

## BOOK REVIEWS

quasi-monochromatic light, can be projected with a laser beam and the visual experience can be shared by a large audience'.

The experiments on holography, speckle phenomena and spatial filtering are well introduced in the book. Some of these experiments teach an important concept of Fourier optics to the students. The measurement of flow velocities by a simple experiment using interference fringe mode is very instructive to convey essential features of a laser Doppler anemometer. One of the good features of the book is the problems given at the end of each chapter. The problems are useful and educating.

With the relatively easy availability of He-Ne lasers in India, it is hoped that our colleges and universities will adopt to the use of lasers in teaching of optics and, in this sense, the book under review will prove to be very useful as a starting point. A reasonable price (Rs 45/-) of the book makes it within easy reach of students and teachers. In conclusion, the book is well written and will prove to be useful to the scientific community.

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**Indian Gondwana** (Sahni volume). B. S. Venkatachala and H. K. Maheshwari eds. Memoir 21, Geological Society of India. 1991. 529 pp. Rs 600.

Gondwana sediments play an important role in Indian stratigraphy because of the occurrence of coal in these sediments. In fact geological studies in this country were initiated for the exploration of coal associated with the Gondwana sediments.

The book covers progress of knowledge

on different aspects of Gondwana over the last one and a quarter centuries. The book has been divided into the following aspects; Part I, Concepts; Part II, Classification, Stratigraphy, Sedimentology; Part III, Palaeobotany; Part IV, Palaeozoology; Part V, Marine incursion; Part VI, Palaeogeography, Climate, Glaciation; Part VII, Tectonics; Part VIII, Economic geology. In each part the editors have made an overall assessment of the work with critical comments.

Another useful feature of the book is that some original articles on various aspects have been reproduced. This will help readers considerably in getting a comprehensive idea of the progress that has been made in different aspects of Gondwana sediments. It will spare the readers the trouble of digging into the earlier literature.

It is befitting that the book has been dedicated to Birbal Sahni to commemorate his birth centenary. By publishing this book the Geological Society of India has made a lasting contribution. There is no doubt that the book will be extremely useful to geologists, teachers, researchers and students.

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**A Textbook on Biotechnology**. H. D. Kumar. Affiliated East-West Press Pvt Ltd., 104 Nirmal Tower, 26 Barakhamba Road, New Delhi 110 001. 1991. 280pp. Rs. 150.

It is not clear for whom this book is intended. Biotechnology is a very general term that encompasses a wide variety of

subjects and topics. The first chapter entitled 'General introduction' seems to indicate that the book provides the basis for technological developments in the utilization of knowledge derived from advances in modern biology. Training and education in biotechnology must essentially depend on the strengths in modern biology, including molecular biology (biochemistry), biophysics, molecular genetics, microbiology, cell biology, engineering technologies such as fermentation, biomolecular separation, and a whole lot of other processes. Hence it is not practical to cover the whole gamut in one small textbook. The book is an overview of the potential of the discoveries in current biology and it serves the purpose of introducing the technological potential of modern biology to students. The book seems to have a bias towards plant sciences, and this is indeed a very welcome change from similar books.

This book is not a textbook but a synthesis of several aspects of modern biology and current topics of applied research in industrial microbiology, immunotherapy, disease resistance in plants, improvement of grain quality, environment and energy. Thus it has a somewhat uneven but diverse coverage.

The book has limited value for a serious student preparing for a career in biotechnology but may stimulate interest in the uninitiated. In addition the information contained in the book could be very useful for those preparing for competitive examinations that may require general knowledge in biotechnology.

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