

Book Reviews

PROCEEDINGS, 6TH INDIAN GEOLOGICAL CONGRESS, Roorkee, Feb. 21-24, 1987. Department of Geology, University of Roorkee, Roorkee. (UP).

The Indian Geological Congress was the brain child of Prof. A. G. Jhingran and was conceived as a meeting ground for different practitioners of earth science in the country. The first meeting was held in 1976 at Delhi and has been followed up since then by biennial sessions at Udaipur, Pune, Varanasi, Bombay and Roorkee. The proceedings of the 6th Congress held at Roorkee during February 21-24, 1987, has now been brought out under the editorship of P. S. Moharir. The volume starts with a lengthy editorial under the catching title. 'Geology: A science in league with future'. It is a rambling account, a confused mass of quotations and commentaries difficult to follow. Apparently, the object of the editor was to project geology as a science of the future, as a science closely connected with the survival of man, but unfortunately the message lies hidden somewhere, and not easily decipherable.

Papers included in the volume are a mixed assortment. Some are review articles, some dealing with mineral occurrences, some petrological, some structural, and some geochemical. Most are routine type of investigations loosely strung together, with no order or arrangement.

In our opinion, it would be worthwhile if organisers of such biennial meetings were to select a theme beforehand for an indepth examination and present readable reviews in the selected fields of study. Such an attempt will serve a more useful purpose than the present one. The volume has been well got up, but the type face chosen and printing are not satisfactory causing too much of a strain on the eye.

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RECENT ADVANCES IN QUANTITATIVE STRATIGRAPHIC CORRELATION TECHNIQUES. 1988, (Eds.) F. P. Agterberg and C. N. Rao, Hindustan Publ. Corporation, Delhi 110007, India, 192 pp.

This is based on an International Symposium at IIT, Kharagpur during 1983 under the auspices of IGCP Project 148 and is dedicated to Late Dr. B. K. Ghose who organised the Symposium. It covers many of the currently popular multi-variate and frequency domain time series (spectral) methods applied to problems of litho-, bio- and chrono-stratigraphy such as empirical conclusions obtained from segmentation, patterns from geostatistics, R and Q mode clusterings, principal component clusterings, simple linear regression correlations, crossplots of petrophysical logs, and spectral analysis of scalar data assuming 'weak stationarity'. The assumptions and proper inferences of these standard statistical techniques are not clearly demonstrated, however. About 50% of the papers have little relevance to 'quantitative stratigraphy'. If modern techniques such as time-domain and state-space (Markovian) models were introduced without assumptions of stationarity and normality using vector stratigraphic data, the volume would have been more purposeful. It may be noted that many stratigraphic variables are