

or a particular area of interest by specifying the geographic coordinates or a particular toposheet number. One can select to view the different rock types belonging to a particular geological system. The information on the surface geology along a specified profile can also be viewed. The information on the colour screen can be printed on a colour copier.

The software is being modified to suit to PC environment and can also be extended to include additional information such as gravity, magnetic, seismic etc.

*National Geophysical Research Institute  
Hyderabad*

G.R.SESHAGIRI  
T.HARINARAYANA

### Reference

SESHAGIRI,G.R., HARINARAYANA,T., REDDY,G.R. and GUPTA. R.B. (1991). Graphical Information System on Indian Geology- First Int. Seminar and exhibition on Exploration Geophysics in Nineties, Extended abstracts. v. II, pp.875-880.

## DESERT ENVIRONMENT

The study of desert environment is becoming very important because of the increase in the adverse effects of any change in it to the habitat of man, animal and vegetation. New tools and techniques are being used in these studies and the Special Issue of the Journal of the Arid Environment (Vol.25, No.1, July 1993, 185p.) contains papers, most of them dealing with the Indian scene. Of particular interest will be the papers which present the response of vegetation to rainfall and interestingly, dependence of rainfall on vegetation! The other contributions are on origin, evolution and migration of dune forms, origin of salt lakes and the efficacy of remote sensing tools in the study of the arid environment. The papers in this issue would be of interest to meteorologists, geomorphologists and biogeographers, and some of them can be considered to be trend setters for future studies in this field in India.

R.V.

## BOOK REVIEW

**BIBLIOGRAPHY OF INDIAN GONDWANA.** Geological Survey of India,  
Special Publication No.62 (1993), 219 p.

Bibliographical compilations are always welcome and all students of Indian stratigraphy ought to feel gratified at the availability of a new Bibliographical compilation on Indian Gondwana. The publication has listed about 2800 entries of literature related to Indian Gondwana. A casual check revealed that while obscure entries which are more of the nature of brief abstracts are listed, the special publication on Indian Gondwana brought out by the

Geological Society of India in 1991 and the papers included in it are not listed in this Bibliography. Birbal Sahni who has contributed so much to the Indian Gondwana, has only three entries against his name! Reference to V J Gupta are included giving official approval to the reports of questionable authenticity. Author index is superfluous since entries are arranged alphabetically. More important would have been a subject index which is missing. Obviously not much care has been taken in making the Bibliography more useful.

B.P.R.

**RIFTED BASINS & AULACOGENS, GEOLOGICAL AND GEOPHYSICAL APPROACH.** (1993), S.M. Casshyap (Editor), Gyanodaya Prakashan, Naini Tal, 315p. Rs.350.

The book under review is the result of a symposium held at Aligarh in January 1990 on "Rifted Basins, Aulacogens in Sedimentation, Crustal Evolution and Mineralization", as part of an Indo-Soviet Collaboration Programme.

The papers are grouped in three sections, (A) Evolution and Structure, (B) Sedimentation, Magnetism, Volcanism and Geophysical signatures, and (C) Case Histories. The coverage is not uniform. More number of contributions are from Rajasthan and Western India. Archaean and Proterozoic sedimentary basins of South India and the Gondwana basins of Eastern and Central India are poorly represented.

The book starts with a lucid review of 'Riftogenesis' and its role in the evolution of the earth's crust by the Soviet scientist Khain. The subject is very interesting. It would be good if a genetic classification of rift basins of India is attempted tracing their development from the Archaean (greenstone belts), through Early Proterozoic (Aravalli) to the more recent Gondwana and Tertiary rift basins.

S.K. Biswas provides a tectonic framework for the intra-cratonic basins of late Palaeozoic to early Mesozoic age. Environment of deposition varies progressively from glacio-marine to fluvial and deltaic. He makes a passing reference to the Palghat gap as a shallow intracratonic rift with a brief incursion of sea during one of the Pleistocene interglacials. There is a good discussion of the Narmada-Son shear zone. Several instructive figures illustrate the dynamics of Indian plate motion.

U. Raval makes an interesting correlation between heat-flow patterns and intercratonic mobile belts of India and speculates on the causes of mobility. A.B.Roy and others argue that Aravalli of lower Proterozoic age represents a package of volcano-sedimentary rocks deposited in a proto rift basin. Stages in the evolution of the basin are discussed.

There are a few papers dealing with geochemistry and volcanism but these appear out of place and do not add much to the information about the basins.

Two contributions on the evolution of the Gondwana basins are important. These basins appear to have developed over reactivated Proterozoic rifts. Palaeogeographic reactivation of the Gondwana basins, south of Narmada-Son lineament, and their possible extension in the Bundelkhand block is interesting but requires to be supported by further intensive sedimentological studies.

India has nearly 26 sedimentary basins ranging in age from Proterozoic to the present. Our information on the tectonic features of these basins and the character of their sedimentary fill