that CBM business in India was initiated by RIL and a brochure on All India CBM Potential was also brought out by Reliance. He emphasized that for economic production of CBM, we have to meet the challenges posed at greater depths as India has a vast reserve below 1000 m depth.

The significant feature of the seminar was the panel discussion, organized (in the afternoon of 30th May) for sharing of the perception of the CEOs of some organizations who are involved in studies related to CBM. In this session, Dr. Avinash Chandra (Director General Hydrocarbons), Mr. Y.B. Sinha (Director Exploration, ONGC) and' Mr. Prem Sawhney (General Manager, Reliance Industries Ltd.) participated and expressed their perceptions on the future scenario of CBM in India and in the world. After USA, Australia and China, India is the fourth country where CBM is expected to reach a commercial stage. To convert huge resources into recoverable resources and to meet geological and technological challenges for economic production of CBM, sustained hard work, sharing of technology and collaborative approach is essential. Existing techniques of CBM production being expensive, many companies are engaged in developing appropriate technologies for cost-effective production of this gas.

The panel also discussed the future strategies of the country to produce CMM and CBM routinely, alongside coal, to enhance its profitability, safety and India's standing as a leading diversified energy producer. This includes identification of prospective areas in CIL mines/blocks and their hinterland; upgradation of in-house human resources, hardware and software capabilities; interaction for evolution of suitable regulatory mechanisms and recognition of national coal companies as CBM operators, besides being coal producers; development of suitable organization and drawal of bankable project reports; training and development (including foreign training in USA/Australia) for overall appreciation of CBM activities in a comprehensive manner; and implementation of projects in key locations. They also opined that commercial energies can be replaced completely or partly by CBM. Harnessed mainly for power generation, CBM can be bottled as CNG (condensed natural gas) and can get very rewarding price, if high cost LPG (liquified petroleum gas) is replaced by it.

The seminar was a good platform for sharing knowledge, information and experience of the country's experts engaged in policy formulation, survey, prospecting, recovery and processing of CBM. It was recommended from the outcome of the Seminar that a detailed field and micro-scopic studies of coal (cleat/fracture pattern, petrography, permeability, rank, etc.) should be done, equipments should be updated, stimulation techniques suitable to Indian conditions should be applied, and various Universities and Institutions should be provided with proper CBM training and education. Mr. M.M.K. Sardana, Special Secretary, Ministry of Power (Govt. of India) addressed the valedictory session of the seminar.

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REPORT ON SECOND WINTER SCHOOL ON SEDIMENTARY FACIES AND BASIN ANALYSIS

Recognising the economic applications of sedimentary basin analysis, the Earth System Science division of the Department of Science and Technology (DST) planned to train young geoscientists in this specialized field. A series of three Winter Schools on Sedimentary Facies and Basin Analysis are proposed over a period of three years for those engaged in teaching and research in the areas of sedimentology, palaeontology, stratigraphy and petroleum geology. After the success of the first School in this series, organized in December 2002 at Jadavpur University, the Second Winter School was conducted from 17 November to 7 December 2003 at IIT Bombay. Eighteen participants, including research scholars, post-doctoral fellows and young faculty from 15 institutions attended this course. Five of these participants had also attended the First Winter School at Jadavpur University.

In order to popularize process-related, high resolution facies analysis and basin studies the programme lays stress on process-product relationship through classroom teaching, laboratory exercises and observations in modern and ancient sedimentary settings. The lectures were held in the good ambience of the IIT Guest House facing Powai lake and the Deccan hills. Dr. K.R. Gupta delivered the first lecture on "Earth Science Research in India: Focus, Funding

and Facilities" On the following days, lectures on a wide range of topics were covered to explain the mechanisms of basin formation, the types of sedimentary basins and the stratigraphic response to tectonics, climate and eustasy The examples of Indian basins, especially the foreland and rift types, were discussed to illustrate the concepts of basin evolution The course also stressed the need of pursuing quantitative approach in basin studies The lectures on quantitative dynamic stratigraphy and computer methods in basin mapping introduced the participants with some of the available techniques in quantitative basin analysis The participants were also apprised of stratigraphic software available commercially and freely in public domain Several lectures emphasized new concepts of seismic and sequence stratigraphy Examples of petroliferous basins given by professionals from ONGC and British Gas Exploration India Ltd clarified these concepts and highlighted the economic applications of basin analysis

The Winter School lays equal emphasis on fieldwork to explain facies and stratigraphic concepts in modern and ancient settings The sedimentary characteristics of modern coastal environments were explained along the Mumbai coast This was followed by a week-long fieldwork in the rift sedimentary basin of Kutch Several sections were shown to explain the strato-types and it was discussed how the stratigraphic build-up in this basin can be interpreted in terms of basin tectonics and sedimentation Due to excellent preservation, these sections proved important in explaining sedimentary processes, taphonomy and sequence stratigraphic concepts Well-preserved sections and distinct faunal breaks in the Cenozoic sections made it easy to recognized the sequence boundaries and parasequences in the field

During the first two Winter Schools the emphasis has been on the understanding of process-product relationship in sedimentary environments and the various descriptive aspects and interpretations of sedimentary records The concepts of sedimentary facies and basin analysis were explained in the field, both in modern and ancient settings The feedback from the participants is to make the course more field-oriented and to learn detailed documentation in small and selected sections The third Winter School is likely to be held at the end of this year and the interested persons may get detailed information in due course at our website http //www geos iitb ac in/dstschool

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SIXTH MEETING OF THE DST PROJECT ADVISORY AND MONITORING COMMITTEE ON DEEP CONTINENTAL STUDIES AT BANGALORE UNIVERSITY

The sixth meeting of Project Advisory and Monitoring Committee (PAMC) for Deep Continental Studies (DCS) of the Department of Science and Technology (DST), Government of India was held in the Department of Geology, Bangalore University, Bangalore during 20-21 October, 2003 The inauguration was held on the 20 October 2003 Prof B C Prabhakar, Coordinator of the meeting welcomed the members of the PAMC as well as the invitees Prof G Srinivas, Chairman of the Geology Department highlighted the academic and research activities and contributions of the Department and sought support from the DST in their future endeavours Shri D N Avasthi, Chairman of PAMC (DCS) who gave the inaugural address pointed out the aims and objectives of the different programs of deep continental studies Dr K R Gupta, Advisor, ESS Division, DST spoke on how the research projects are evaluated before considering them for funding by DST and emphasized the need for taking up challenging problems in earth system sciences Shri G D Gupta, Advisor, Seismology Division, DST who graced the occasion gave a brief account of the seismological situation in India Dr Ch Sivaji, Scientist-D, ESS Division, DST and convener of the meeting announced the recent awards and achievements of the PAMC members, and the publications brought out by DST funded projects Prof M S Thimmappa, the Vice-Chancellor of Bangalore University presided over the inaugural function The function was also attended by faculty members, research scholars and students Prof N Shadakshara Swamy conducted the proceedings and Dr M Jayananda proposed the vote of thanks

The inaugural function was followed by a special lecture by Prof R S Sharma, INSA Emeritus Scientist, University of Rajasthan, Jaipur on Magma Generation in Mantle and Lower Crust The lecture was informative and led to thought provoking discussion on various aspects of magma generation and crust-mantle interaction