

BOOK REVIEWS

THE GONDWANA MASTER BASIN OF PENINSULAR INDIA (1995); by J.J. Veevers and R.C. Tewari; Publisher: Geological Society of America, Boulder, USA.

The authors convincingly demonstrate that the master basin occupied mid-latitude ground between the Tethyan margin in the Himalaya and adjacent Western Australia, East Antarctica and Madagascar-Arabia, thus stretching far beyond the limits of Peninsular India. The original Gondwana formed part of the 10,000 km wide alluvial fan and the provenance of the sediments lay in East Antarctica. It was disrupted by the separation of continents; and its relicts are discernible in the rift valleys in Peninsular India. Gondwana sedimentation came to the end in Early Jurassic when there was intense transpression. The Late Jurassic and Early Cretaceous breakup of Greater India from the rest of the Gondwanaland was accompanied by an onlapping rift-drift succession along the margin.

The book provides an integration of stratigraphy and tectonic events in a uniform time-scale of the Gondwanaland. Usage of international biostratigraphic and tectonic nomenclature, (with which many an Indian geologist is unfamiliar) makes this treatise a bit difficult to follow. However, palaeogeographic/ palaeotectonic maps of the Gondwanaland province of Pangea make the book very informative and extremely interesting.

The book is profusely illustrated and there are many comprehensive time-lithology-correlation charts of the various Gondwana basins in India, characterized, among others, palynomorph zones and magnetic-polarity reversal history and several columnar and fence diagrams showing time and space relation of Gondwana basins. In-depth analysis of sequences of crucial basins, coupled with palaeogeographic synthesis, block diagrams of environments of deposition make the publication valuable information source on Gondwana. The impressive list of important references open a window to the storehouse of knowledge on the subject.

This memoir written by Veevers and Tewari is a very good reference work for researchers and would make a valuable addition to all libraries.

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THE TECTONIC EVOLUTION OF ASIA (1996); edited by A. Yin and M. Harrison; published by Cambridge University Press, Cambridge, 666 pages.

Embodying proceedings of a colloquium at the University of California, Los Angeles, this volume contains 21 papers on geodynamic models of deformation in the Cenozoic, tectonic evolution of the Himalaya-Karakoram orogenic belt, structure and development of collision zones, and assemblage of microcontinents of China and fringing belts in the Palaeozoic-Mesozoic eras. A group of authors, predominantly from the United States of America, China and France, endeavour to spell out their current understanding of tectonics and continental growth of the Asia of their perception and discuss at length, among other matters, the thickening of the elevated Tibetan plateau, blueschist metamorphism of ultrabasic rocks in collision zones, plate movements and mosaics of microcontinents, extrusion of continental blocks following plate convergence, etc. The contributions include a mixture of state-of-the-art reviews (oft-repeated on Himalaya, Karakoram, central and northeastern Asia) and research papers on new findings (on northeastern and southeastern China and adjoining regions), and a couple of articles on central Asia, Turkey, Indonesian island arc and Japan. Dealing with aspects of structural geology, petrology thermo-