Indian Participation in XVIII International Union for Quaternary Research (INQUA) Congress, 2011 — *M.C. Manoj, National Centre for Antarctic & Ocean Research, Goa, (Email:manojmc@ncaor.org), Ashok Singhvi (PRL, Ahmedabad) and Alpa Sridhar, M.S. University of Baroda*

Quaternary researchers from all over the world meet at the INQUA Congress once every four years, to exchange the latest research results and to develop research agenda for the inter congress years. The Quaternary period is an interval with dramatic and frequent changes in global climate which spans the last 2.6 million years of the Earth's history. Significant and potentially rapid environmental changes could pose major challenges for human habitability and Quaternary scientists strive to interpret the changing world of the glacial ages, and their impact on our planet's surface environments, as well as their possible role in the human evolution. Quaternary palaeoclimatic investigations play a key role in helping evaluate the possible future course of climate change on our planet. The XVIII International Union for Quaternary Research (INQUA) Congress, Bern, Switzerland, from July 21st to 27th 2011, was aimed to divulge to the participants a breadth of research careers within the Quaternary science community and to give an opportunity for international and interdisciplinary research collaborations. Physics, Chemistry, Biology, Earth Sciences, Meteorology, Climatology, Mathematics and Archaeology – all these fields interacted in multi-, trans-, intra- and interdisciplinary projects. The Congress emphasized on the global impact of Quaternary research and highlighted the interdisciplinary and multinational efforts in research and communication of results to the society. The Conference was inaugurated by Prof. Allan Chivas (INQUA President) followed by speeches from Prof. Christian Schluchter (LOC President), Mr. Urs Wugler (Rector of the University of Bern) and Mr. Alexander Tschappat (Mayor of the City of Bern). The INQUA medals and laudations (The Liu Tungsheng Medal and The Shackleton Medal) for outstanding research in Quaternary were also presented. The major focus of the Congress was climate change and proxies, sea level changes and earthquakes and tsunamis. The special talks

on “The New Zealand Earthquake” by David J.A. Barrel (GNS Science, Dunedin, New Zealand) and “The Japan Earthquakes and Tsunamis” by Koji Okumura (Hiroshima University, Hiroshima, Japan) were very informative. The plenary lectures by Johannes Oerlemans on Climate change and global glacier dynamics, Maureen E. Raymo on Plio-Pleistocene ice volume, Antarctic climate, and the global $\delta^{18}\text{O}$ record and Peter Clark Sea level – past and future were outstanding. Thomas Stocker gave a brief on IPCC AR5 – The Physical Science Basis: Emerging questions, structure of report, and schedule to ensure maximum inputs in the report from the INQUA community.

The Indian delegation, largest ever to represent the country at INQUA, comprised 16 participants owing to the financial support from Ministry of Earth Science (MoES), Indian National Science Academy (INSA), Council of Scientific and Industrial Research (CSIR), National Centre for Antarctic & Ocean Research (NCAOR) and the INQUA Commission. More than 1000 posters, 1000 oral presentations and 7 plenary talks, under 87 different sessions were made where India contributed 8 oral presentations and 8 posters. Prof. Ashok Kumar Singhvi, Physical Research Laboratories (PRL) gave an invited talk on “Implications of Luminescence dating of terrestrial sediments in Land Sea Correlations.” M.C. Manoj, NCAOR, was given the best poster award sponsored by (Past Global Changes) PAGES for the poster entitled “Palaeoclimatic and palaeo-environmental history of the late Quaternary sediments in a core from the Indian sector of the Southern Ocean: rock magnetic and geochemical signals”. This eventually opened several key discussions on environmental magnetic, geochemical, ice rafted debris, and stable isotope proxies from the Indian sector as well as other parts of the Southern Ocean. Dr. Sayyed Mohammed Rafi, Poona College co-convoked a session on ‘Indicators of

climatic changes in saprolite, palaeosols, polygenetic soils and soil sediments’. Prof. Rajiv Sinha (IIT, Kanpur), Dr. Farooqui Anjum (Birbal Sahni Institute of Palaeobotany (BSIP)), (M.S. University of Baroda), Dr. Hundekari Sajid and Dr. Sayyed Mohammed Rafi (Poona College), Prof. Bhushan Deota, Dr. Rachna Raj and Dr. Alpa Sridhar (M.S. University of Baroda) made presentations. Dr. D.M. Maurya (The M. S. University of Baroda), Dr. Sanyal Prasanta (Indian Institute of Science Education and Research Institute), Dr. Malik Javed Husain N (Indian Institute of Technology (IIT) Kanpur), Dr. Mathew George, (Indian Institute of Technology (IIT) Bombay), Dr. Ruta Bharat Limaye (Agharkar Research Institute), Parul Joshi and Prizomwala Siddharth (M.S. University of Baroda) presented posters. The presentations focused on palaeoclimatic, palaeoseismic and neotectonic proxies from the sediment record in the fluvial and marine environments in India. Few participants also joined the mid-congress excursions encompassing several Quaternary formations around Bern and the large Glaciers, organized as part of the congress. The conference concluded on the evening of 27th July 2011, which marked the closing of the official INQUA business by the sponsors.

This congress offered an excellent platform and a good opportunity to showcase India's presence in the Quaternary research to members of the international Quaternary community that would help to forge new collaborations. INQUA proposes to invest more energy in the future: firstly, in encouraging young scientists to enter into the fascinating and challenging field of Quaternary Sciences, and secondly, in keeping up the present momentum of the Union until the next congress and beyond. Therefore, a sizeable participation in the multi institutional projects being funded by INQUA for specific working groups can be ensured if more workers in Quaternary Sciences are promoted from the country.