OBSERVATION OF THE CONTINENTAL CRUST THROUGH DRILLING
Edited by C. B. Raleigh. Springer-Verlag, pp. 364, price: DM 114/-.

Drilling deep into the earth to verify the predictions emerging from geophysical measurements is gaining importance as it is aimed at solving major problems in earth science. Hence, the Federal Republic of Germany, Japan and the United States have drawn ambitious programmes to drill deep into the earth's crust. Russia has achieved remarkable success in drilling a deep hole in Kola Peninsula. The book under review surveys problems surrounding high temperature drilling and forms the proceedings of an International Symposium held in May 1984.

In the earlier chapters, the National drilling programmes of different countries – U.S., Germany, France, Belgium, Japan and Sweden are briefly reviewed. Sweden is concentrating on testing the theory of non-biological origin of gas. This is followed by a study of thermal regions, models of volcanic processes and testing by continental drilling. Two papers discuss brine evolution and fluid circulation in hydrothermal mineral systems. Scientific drilling to study physical properties and the state of stress in the earth's crust and advances made in drilling and logging technology are important aspects detailed in a large number of papers.

Papers of considerable interest to earth scientists are those dealing with the results of deep drilling. One of the concepts tested was to drill deeper in a proven gas and oil province in the hope of striking fresh oil *field*. Gas *field* was in fact discovered in Austria at a depth of 6344 m. Drilling ultra-deep holes is not only expensive but involves high technology. Very few companies are capable of handling this complex job. A plea has been made that these companies should communicate frequently and freely for the benefit of all. This way the capacity to produce more hydrocarbon resources can be accelerated.

The articles on deep drilling technology contain useful information which is sure to be helpful in planning future drilling. There are two papers detailing the rational behind proposing deep and ultra-drill holes which should prove to be particularly useful for those planning drilling of deep holes.

All those who are engaged in finding solution to fundamental problems in crustal evolution would benefit by going through this volume.

B. P. RADHAKRISHNA

CORRECTION

[The following corrections may be noted in the paper by V. Madhavan and C. Leelanandam – 'Petrology of the Elchuru Alkaline Pluton, Prakasam District, Andhra Pradesh, India' published in the June issue of the Journal Vol. 31, pp. 515-537.]

(1) The last but one sentence in the abstract should read as 'The content of Sr and Ba are very high and with differentiation the ratio Ba/Sr falls whereas the Sr/Ca and K/Ba ratios rise.

(2) Under explanation to Figure 1, item 3 should read as *Nepheline Syenite Porphyry* instead of Nepheline Syenite (hypersolvus), and 4 as *Nepheline gneiss (subsolvus)* instead of Nepheline syenite (hypersolvus) and 5 as *Nepheline Syenite (hypersolvus)* instead of Nepheline Syenite (subsolvus).

(3) In Figure 7 (p. 527) a large black dot has inadvertently appeared. This should be ignored.