

Visakhapatnam – 2004

The Annual General Meeting of the Geology Society of India was held during the first week of November (2nd to 4th) in the Geology Department of the Andhra University at Visakhapatnam. A National Seminar on “Deltas of India” was organized by the Geology Department on the occasion.

The City of Destiny

Visakhapatnam is the second largest city of Andhra Pradesh endowed with rare scenic beauty and salubrious climate. The blue waters of the Bay of Bengal with palm-fringed beaches on one side and the khondalitic hills of the Eastern Ghats on the other characterize the picturesque landscape. This strategic coastal town has had a hoary past dating back to the Kalinga Kingdom, under Ashoka's rule in 260 BC. The Vengi, Pallava, Chola and Ganga dynasties ruled the city up to the 15th century, when Visakhapatnam became a part of the Vijayanagar Empire.



Panoramic view of the Visakhapatnam coast as viewed from the Kailasagiri Hill.

The Dutch, the French and the English established themselves as colonial powers from the 17th century onwards and the port was utilized for the export of tobacco, ivory, indigo and textiles. The natural protected harbour at Visakhapatnam has played a major role in the rapid development of the city since independence which has earned for it the sobriquet of the ‘City of Destiny’. Visakhapatnam has evolved into a major industrial hub and port city of Andhra Pradesh with ship building yards, dry docks, oil refinery and petrochemicals, a major steel plant and several other ancillary industries. The Eastern Naval Command has chosen the city as its headquarters owing to its geostrategic location.



Annual General Meeting at Visakhapatnam, 4th November 2004.

Andhra University Geology Department

Visakhapatnam also had the distinction of being a major educational center of coastal Andhra Pradesh from the early thirties of the last century. The Geology Department of the Andhra University is one of the older departments in the country dating back to 1941. The department made major strides under the stewardship of late Professor Calamur Mahadevan during the period 1945-1962.

National Seminar on Deltas

In view of the recent discoveries of oil and particularly vast resources of gas in the Godavari and Krishna deltas of east coast and in contiguous offshore as well as in deep waters, it was felt that a National Seminar on "Deltas of India" would not only bring out the recent advances in the basic scientific knowledge about the evolution of these deltas but also highlight the new and exciting discoveries of hydrocarbons.

Dr. B.P. Radhakrishna, President of the Geological Society of India in his address at the inaugural session of the seminar (read out by Prof. R. Vardyanadhan, Vice-President), highlighted the importance of the subject of deltas chosen for the National Seminar as follows:

"The study of Quaternary, although geologically recent has long been neglected. It is good that increasing attention is being given to the subject. Deltaic and shelf sediments can furnish a great deal of information on past climate, especially the course of the monsoon.

Indian history according to our historians starts with the birth of the Buddha around 500 BC. What happened before is dubbed as pre-history. The great texts – the *Vedas*, *Puranas* and the epics *Ramayana* and *Mahabharatha* are not subjects of deep study. They are collectively dismissed as myths. Our ancient civilization was evolved on the banks of rivers. River deltas, whose study can yield rich material, can enable to build up a history of past events. River deltas are the cradle of Indian Civilization and merit a closer study. Apart from this historical perspective deltas are important for their hydrocarbon potential.

The discovery of vast amounts of gas off the Godavari delta will open up the entire east coast and it will soon become a beehive of activity.

Andhra University and its geology department will have to play an important role in all these developmental activities. You should gear yourself to take up these new tools and revive the past glory of the Andhra University."

Dr. B.P. Radhakrishna also paid rich tributes to the vision and sagacity of late Prof. Calamur Mahadevan. To quote him:

"Prof. Mahadevan had the foresight and vision to start newer branches of study like marine geology, nuclear geology, mineral beneficiation, geochemistry and geomorphology. He selected bright students and sent them to prestigious universities abroad, giving them the best training in these newer disciplines. Not only that, he invited eminent professors from abroad to come and lecture to the students and teach them newer techniques. No other university in India can claim this distinction. You should feel proud of your university."

Dr. B.P. Radhakrishna further appealed to the younger generation to come forward and take part in the activities of the Geological Society of India and to particularly support the publication activity of the Society.

Dr. J.C. Mohanty, Principal Secretary (Information Technology), A.P. Government, who was the chief guest at the inaugural function and who was himself an alumnus of the Andhra University Geology Department, presented an insightful address, wherein he

highlighted the initial contributions of late Prof. C. Mahadevan and his team of researchers in collaboration with Prof. E.C. La Fond of the U.S. Navy Electronics Laboratories, on several aspects of the coastal, deltaic and marine geology of the region, including studies on beach sands, submarine landforms in Bay of Bengal, using the simple technologies of the 1950s. He recounted the recent discoveries of a giant gas field in the Bay, utilizing state of art techniques like the 3-D seismics but building on the earlier database generated by the pioneers. As a part of the Cyber Infrastructure, he proposed a National Geosciences Data Repository System (NGDRS), in which the large volume of geoscientific data being generated by various agencies (like seismic data, well-logs, cores, samples and maps) is stored for further geological studies. He further urged the geological profession to demonstrate the utility of the district and taluk geological maps at the village level in village planning, water resources management etc. He pleaded for greater synergy between academic institutions, governmental scientific departments and private enterprise for improving student exposure and training at the university level to cope with the fast changing scenario in the context of globalisation. There were several interesting presentations in the national seminar on the deltas of India, which are summarized in the detailed report appearing in this issue of the Journal. The general consensus was that there is a vast scope for further detailed studies on several aspects of deltas relating to palaeo-climate, monsoons, neotectonics and seismicity in addition to the economic aspects of hydrocarbons and offshore placers (with precious metals like Au and Pt and also diamonds).

Relevance of Geology

An interesting finale to the seminar was a group discussion on the last day on the relevance of geology in the present day context. The discussion elicited wide-ranging responses from all the participants both young and old. The need to rethink, restructure and prioritize objectives of geological studies and research was emphasized. A point that emerged again and again during the deliberations at Visakhapatnam was the lack of mobility of scientific personnel between academic institutions, governmental scientific departments/laboratories and the private enterprise/industry. Unless some innovative methods of ensuring such flexibility are worked out, neither the needs of the student community, nor the industry could be satisfactorily met. The administrative and financial hurdles in accomplishing such an objective should be one of the challenges to be faced by the earth science community and the Geological Society of India will be happy to offer a forum for all the concerned to work out tangible solutions in a specific time frame.

Prof. K.L.V. Ramana Rao, Head of the Department of Geology at Andhra University, his colleagues and the students of the department spared no effort to make all the participants at the seminar and the AGM to feel at home and enjoy their 3-day sojourn at Visakhapatnam. The lively scientific sessions and discussions that followed reflected not only the keenness of the participants but also the smooth efficiency of the organizers deserving appreciation. All the participants carried home pleasant memories of their stay at Visakhapatnam.

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