REPORT ON THE SECOND MEETING OF IGCP 449: GLOBAL CORRELATION OF LATE CENOZOIC FLUVIAL SEQUENCES

The second meeting of the IGCP 449 was held at the Indian Institute of Technology, Kanpur from December 20-22, 2001. The meeting was jointly convened by Dr. R. Sinha (IIT Kanpur) and Prof. S.K. Tandon (Delhi University) supported by UNESCO, IUGS, SCIR and AICTE. The general programme of the meeting included invited talks on the first two days followed by a field excursion in the adjoining gangetic plain. The first day of the meeting focused upon the fluvial systems of Australia (Prof. R.J. Wasson, Australia), Russia (Andray Tchpalyga, Ukraine), Turkey (R.W.C. Westaway, UK) and a series of talks on the Indian river systems. Prof. Vishwas S. Kale (University of Pune) presented a case history of western Indian rivers and highlighted the importance of palaeoflood studies during historical times. Dr. V. Jain (IIT Kanpur) presented some interesting results on the rivers of north Bihar plains and showed that rapid migration of these rivers is a cumulative effect of tectonic activity and lateral erosion due to hydrological processes. Dr. U.K. Shukla (Kumaun University) presented his work on the Ganga river and deliberated upon various sedimentation models. The day ended with a workshop on dating of fluvial sediments by Prof. Ashok K. Singhvi of Physical Research Laboratory, Ahmedabad who emphasized the need for producing a comprehensive database on chronology of alluvial sediments in the gangetic plains. Prof. Singhvi stressed upon continuing a systematic study of dating of fluvial sediments to trace back the history of these rivers and understand their long term behaviour.

The second day of the meeting started with the keynote lecture by the IGCP 449 leader Prof. David Bridgland of Durham University, UK who presented his research on the largest terrace sequence from Thames river, England. He also presented his recent work on the fluvial terrace sequences from Syria. Prof. R. Sinha presented his work on north Bihar plains, eastern India and emphasized that the plains of north Bihar are very different from the other parts of gangetic plains in terms of their sedimentation history. The rest of the meeting was dominated by talks on the western Indian rivers. Prof. S.K. Tandon (Delhi University) presented an excellent review of the sedimentological research in India with examples from different parts of the country. He emphasized the need for rigorous and intensive studies in the Ganga Basin as the region presents a variety of sedimentation patterns and a complex history of river evolution. The other important speakers included L.S. Chamyal from M.S. University of Baroda and Dr. Sheila Mishra from Pune University. A group of researchers from the Wadia Institute of Himalayan Geology presented a detailed account of the long sedimentation history of the Himalayan foreland based on facies analysis and palaeomagnetic data. They showed the variations in sedimentation history in the Himalaya since 10 million years and emphasized the need to find modern analogues of such sedimentary systems in the present-day environment.

Prof. S.B. Bhatia (Chandigarh) presented a very detailed account of the use of microfossils for global correlation. Important aspects of arsenic contamination in fluvial sediments were highlighted by Prof. B.C. Raymahashay of IIT, Kanpur who deliberated upon the various mechanisms by which arsenic is cycled in fluvial sediments. The day ended with the IGCP 449 business meeting in which the participants discussed plans for the next year. It was strongly emphasized that the collection of papers presented at the meeting should be published as soon as possible in a national journal. Attempts should also be made to publish a detailed review of the Indian work in an international journal.

A field excursion was arranged on the final day of the meeting to the Yamuna plains around Kalpi and the Ganga plains around Bithoor. The participants were exposed to a variety of geomorphological features of the Ganga and Yamuna rivers and the sedimentary sequences along the banks were examined. Prof. S.K. Tandon, Prof. R. Sinha and U.K. Shukla explained their current research in the area which generated a lot of interaction.

Department of Civil Engineering, IIT, Kanpur - 208 016

Department of Geology, Delhi University, Delhi - 110 007

ADDENDUM

The contact course on Structural Geology (JGSI, Notes, v.59, no.3, p.281) was sponsored by the Department of Science and Technology (DST) and held in the Department of Geography, North Eastern Hill University, Shillong. Dr. A. Matin was also a member of the Core faculty.