temple in Konark in Orissa is in Khondalites (p. 126) and many in Kerala are in laterites (p. 142). Even quartzites and quartzite phyllites have been used in Chamba in Himachal Pradesh (p. 94). Brick constructions, even centuries ago, were common as seen in the excavations at Nalanda in Bihar (p. 51). Many in West Bengal were in terracota, using good quality clay (p. 188). Thus it can be seen that practically every type of rocky and earthy material has been used since centuries in this country and most of them have stood the ravages of time.

While the publication is definitely praiseworthy (though pricewise. only libraries can afford it), it does not possess the stamp of an engineering geologist, in the sense that besides just mentioning the rocks that have been used, a few appendices could have been provided giving important particulars like location, physical and chemical properties, strength etc., of different types of rocks used in construction. The Society is to be congratulated, however, for bringing out such a useful publication.

R. V.

'APPLICATIONS OF MATHEMATICAL MORPHOLOGY FOR PATTERN STUDIES', 1992. Editors: S. V. L. N. Rao and B. S. Prakasa Rao, Geo-Engineering Department, Andhra University, Visakhapatnam. Publisher: J. P. Laser, Graphics, Akkayyapalam, Visakhapatnam-530 016. About pages 100, Price: Rs. 150/- US $ 15.00 Paperbound.

This booklet contains sixteen assorted papers on applications of mathematical morphology and image processing for pattern recognition in geoscientific studies using remote-sensed data and computers. Relevant applications as proposed and partly demonstrated include: those for Droughts, Texture characterization, Drainage extraction, Pattern recognition based on satellite digital remote-sensed data. Geoscientists may obtain useful concepts of mathematical morphology and image processing for geological feature/pattern extraction.

The editors have done a fine job of collecting a large number of scattered information on mathematical morphology, image analysis, etc., in a single cover which would help the computer oriented geoscientist to analyze digital remote-sensed data and obtain better inferences. Paper Nos. 1, 2, 3, 4, 6, 7, 10, 12 seem to be more relevant for geoscientific research and applications and would be of value to students and professionals.

However, the extreme brevity of papers often leave several concepts unclear and undefined; which necessitate the original publications to be perused. References, Tables and Figures are often incomplete, which is rather annoying. Sometimes text and Figures are incomplete and ambiguous (such as page B 11, relations between resolution, record length and spatial frequency; Page F 9A, B: Figure 4 Harmonic Numbers are not included, etc.). Moreover, the high price at Rs. 1.50 (or US $ 0.15) per page would tend to exclude personal purchases. In spite of the above drawbacks, the book fills the need for a quick summary of mathematical morphology and image processing techniques that are useful to geosciences and hence recommended for libraries.

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