

## Micropalaeontology and stratigraphy\*

The 25th Indian colloquium on micropalaeontology and stratigraphy was organized recently. The principal themes of the silver jubilee event were: recent developments in micropalaeontology; advances in micropalaeontological studies of Foraminifera, Radiolarians, Ostracods, Bryozoa, Calcareous Algae, Diatoms, Nannoplanktons, Dinoflagellates, palynological studies, geochemical studies of microfossils and their application in palaeoclimatology, palaeoceanography, palaeolimnology and tracing the history of marine and lake pollution; microfossils and Late Quaternary climate; microfossils as biological proxy for ecological and environmental changes, global warming and its impact recorded by high-resolution microfossils study; integrated stratigraphy and applied micropalaeontology; application of micropalaeontology and stratigraphy in the petroleum and coal industry, and advances in geobiology and ichnology. About 100 scientists, students and professionals from different parts of the country participated; 35 oral and 9 poster presentations were included in the colloquium. The conference was inaugurated by M. P. Singh (Secretary, Palaeontology Society of India, Lucknow).

In his presidential address, Singh emphasized on the need for preservation of geoheritage sites and fossil localities present in different parts of India. In cooperation with officials of the concerned states, he suggested that some preventive measures be taken to check vandalism by the local populace, which is rampant in the fossil localities. He suggested that the syllabus of geology, palaeontology and/or micropalaeontology in colleges

and universities needs revision and updation. In the technical sessions that followed, A. Govindan (Asian Biostratigraphic Services, Chennai) based on the foraminiferal fauna in the Indian basins, spoke about the presence of oceanic red beds during the Cretaceous and their bearing on hydrocarbon exploration. Rajeev Nigam (CSIR-National Institute of Oceanography (NIO), Goa) drew attention to the foraminifera parks in China and use of forams for developing curios such as foram keychain, lollipop, salad, ear rings, etc. Anand S. Kale (Bharat Petroresources Ltd, Mumbai) analysed the sequence stratigraphic studies in India. Ajit Vartak discussed a unique mode of education in geosciences, i.e. palaeophilately (collecting and publishing stamps). Ippolitov Alexei P. (Geological Institute of Russian Academy of Sciences, Moscow, Russia) reported new finds of megateuthids from the Middle Jurassic of Kachchh and discussed their significance for understanding the evolutionary history of Gondwana belemnites, upper Bathonian and lower Callovian belemnites in Russia. K. G. Kulkarni (Agharkar Research Institute, Pune) reviewed the significance of ichnofossils in palaeoenvironmental studies. Amit K. Ghosh (Birbal Sahni Institute of Palaeosciences (BSIP), Lucknow) explored the recent advances on studies of fossil calcareous algae. Besides taxonomic advancements, Ghosh also discussed their application in hydrocarbon exploration in Canada, New Mexico, Libya, southeastern Utah and Colorado, west Texas and USA and made case for such studies in India. R. Venkatchalapaty (Periyar University, Tamil Nadu) presented an overview on the application of diatoms in assessing the ecological status of freshwater. On the basis of diatoms and water quality indices, he assessed the ecological status and water quality of Cauvery River, Yercaud Lake, lakes in Kodakanal and Salem in Tamil Nadu and Loktak Lake in Manipur. S. M. Hussain (University of Madras, Chennai) discussed the recent researches on ostracods. He spoke about the need for a study of the *in vitro* culture of ostracods. N. Malarkodi (Bangalore University,

Bengaluru) presented a biometric approach and palaeobiogeographic synthesis on the orbitoidal/orbitoidiform larger benthic foraminifera of Upper Cretaceous shallow marine sequences of Trichinopoly, Cauvery Basin. Bandana Samant (Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur) reviewed the palynological studies on Late Cretaceous–Palaeogene periods and their bearing on the palaeoclimate. Rajeev Saraswat (CSIR-NIO, Goa) discussed the various aspects of foraminifera, such as ecology and distribution of *Asterorotalia* and *Uvigerina* in western Bay of Bengal and northern Indian Ocean respectively, and comparison of living and dead benthic assemblages from western Bay of Bengal. M. F. Quamar (BSIP, Lucknow) discussed monsoonal variation in the core monsoon zone of central India on the basis of moisture content, inorganic and organic carbons present in the sediments as well as pollen grains and spores (recovered from the sediments). He also pointed out the signatures of global climatic events such as Younger Dryas event and period of Climatic Optimum.

During the valedictory function, the venue of the next colloquium was announced to be held in Madras University, Chennai, with S. M. Hussain as the convener.

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