

## REVIEW

GEOPHYSICAL CASE HISTORIES OF INDIA Vol. 1, Association of Geophysicists, CEG Building, Osmania University Campus, Hyderabad-500 007, India, 218 p. Price : Rs. 100/-, US dollars 15/-

This volume is dedicated to Mr. M. B. Ramachandra Rao, formerly, Chief Geophysicist, Geological Survey of India, and later a member in Oil and Natural Gas Commission, in honour of his many varied and valuable contributions in the field of earth sciences, during the last four decades.

The present volume which we are told is the first in a series, contains a collection of sixteen papers presented at the Seminar on Exploration Geophysics in India 1977 which was organised by the Association of Geophysicists at Hyderabad. A wide range of subjects is covered from groundwater to mineral and oil exploration, tectonics and other aspects where exploration geophysics is applied with advantage.

One obvious criticism of this publication is its inconsistency in the quality of the papers that make up the volume. The assortment includes some good contributions interspersed with several minor papers. The reproduction of several figures in the text is very unsatisfactory (for example on pp. 12, 64, 86, 89 and 108). The figures should have been drawn on larger scales reduced to satisfactory sizes when printed, so that details are not lost in indecipherable blotches. One plate on p. 178 is even bound upside down! There are some awkward expressions, and mis-spellings, all of which, on the whole, make distracting reading. Editing appears to have somewhat slipped.

There is valuable material presented in the three papers '*Structure and Tectonics of Indo-Gangetic Plains*', '*Geophysical Survey for Oil in the Cauvery Basin*', and '*Palaeostructural Analysis of Karikal-Nagapattinam Areas, Cauvery Basin, by Electrolog Correlations*'. An authentic picture has been made available from the data provided by the deep structural wells drilled in the areas and their integrated study along with the available geophysical results obtained through the earlier basic work carried out by the Geological Survey of India and the later detailed work including additional drilling conducted by the Oil and Natural Gas Commission.

In another paper the results of the multi-parameter airborne geophysical surveys carried out by the NGRI indigenous equipment, and data processing, interpretation and presentation carried out entirely by the staff of the Institute, is a valuable contribution.

The papers on mining geophysics and other aspects on work carried out from mid 1950 to 1970, provide good case studies of a large variety of investigations that have been conducted in the country.

The papers on groundwater are a varied lot and are generally of a routine and 'run-of-the-mill' stuff. In these contributions, efforts are made to delineate fresh water zones, predict water yields in hard rock areas, locate groundwater inflow horizons from the borehole data in granitic terrains, by 'resistivity logging'.

The publication is priced Rs. 100/- which seems to be on the high side for the volume. Other than organisations, it is beyond the means of individuals to possess a copy. The volume nevertheless is an useful addition to the growing literature on geophysical exploration in India.

M. S.