

*New Release*

**Memoir 50**

# **Tectonics of Southern Granulite Terrain Kuppain-Palani Geotransect**

*Editor: M. Ramakrishnan*

Granulites are windows on the lower crust. Southern India presents a unique example of unbroken amphibolite to granulite facies transition marked by incipient charnokites. Granulite terrains are exposed in the Precambrian shields in varied tectonic settings, but the most prominent setting is along the craton-mobile belt contact marked by conspicuous crustal scale shear zones. In southern India, the Archaean Dharwar craton is bounded to the south by the Pan-African mobile belt called the Southern Granulite Terrain (SGT) otherwise known as the Pandyan mobile belt.

Integrated geophysical and geological studies have been carried out along a transect corridor about 300 km long from Kuppam in the craton to Palani in the mobile belt. These multi-institutional studies were conducted under the Deep Continental Studies Programme of the Department of Science and Technology, New Delhi, with the National Geophysical Research Institute, Hyderabad as the lead agency.

The results of the above studies are incorporated in the 17 papers included in this volume of which the first three are overviews. The remaining deal with deep seismic reflection and refraction, wide band magneto-tellurics, deep resistivity sounding, gravity, magnetics and aeromagnetics, heat flow and heat production, palaeomagnetism of mafic dykes, structural studies of shear zones, geochemical, thermobarometric and fluid inclusion studies and isotopic mapping employing Sm-Nd and Rb-Sr systematics. Aably edited by M.Ramakrishnan with an intimate knowledge of SGT, this memoir presents a comprehensive picture of one of the classical granulite terrains of the world.

**Pages: 434+xviii; Price: Rs.500/-**

*(Copies can be supplied at concessional price to Fellows and bonafide students.*

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