

by B. Prakash and Sudhir Kumar is titled as 'Indogangetic Basin' but very little of modern Indo-gangetic basin sedimentation is to be seen in the paper. T. N. Bagati's paper on 'Tethyan Basin of Western Himalaya' is cluttered with too many stratigraphic columns with the result that it is not possible to decipher lithological succession which they are supposed to indicate. Harukata Sakai gives an account of Gondwana rocks involved in Himalayan Orogeny of Nepal. Brookfield and Andrews-Speed lament the general lack of measured sections and sedimentological data to interpret in tectonic terms the Ladakh Mesozoic to Tertiary Magmatic Arc Basins. This is a highly justifiable lament.

The volume would have served the geological community better if the seminar papers, instead of following classical stratigraphic approach had concentrated on modern basin analysis techniques, especially of sequence and event stratigraphy. The editors are to be congratulated, however, for bringing out a collection of papers devoted to a study of 'Sedimentary Basins of India in a Tectonic Context' in a single volume. This is sure to serve as a basic reference work to promote further research on this important subject.

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**'SEISMIC PROSPECTING FOR SEDIMENTARY FORMATIONS'**. By G. N. Gogonenkov 1990, Oxford and J.B.H. Publishing Co. New Delhi, 219 pp., Rs. 170/-

The development of concepts in the book and their applications are primarily based on the investigations conducted by the author at the Central Geophysical Expedition (CGE), Ministry of Petroleum Industry, USSR. The book specifically deals with the possible designing methods for detailed sequencing of sedimentary formations based on seismic and other geophysical field data.

This book consists of six chapters. The first chapter deals with the acoustic and density properties of sedimentary sections with an emphasis given to the analysis of the horizontal persistence of inhomogeneity and on studying the velocity-density differentiation as a basis for subsequent interpretation of the results obtained by the dynamic inversion of seismic data.

The concept of an effective seismic model which is a modified version of a thin-layered medium with minimum inhomogeneity is introduced in the second chapter considering the seismic data are recorded in a narrow frequency band. An algorithm has been designed for constructing a homogeneously layered effective model that has got practical importance in geoseismic modelling in order to compare theoretical wave fields with observed records.

The processing of seismic data on the basis of some apriori information on the model of the medium and the wave field characteristics followed by pseudoacoustic transformation and geoseismic modelling in connection with integrated interpretation of seismic and field geophysical data is highlighted in the third chapter. The importance of geoseismic modelling is emphasized particularly when the target is inadequately and poorly resolvable from the seismic record. This topic catches the attention of researchers in seismic exploration as the pseudoacoustic transformation particularly enhances resolution when investigating non-anticlinal traps and it is also useful in the study of identified deposits for the purpose of computing reserves and determining rational systems for their development.

The recovery of a detailed acoustic structure by seismic observations from vertical seismic profiling has been studied in chapter four after examining the linear programming and autoregressive methods for solving the problem of recovery of the acoustic model of a homogeneous layered medium.

The complex task of estimating the shape of the initial signal which plays very important role in transforming seismic traces into acoustic impedance curves is discussed in the fifth chapter in the light of the methods based firstly on minimum phase model of the seismic signal and secondly by the recovery of a signal of arbitrary shape exclusively from the information contained in the seismic trace and the third is based on the geophysical well measurements.

The last chapter provides an intriguing application of pseudoacoustic transformation of seismic data for solving geophysical problems in oil and gas exploration. It may be mentioned that the modelling was done in typical geological situations encountered during seismic survey in Urals-Volga region, Western Siberia, Cis-Caucasus and other geological provinces of USSR together with some examples illustrating world-wide experience in constructing detailed Pseudoacoustic models of real media elsewhere.

This book does provide a very good overview of the author's work in transforming seismic records into detailed petrophysical models in an interactive regime using graphic displays. Libraries could provide a useful reference by including this book in their collection, particularly meant for geophysicists and geologists.

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### MAY HER TRIBE INCREASE

“Emily Glorio Wilson remained a member of the family for the next forty years, managing our household affairs, rearing our children, accompanying us to India and eventually giving attention to our grandchildren. Her character and devotion were illustrated one afternoon in the mid-sixties. It had been a wearying day, and we had to go over for a dinner. I asked Emily to hold all telephone messages while I had a nap. Shortly thereafter the phone rang. Lyndon Johnson was calling from the White House and he came on the line himself:

- ‘Get me Ken Galbraith. This is Lyndon Johnson’
- ‘He is sleeping Mr. President. He said not to disturb him’
- ‘Well, wake him up. I want to talk to him’
- ‘No Mr. President. I work for him, not you’

When I called the President back, he could scarcely control his pleasure. ‘Tell that woman I want her here in the White House’.

—Narrated by KEN GALBRAITH  
*U.S. Ambassador to India*