

are the Main Central Thrusts, the Vaikrita, Jutogah, Krol, Berinag, North Almora, Singuni and Main Boundary Thrust. There are only two papers which treat thrust tectonics in terms of modern concepts of ramps, flats and the piggy-back model (and these are the two most original contributions). P. S. Saklani and V. K. Bahuguna interpret the imbricate thrust stack of the Garhwal Himalayas as a duplex system which was shortened by up to 10.9 km or 49%, and M. R. W. Johnson analyses the structural evolution of the Kumaun Lesser Himalayas in terms of the piggy-back stacking of thrust sheets folded above ramps on the sub-surface sole or Main Frontal Thrust.

Other papers are as follows: strain analysis of folds of the North Almora thrust zone is by D. B. Yedekar and K. B. Powar, of the Krol syncline by P. S. Saklani and Satendra, and of the Chamba syncline by A. M. Bhole and Y. Sharma. N. S. Viridi has an interesting paper which describes the lithostratigraphy, fold structure and inverted metamorphic isograds in the Central Crystallines above the Main Central Thrust in the Joshimath-Badrinath section in the Garhwal region. P. S. Saklani and D. C. Nainwal produce a petrological and geochemical study of the problem of the migmatization of granitic gneisses and migmatites in the Garhwal Central Crystallines; this partial melting was a response to deep burial caused by the thrust stacking. A. K. Bahattacharya and P. S. Saklani describe quartzites, metabasics and cataclasites with pitchblende/uraninite mineralization in the vicinity of the Main Central Thrust, and the petrofabrics and deformational history of mylonites associated with the Singini thrust in the Lesser Himalaya are analysed by R. K. Prasad; these papers deal with high level effects of the thrusting. In central Nepal post-metamorphic movements illustrated by lineations, joints and slickensides are recorded by W. Bogacz and J. Krokowski, who in another paper analyze the well-known mega-scale simple shear motions that took place during the northward indentation of India. From an experimental study A. K. Dubey and M. I. Bhat conclude that basement listric faults had a considerable influence on the location of many Himalayan structures, and in a similar vein, D. P. Dhoudial concludes that differences in the nature of the Precambrian basement influenced the evolution of the Himalayan belt. Seismicity indicates that crustal-scale thrusting is still taking place in the mountain range and field evidence indicates displacements have taken place along Quaternary to Recent faults in regions such as Nepal (T. Nakata). Rather out-of-place in this volume, J. Jaros gives a simplistic overview of the pre-Himalayan stages of tectonic evolution via island arcs, Andean-type margins and Zagros-type collision.

It is a pity this book did not include research results on the major thrusts that dominate the Northwestern Himalayas in Pakistan and the Zaskar range, the thrusts in the suture zone along the mountain belt or the thrusts associated with ophiolites such as Spongtang. Also little is included on the thrusts so well developed in Nepal, and there is nothing on the thrusts of southern Xizang (Tibet) or the eastern

Himalayas. The papers seem like a result of a symposium focused on the central Indian Himalayas. This may be fine in itself, but it does raise the suggestion that it would be useful to have a comprehensive volume on Himalayan thrust tectonics.

Indian publishers have an unfortunate tendency to double or triple the price of a book for foreign sales. The Indian price of 395 rupees for this book is reasonable, but the foreign price of \$65 is not.

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Journal for Southeast Asia

Journal of Southeast Asian Earth Sciences. Pergamon Journals Ltd, Oxford. Price: DM 260.00 per annum.

The new *Journal of Southeast Asian Earth Sciences* gets off to a promising start with its first issue. Of the four papers in it, two deal with regional tectonics (of the Philippines and East Indonesia), one with palaeomagnetic data from Thailand and the tectonic implications and one with a mineral resource assessment of Indonesia. All four are interesting and useful.

The aim of the Journal is "to serve and to assist in the promotion of the geoscientific development in Southeast Asia". It is an international interdisciplinary journal, to be published quarterly. The region primarily covered includes about a dozen countries, between India, China and Japan to the north and Australia to the south. This region is of outstanding interest to earth scientists, especially for its tectonics and structures and because of its important oil and mineral resources. Until now much of the work done there has often been buried in local journals and reports which are not easily accessible, besides being written in a variety of languages, so there is plainly the need for a unifying journal which disregards political boundaries and enables both workers on the spot and the many interested outsiders to know about significant work being done in the whole region.

Problems for a regional journal are to encourage earth scientists working, often under difficulties, in the region, yet avoid letting the journal become a vehicle for ego trips for mediocrities; and to keep an international readership aware of what is being done, not just in Universities but also in Geological Surveys and by mining and oil companies, some of whom prefer to publish—or not publish—their own reports.

The Journal meets a real need; it has made a good start. It deserves support.

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