

river processes and developing a national programme on river studies. Several river processes such as fluvial dynamics, flooding, river hydrology and energy distribution, landscape development etc. need to be looked into with a long term perspective and a continuous interaction between river engineers and geomorphologists is more than necessary. Apart from hydrological aspects, several geochemical and biological aspects such as the effect of mixing of waters of different composition, extent of river pollution, aquatic life and ecology need to be understood thoroughly before such a mega-project is launched. Apart from the main river channels, the delta systems would require special attention as it supports a rich life system which survives on the nutrient (sediment) supply from the upper catchments. A large issue is the effect on monsoon system which is partly operated through changes in salinity and sea surface temperatures. River interlinking would involve large scale transfer of water and sediment mainly from the Ganga-Brahmaputra system and is likely to affect the salinity contrast between the Bay of Bengal and Arabian sea which is presently responsible for driving the monsoon system.

It is obvious that there are a large number of 'unknowns' with regard to the river interlinking project and it is strongly desirable that an intensive data generation and scientific debate on this should happen to understand the long term, perhaps irreversible, impact of such a project. To start with, some of the recommendations are as follows:

- Review and compile what we know on the geological aspects of river systems of India - remote sensing based resource mapping;

- Understanding of response of rivers to hydrological changes expected by interlinking including hydrological modeling;
- Understanding of hydrology-geomorphology linkage;
- Identify different links across the country for detailed investigations - river dynamics, spatial and temporal variability of fluvial activity, Water quality modeling, effects of mixing;
- Data-based knowledge generation through research projects;
- Identify primary data required and liaison with NWDA and other agencies;
- Supplement the DPRs with intensive research in impact on earth system and
- Pick-up areas where linking has been done on a smaller scale for impact assessment.

Following the lecture, several issues were raised during the ensuing discussion. Most of the fellows and scientists in the audience agreed on the need for data generation in understanding the river systems in general and impact of the interlinking in particular. Mr. Ravi Shanker, formerly of the Geological Survey of India and Vice President of the Society however cautioned about the 'overreaction' of the earth scientists on this issue and felt that several of the facts about the Indian river systems such as migration, flooding etc. have been known for long and should be incorporated in the interlinking scheme as and when implemented.

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'SCAR' OPEN SCIENCE CONFERENCE AT HOBART, AUSTRALIA

Scientific Committee on Antarctic Research (SCAR) is a multidisciplinary committee of the International Council of Science (ICSU) that deals with Antarctica and the Southern Ocean. It consists of 28 full member countries and 4 associate member countries.

The 2nd SCAR Open Science Conference on "Antarctica in the Earth System" was held at the Great Chancellor Hotel, Hobart, Australia from 12-14th July 2006. The Open Science Conference was attended by 850 delegates from around the world and India was duly represented by a group of scientists headed by Rasik Ravindra, the Director of National Centre for Antarctic & Ocean Research (NCAOR).

The Opening Ceremony began with an address by Dr. Jorn Thiede, President of SCAR, followed by addresses by Gerard Jugie, President of COMNAP (Committee on

Managers of National Antarctic Programme), Moh. Nordin Bin Hassan, Director, ICSU Regional Office, Asia and Pacific and a presentation by Dr. Tony Press The Director of Australian Antarctic Division. The first day of the Conference was devoted to Plenary Sessions, which covered presentations from Antarctica in global climate system covering varied topics from atmospheric sciences, geosciences, biology, glaciology, limnology to even history of Antarctic research. This was a day, which belonged to the big players of Antarctic Science. Three prominent international Antarctic scientists were honoured for their outstanding achievements by SCAR. Prof. Jorn Thiede presented the Presidents Medal for Outstanding Achievement in Antarctic Science to New Zealand scientist Prof. Peter Barrett, Director of Victoria University's

Antarctica Research Centre in Wellington, New Zealand Prof Barrett is recognized as a leader of the geological drilling and has been the Chief Scientist for several projects investigating history of East Antarctic Ice Sheet

The SCAR Medal for Excellence in Antarctic Research, was awarded to Professor Paul Mayewski, Director of the Climate Change Institute at the University of Maine, U S A His primary interests are climate change and change in the chemistry of the atmosphere

The SCAR medal for International Scientific Coordination was awarded to Dr David Walton from the British Antarctic Survey, U K Apart, from being a part of the Standing Committee on Antarctic Treaty since 2002, he is the editor in chief of the journal "Antarctic Science" and has written many books on Antarctic research

The next day of the conference (13th July 2006) saw the Sub-Plenary sessions divided into three main heads Geosciences, Physical Sciences and Life Sciences in the morning session with the afternoon session further divided into 12 parallel sessions on sub-groups of these three major groups The major thrust area in the Theme Paleoclimate of Holocene and recent past – has been the ice core results of US-ITASE (International Trans Antarctic Scientific Expedition) and also the high-resolution atmospheric data This is also one of the thrust area of NCAOR In another session on Sea ice and its interaction with Southern Ocean Climate, Dr Bhandari from SAC presented his paper on "A passive and active microwave based investigation of the seasonal and long term dynamics of sea ice edge around Antarctica" which was widely appreciated

The chill on the last day (14th July 2006) marked the culmination of the Open Science Conference The day started with the presentation of Rasik Ravindra, Director, NCAOR who spoke on "Multi-archive, multi-proxy paleoclimatic studies in the Central Dronning Maud Land, East Antarctica Indian Initiatives" – a talk about what in a small way Indian Scientific Community has contributed in the Dronning Maud Land – be it lakes, glaciological studies, ice cores as well as geological mapping The talk of Dr Thamban on ice cores

followed which was about the climate history as we interpret it from the ice cores of few hundred years It was also interesting to attend another parallel session on deep-water pelagic ecosystems in which there was interesting talk on protistan population from Tasmania to Antarctica Another interesting parallel session was on Cenozoic and Pleistocene paleoclimate – in which topics covered were from clay mineral distribution in the South Atlantic to sediment compositional changes in the Prydz bay region There were two talks at about the same time by Indian colleagues – one on the deep water pelagic ecosystems – in which the author of this note presented his data on Coccolithophores during the austral summer of 2004 There was much interest on the Indian Ocean sector data Another talk was by Dr Ashwini Wanganeo, who dealt with the limnological similarity between Himalayan lakes and Antarctic lakes under the theme Terrestrial and limnetic evolution and biodiversity

13th and 14th July 2006 afternoons also saw the exciting poster sessions (more than 300 posters) covering varied fields of Antarctic Science and Southern Ocean, in which Indian side also contributed with their posters

Overall, the Open Science Conference has opened new vistas and challenges for those working in Antarctica and the Southern Ocean The world is open with its interest in Shallow Ice Cores, Permafrost as well as Southern Ocean With 13 parallel sessions at a time, it was next to impossible, to attend more than two or three sessions, if you had marked it in the time table provided We need to present science at these forums for more interactive sessions and future collaborations Much needs to be done though, the world is moving at a fast pace, and we need to catch up with them The next SCAR Open Science Conference is scheduled for 2008 in Russia

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Corrigendum

Following correction may be made in the note on the "Need for a Review of India's Iron Ore Export Policy" that appeared in Jour Geol Soc India, v 67(6), June 2006, pp 823-826

p 824, line 21 from bottom "for its beneficiation plant at Bailadila " *should read as* " For beneficiation plant of Essar Steel at Bailadila "

p 825, Line 3 from bottom "Domestic requirement of iron ore for sponge iron and steel plants " *should read as* " Domestic production (which includes sponge iron and steel) "