

BOOK REVIEWS

CARBONATE SEDIMENTOLOGY. By Maurice E. Tucker and V. Paul Wright.
Blackwell Scientific Publications. Paperback 1990. 482 pp. £. 24.95.

The book provides 'a detailed synthesis of the enormous body of research which has been published on carbonate sediments and rocks'. One need not over-emphasise the importance of carbonate sedimentology in view of the fact that at least 40% of the world's supply of hydrocarbons comes from carbonate rocks. Besides, carbonate rocks are hosts of base metal deposits and groundwater resources. They are also raw materials for construction and chemical industry. The uniqueness of the book is in its attempt to incorporate information on changing concepts of carbonate deposition and diagenesis over the past ten years.

The book consists of nine chapters, (1) Carbonate sediments and limestones, (2) Geological background to carbonate sedimentation, (3) Modern carbonate sedimentation, (4) Carbonate depositional systems I: marine, shallow water and lacustrine carbonates, (5) Carbonate depositional systems II: deeper water facies of pelagic and resedimented limestones, (6) Carbonate mineralogy and chemistry (by Tony Dixon), (7) Diagenetic processes, products and environments, (8) Dolomites and dolomitisation models, and (9) The geological record of carbonate rocks. If the authors had provided another section on the techniques of study of carbonate sediments and rocks including the progress made over the past ten years, it would have not only added to the completeness of the text, but also would have aided serious students of carbonate sedimentology.

The book is the latest in the series of texts and monographs published by Blackwells on carbonate sediments and rocks. Students of carbonate sedimentology should go through earlier texts and monographs published on the subject before starting on the present text in order to appreciate and grasp what has gone on up to the present time in carbonate research and chalk out present and future plans of research in the field. An actual acquaintance with carbonate rocks at outcrop, polished slabs and thin section levels to begin with, will help to understand the present text better. The book is well illustrated with line drawings, cross sections, exceptionally good, high resolution microphotographs and scanning electron micrographs.

India has made big discoveries of hydrocarbons in carbonate basins off the coast of Bombay and many more prospects await discovery. Our knowledge of these carbonate rocks is highly circumscribed and what exists, lacks clarity and expertise. It is high time that real good expertise is developed in carbonate sedimentology especially in organisations devoted to oil exploration. To this end the present text is an excellent aid and must be studied by industry, professionals, academics and students with profit.

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