

are clear and the printing is good. After reading through the book, the question arises whether it serves the purpose for which it is written i.e. for the benefit of post-graduate students of earth science. The answer is yes and I have no hesitation in recommending this book to all the libraries of geology departments.

A.M.S.E. Wing

*Geological Survey of India
Bangalore 560001*

S. V. SRIKANTIA

STRATIGRAPHY OF THE JAMMU LIMESTONE (GREAT LIMESTONE), UDHAMPUR DISTRICT, JAMMU AND KASHMIR STATE, WITH SPECIAL REFERENCE TO ITS STROMATOLITE CONTENT AND AGE: PALAEOONTOLOGIA INDICA, NEW SERIES, VOL. XLVII. By P. K. Raha, Geological Survey of India, 29, Jawaharlal Nehru Road, Calcutta 700 016, pp. 103. Price: Inland Rs. 39.25; Foreign £ 4.70 or \$ 14.50.

Palaeontologia Indica Series of Geological Survey of India has the reputation of bringing out outstanding work on Palaeontology and Stratigraphy of the Indian sub-continent. The New Series incorporating for the first time work on fossil-algae is a commendable effort.

The Riiasi inlier of the Jammu Limestone (Great Limestone) extends for about 40 km in a northwest-southeast direction in the Himalayan foot-hills of Jammu and Kashmir State of India. The structural inliers consisting of grey and white carbonate rocks form prominent hill ranges amongst the surrounding Murree and Siwalik rocks of Tertiary age. Permo-carboniferous age of these limestones was accepted by Wadia and other workers. It, however, remained controversial and lacked authentic fossil support. Now, on the basis of stromatolite and supporting data of Pb-isotopic dating of galena, their Precambrian age is confirmed. In the second chapter a summary of regional geologic set-up, tectonic implication and stratigraphy have been given. In the third chapter the author has attempted to classify Jammu Limestone into fifteen sub-facies. Palaeoenvironmental analysis reveals their cyclic deposition in supratidal, intertidal and shallow subtidal conditions on a broad sea-marginal shelf.

The chapter on stromatolite is perhaps the most important contribution of the author in which he compares the stromatolite-assemblage found in Jammu-Limestone with those identified earlier in other parts of the Himalaya and in Peninsular part of India. The identification of biostromes and their utility in broader correlation is very significant and can have a wider application in many such stromatolite-bearing Precambrian carbonate belts of India.

Although most of the material incorporated in this volume has already been published by the author, the present compilation forms a good reference book for future studies in stromatolite bearing horizons of the entire Himalayan region extending from J & K to Arunachal. Some of the plates viz. Geological Map etc. have been reduced to such an extent that minor details have become quite obscure. The reproduction of halftone photographs from field and micrographs and blocks are poor in quality. Despite some typographical errors and other shortcomings, the volume is an attempt to use stromatolites for dating of carbonate rocks and reconstruction of palaeoenvironment. The price is reasonable like other GSI publications and it should not be out of reach for individual researcher to secure a copy. This reference book is recommended for all Earth-Science and allied subject libraries.

*Wadia Institute of Himalayan Geology,
Dehra Dun*

A. K. SINHA