island (Graduate School of Oceanography) before returning to Australia in 1984 to joining the Bureau of Mineral Resources (subsequently called Geoscience Australia) as a research scientist and head of the geomagnetic observatory group. His responsibilities in Geoscience Australia expanded into natural disaster risk assessment, and developing a national information network for disaster management.

Charlie is a Fellow of the Royal Astronomical Society, a past President of IAGA and now an Honorary Member, and has served on many national and international Earth & space science committees and editorial boards of scientific journals.

His research interests have been in the nature, origin, and applications of the Earth's magnetic field; relationships between climate change and variations of the geomagnetic field; information systems for emergency management; and informatics. Much of his work has centred on the use of lake sediments for reconstructing the history of geomagnetic and climate change, involving fieldwork in Australia, Africa, South America, Europe, North America, and the Tasman Sea. He appears to be the first person to realize James Clark Ross's dream of reaching both of the Earth's magnetic poles, (3km from the NMP with Larry Newitt in 1994, and 1.6 km from the SMP observed at sea in 2000).

Charlie has been a strong advocate for the preservation and sharing of scientific data and information, culminating in the conduct with IAGA of the "Electronic Geophysical Year" to mark the 50th anniversary of the 1957-1958 International Geophysical Year.

He is currently a visiting fellow at the Research School of Earth Sciences at the Australian National University and grows weeds and wombats on a much-loved property near Canberra.