The Memoir 79 of the Geological Society of India entitled “Bengaluru – Water Problems of the Fastest Growing City of India”, was ceremonially released in a largely attended function on 22nd December, 2011, in the auditorium of Bangalore Water Supply and Sewerage Board (BWSSB), Cauvery Bhavan, Bangalore. The function was organised jointly by the Geological Society of India and Bangalore Water Supply and Sewerage Board, and was presided over by Shri P.B. Ramamurthy IAS and Chairman, BWSSB. Shri Suresh Kumar Hon’ble Minister, Law and Parliamentary Affairs was the Chief Guest. Dr. A. Ravindra, IAS (Rtd.) & Advisor to the Chief Minister, Govt. of Karnataka, and Shri V.S.Prakash, Director, Karnataka State Natural Disaster Monitoring Centre also graced the occasion as Guests of Honour.

The book covers the important study of the genesis and possible solutions of the raging water stress in Bangalore (now renamed Bengaluru) City, and consists of articles from eminent experts in water sector covering various aspects of the subject. The city of Bangalore is unique in its water supply system as it is catered from Cauvery source by lifting 510 m from a distance of about 80 km. Since the piped water supply system is unable to cope with the increasing demand, people are tapping groundwater as an alternate source, particularly in the peripheral areas. Hence, there is a phenomenal growth of groundwater abstraction structures in recent years which is far above than the statistics available. At present BWSSB is able to cater about 870 MLD towards water supply against the demand of 1200 MLD and the shortage is met through bore wells. The book dwells on all aspects of the subject ranging from water scarcity to water security.

R.H. Sawkar, Secretary, Geological Society of India, in his welcome address, informed the delegates about the activities of the Society in generating public awareness on region-specific water crises and indigenous solutions thereof. The Memoir 79 on water crisis in Bangalore is one of the outcomes of these endeavours.

While touching on the various options being mulled over in different quarters, Sawkar underlined the importance of rainwater harvesting and water conservation as advocated in the book, which is a cost effective and technically viable option today. He also reminded all about the need of water atlases and ward wise micro-level surveys as a backup for city’s water management.

After releasing the book, Shri S. Suresh Kumar, Hon’ble Minister for Law, Parliamentary affairs, Govt. of Karnataka, lauded the efforts of the Geological Society and the Editor of the Memoir, in particular, in bringing out this compendium having a treasure of information on the historical to real time transformation of the fastest growing city of the country. He observed that the articles in the volume are lucidly written in simple language on a complex subject and accessible to common man. The Hon’ble Minister also stressed the need for integrated action plan by the concerned departments to chalk out an alternate water management option as a follow-up action. He mentioned about the need to implement rainwater harvesting and artificial recharge schemes on a fast track, as it has been rather slow in picking-up the much needed momentum. Dr. A. Ravindra expressed his views on the management of water resources in the city. He appreciated the role of the Geological Society of India in consolidating the studies on the complex subject of city’s water management in this book. Subhajyoti Das, Editor of the Memoir, presented the synoptic view of the topics covered in the book, stressing a multipronged strategy for the restoration of the Arkavathy river and other water bodies around Bangalore through an integrated plan of rainwater harvesting, conservation of lakes and wet lands, along with artificial recharge of groundwater which only can revive depleted groundwater levels and surface water sources, restore lakes, wet lands, degraded environment and ecology of the city. For this purpose all concerned agencies may be brought under one Urban Water Management Institute as conceived by experts. He recommended a proper role for hydrogeologists in city’s water management.
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 Singhi (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 Schlucher (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 δ¹⁸O 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 Singhi, 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 convened 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), V.S. Parakash suggested ward-wise monitoring of rainfall in the city through telemetric rain gauges in order to compute realistically the runoff and infiltration factors for precise estimation of rainwater, groundwater, surface water resources of the city.