

Chris Hartnady is the Research and Technical Director of the earth-science consultancy, Umvoto Africa (Pty) Ltd, which he joined in 2000. He received his PhD in Geology (1978) from the University of Cape Town, where he was Senior Research Officer in the Chamber of Mines Precambrian Research Unit (1974-1987) and later Associate Professor in the Department of Geological Sciences (1987-2000). He is internationally recognized in the field of structural geology and tectonics with an emphasis on Southern and Eastern Africa, particularly the kinematics of African plate motions and the seismotectonics of the East African Rift System. He has applied his tectonic knowledge to fractured-rock aquifers, geohazard and georisk assessment and disaster risk-reduction studies. His experience in geospatial data analysis and remote-sensing applications includes the use of space-geodetic methods, such as the application of GPS in plate-kinematics and the novel field of hydrogeodesy. He has also developed innovative technological applications in the drilling of deep artesian-groundwater wells, hydrogeological monitoring and the use of geoinformatics for hydrogeological modelling. Apart from his research and development interests in water resources, he has particular interests in the area of mineral and fossil-fuel resource finitude and the developing 'water-energy nexus', having published on the depletion of South Africa's gold and coal resources using extensions of the geomathematical modelling method of M. King Hubbert.

