

and geo-tectonic settings of the basins. Large resources of high rank coal in the country provide ample opportunities for harnessing this un-conventional source of energy.

The Indian coal is mainly confined to the Permian Gondwana basins and Cenozoic basins. Methane emission studies from working mines of India indicate most of the degree three gassy mines (> 10 cubic m/ton) are confined to the four Damodar Valley coal fields, viz. Raniganj, Jharia, Bokaro and North Karanpura in Bihar and West Bengal. Of these, the thickest bituminous coals are extensively developed in the Barakar Measures and in Raniganj Measures of Lower and Upper Permian age, respectively. The Barakar coal seams are superior to Raniganj coal seams as coal bed methane targets. Tertiary coals are widespread in Assam, Meghalaya, Arunachal Pradesh, Tamil Nadu, Rajasthan and Gujarat. Tertiary coals are generally found to be lignitic to sub-bituminous in rank and are generally considered to be unsuitable for coal bed methane target. However, Tertiary coals in petroliferous basins of Cambay, Upper Assam and Assam-Arakan may be prospective due

to reported higher gas content, which is probably stored in the coal after generation from deeper-lying hydrocarbon source beds or may be of biogenic origin.

Based on the initiative taken by Directorate General of Hydrocarbons, Government of India has awarded 16 CBM blocks to different companies for exploration and production of CBM in the country. The total production from these blocks is estimated at 23 million metric standard cubic meter per day at their peak production level. Results obtained from more than 75 exploratory or test wells in these blocks have been very encouraging and there have been promising finds in eastern and central part of India. Preliminary estimates put the anticipated CBM production from these blocks in the range of 20-22 million cubic meters per day for about 20 years.

V K SIBAL¹, S V RAJUI¹, M E A MONDAL² and M NAUROZ AHMAD^{1,2}

¹Directorate General of Hydrocarbons, New Delhi - 110 001

²Department of Geology, Aligarh Muslim University
Aligarh - 202002. Email: emondal@lycos.com

WORKSHOP ON EARTHQUAKE - AWARENESS AND DISASTER MANAGEMENT

Jabalpur lies in seismic zone III where an earthquake of 6.0 magnitude occurred in May 1997. Some of the localities of Jabalpur with thick soil cover and reclaimed areas need particular attention in disaster management to minimize losses from possible earthquakes. Keeping these aspects in mind a workshop on "Earthquake-Awareness and Disaster Management" sponsored by Madhya Pradesh Council of Science and Technology and organised by South Asian Association of Economic Geologists (SAAEG), Jabalpur Chapter, was held on 27 June, 2006. The workshop was convened by D K Trehan.

The workshop was inaugurated by Dr. M K Soni, DDG, Geological Survey of India, Madhya Pradesh and Chhattisgarh. In his inaugural address Dr. Soni said that earth scientists have done intensive work on earthquake and disaster management and efforts should be made to enlighten the public on various aspects of management. The first technical session was presided by R K Singhal. S D Pimprikar presented his keynote paper on 'Seismotectonics in parts of Central India'. D K Trehan spoke on Monitoring of Crustal Deformation. Anamika Sharma presented her paper on Earthquake Resistant Design of Buildings. V K Khanna

highlighted various approaches in the delineation of seismic zones.

The second technical session was presided by D K Jha. In this session S D Pimprikar spoke on Principles of Microzonation. Agnivesh Uday Roy, of Urban Earthquake Vulnerability Risk Project of UNDP, screened a film on earthquakes, covering management aspects also.

Earlier a poster exhibition on the said topic was inaugurated by S K Chattopadhyaya, Income Tax Commissioner. A book titled *Bhukamp Kya? Kyon? Kaise?* in Hindi, written by V K Khanna and published by Kitab Ghar, New Delhi was released by Dr. Soni. The book is a part of popularization of the science of earthquake.

A large number of citizens, scientists from Geological Survey of India, Indian Bureau of Mines, DGM, M P Government and educational institutions attended the workshop. Organising Secretary, Prof. Khanna thanked various institutions, particularly GSI, for their cooperation in organising the workshop.

232, Napier Town
Jabalpur - 482 001

V K KHANNA