

BOOK REVIEWS

currently occupy my interest, but I have hopefully conveyed what to expect in the different sections of the volume. The *Annual Reviews* are highly informative, and the 1995 volume is no exception. Serious research workers in emerging fields of physiology which is increasingly becoming molecular, would find this volume particularly useful.

S. K. SIKDAR

*Molecular Biophysics Unit,
Indian Institute of Science,
Bangalore 560 012, India*

India and Antarctica during the Precambrian. Yoshida, M. and Santosh, M. (eds). Memoir 34. Geological Society of India, P.B. No. 1922, Bangalore. 1995. Price: Rs 400; \$50.

Amalgamation and dispersal of supercontinents present a fascinating story of the Earth's evolution. Reconstruction of palaeogeographic disposition of continents is an absorbing game of the latter-day tectonics buffs. The aggregation and disassembly of the Gondwana supercontinent continue to tickle the imagination of several front-ranking geoscientists. The cratons and mobile belts which constitute the Gondwana ensemble are themselves products of rifting, subduction and colli-

sion of smaller masses in several orogenic cycles. Such facts and fantasy are being interwoven in the multi-author volume under review.

Raphael Unrug sets the tone by outlining the changes through time in the configuration of Rodinia and Gondwana. John Rogers and others describe the Pan African Zone linking the East and West Gondwana. The reassembly of the Eastern Gondwanaland is narrated by Masaru Yoshida. The fit of Australia and Antarctica is brought out in detail by Lyal Harris. The section on structure deals with amphibolite-granulite transition in south India as related to deep structures (Katz), terrains in parts of East Antarctica (Dirks), intercontinental shear zones (Chetty) and evolution of 'arenas' in Sri Lanka (Tani and Yoshida). The section on metamorphism has three papers on Eastern Ghat granulites (S. Dasgupta, Fonarev *et al.*, Sanyal and Fukuo) and one paper on the Prydz Bay in Antarctica (Harley and Fitzsimons). In the related theme on fluid processes in the lower continental crust, there are two papers by Touret, Wada and Santosh.

The section on geochemistry has three papers: Peterman Ranges charnockites (Joshi and Pant), high-grade metapelites of southern Karnataka (Mahabaleswar and others) and Eastern Ghats charnockites (A. T. Rao and others). There is a lone paper on geophysical studies by India in Antarctica (Gupta and Verma). In the section on magmatism there are three

papers: tabular granites of Antarctica (Grantham), acid magmatism in Rajasthan (Bhushan) and Pan-African gemstone provinces (Menon and Santosh). The book concludes with the section on geochronology, where three papers (Jayananda *et al.*, Bartlett *et al.*, and Unnikrishnan-Warrier *et al.*) provide new ages and insights into the chronological evolution of the granulite terrain of south India.

This edited volume will provide a new impetus to global cooperation in unravelling the past history of continents in the Precambrian which will have long-term implications for future mineral discoveries. This volume will also hopefully trigger greater enthusiasm in the Gondwanic neighbours to share their past geological heritage. The theme of the book forms a major IGCP Project supported by UNESCO and IUGS whose outcome will be watched eagerly by the Gondwana geologists the world over.

The volume is neatly edited and published to international standards by the reputed Geological Society of India. Apart from unevenness in quality and lack of cohesion inherent in any multi-author effort, this volume is flawless in presentation and is an asset to every earth science library.

M. RAMAKRISHNAN

*Geological Survey of India
27, Jawaharlal Nehru Road,
Calcutta 700 016, India*