

## MICROPALAEONTOLOGISTS' MEET AT MADRAS

A Workshop on "Micropalaeontological studies and their application" was held during March 26-29, 1993 at the Department of Geology, Madras University (A.C.College Campus), Madras. Lectures were delivered on some aspects of micropalaeontology, biostratigraphy, paleoecology and sedimentary basins (oil bearing). Contributions were also made on a wide variety of other topics such as Lower Palaeozoic Ichnofossils of India, advanced researches on foraminifera and ostracod microfossils, Lesser Himalayan microfossils (organic-walled microfossils), biostratigraphy etc. One of the notable features of the workshop was the 'practicals' held on the afternoons to familiarise the participants with different materials and techniques in micropalaeontology.

*Dept. of Geology  
Lucknow University  
Lucknow- 226 007*

A.Ch.NAUTYAL

## GROUP DISCUSSION ON THE VINDHYANS: A REPORT

Identification and promotion of frontline and challenging areas in earth sciences have always been the endeavour of the Programme Advisory Committee on Earth Science (PAC-ES) of Science and Engineering Research Council (SERC), Department of Science & Technology, New Delhi. Last year, this committee identified five emerging areas, having strong relevance with the Indian Geology, for the purpose of holding Group Discussions in order to bring out the achievements in these respective fields and highlight the gaps that need concerted and co-ordinated efforts to narrow them down. The DST-sponsored Group Discussion on the Vindhyan was second such in the series organized by the Department of Geological Sciences, Jadavpur University, Calcutta-32 for a period of three days from 15-17 March, 1993.

The following recommendations were made in the Plenary Session of the Group Discussion on the Vindhyan as a follow up action:

a. Considerable volume of geophysical data are now available, along with data from 15 deep wells, to provide a fair degree of subsurface control for adopting a holistic approach in interpreting data in geological terms. This task may be undertaken by a group of scientists drawn from the Geological Survey of India, Oil & Natural Gas Commission, National Geophysical Research Institute and few selected Universities. Besides a lot of subsurface data are locked up with GSI, ONGC, and NGRI. A centralized data bank should be opened for storage and retrieval of data by the user agencies.

b. The present confusion in regard to the nature of the basement rocks of the Vindhyan basins, arising out of various interpretation of geophysical data collected from key areas, should be addressed by designing special geophysical surveys.

c. The geological and geophysical work on the Vindhyan in the western part of the Vindhyan basin (Rajasthan) appear to be too meagre to draw any meaningful conclusion, apart from the work of Heron in the year 1936. This sector, therefore, merits greater attention by the Vindhyanists. This will sort out the problems of nature of relationships between this basin vis-a-vis Son Valley Vindhyan basin. Do they represent a continuous basin or are they separate basins? What is the tectonic history of these two basins?

d. Bastar craton associated with Moho uplift should be a good target for future base metal exploration programme.

e. The Bijawar and the Mahakoshals which underlie the Vindhyan sediments should form good target for tectono-stratigraphic studies to bring out, in clear terms, the nature of relationships with the overlying Vindhyan. It is expected that the work on the Bijawar and the Mahakoshals will help in understanding the tectonic evolutionary history of the Vindhyan basins.

f. Sequence stratigraphic analyses of the sedimentary records of the Vindhyan, hitherto not attempted, is urgently needed to help identify genetically related sedimentary packages and recognition of intra-, and interformational unconformities. It is expected that the identification of maximum flooding surfaces can help in correlation of stratal packages all over the basin.

g. Volcanics within the Semri Group have never been studied seriously with respect to petrography, geochemistry and their field relationships. It needs immediate attention to understand the tectonic evolution of the basin.

h. Process-response depositional modelling for every formation within the Vindhyan Supergroup need to be undertaken on regional scale.

i. Carbon isotope variations of various carbonate facies need to be undertaken in order to chart the paleoclimatic fluctuations, if any.

j. A small group of interested workers need to be formed to deliberate and develop a model methodology for study and develop a uniform nomenclature of stromatolites before these are used as stratigraphic markers.

k. Need is felt to set up a separate geochronology laboratory to undertake the systematic work of dating. Moreover, a committee of young and enthusiastic workers need to be formed for reconciliation of data on biota, stromatolite and geochronology of the Vindhyan sequences.

l. It is necessary to re-review and consider the Ediacarian flora/fauna, or in other words, the attainment of multicellularity in the biotic kingdom vis-a-vis records from the Vindhyan.

It is hoped that this Group Discussion will kindle a keen interest amongst Earth Scientists in the country for having a relook into the existing data sets and bridging the identified gaps by way of multi-disciplinary projects on various facets of Vindhyan.

K R GUPTA  
ESS Division,  
DST, New Delhi

AJIT BHATTACHARYYA  
Dept. of Geological Sciences,  
Jadavpur University Calcutta

### PREMATHA NATH BOSE MEDAL, 1990

The Prematha Nath Bose Medal of the Asiatic Society, Calcutta, for the year 1990 has been awarded to Dr.B.P.Radhakrishna for his "conspicuously important contribution to geology with special reference to Asia". Prof. D.Mukhopadhyay received the medal, on behalf of Dr.Radhakrishna at the Annual General Meeting of the Society held on 3rd May, 1993.