

## *Editorial*

The Roorkee Chapter of Indian Society for Rock Mechanics and Tunnelling Technology (ISRMTT) in association with Institution of Engineers (India), Roorkee Local Centre; Central Institute of Mining and Fuel Research (CIMFR) Roorkee Regional Centre; and Department of Civil Engineering, IIT, Roorkee; organized two important events recently at Roorkee under the following titles:

- Third Indian Rock Conference, INDOROCK 2011 (13-15 Oct. 2011)
- Short Term Course on Underground Engineering (15-17 Feb. 2010)

The theme or the subject matter of the above conference / short term course essentially focussed on the infrastructure development related to Rock Engineering application, which include planning and design of hydro power projects, tunnel construction for highways and railways through difficult terrain of Himalayas; and landslides, rock slope stability and risk assessment studies. Thus the theme of the conference has been of immense help in discussing various important and complex issues related to Mega projects in India and also provided an opportunity to the engineering community particularly, to the young researchers to share their experiences and identify priority areas for further research. Fortunately India has attained vast experience in executing many important projects located in seismically active and complex geological conditions of lesser Himalayas, as a result of which the Indian experts have found solutions to various challenging problems of Rock Engineering. The construction activities of large scale hydro-electric projects in various hill states of India have further boosted up the confidence of planners, designers, engineering geologists and rock engineers particularly after the commissioning of the Tehri Dam Project situated in hill state of Uttarakhand, Nathpa Jhakri Project in Himachal Pradesh and Sardar Sarovar Project located in Gujarat, India. Undoubtedly, the completion of Tehri Dam Project with its technical complexities is not only an engineering marvel but also a landmark achievement in the history of river valley projects in India. The unique features of 260.5m high and 575m long earth and rock fill dam (highest in Asia) Tehri Project include its vertical shaft spillways (230m high being the highest in the world), 220m high chute spillway, butterfly valve of 5m diameter (largest in Asia), concrete monolithic block (80m x 100m), cranes in Machine hall – 2 nos. each of 375 ton capacity, 62.5 m powerhouse cavern, 670 m long gas insulated Bus Duct installed for power evacuation, variation in operation head of 90m with storage capacity of 35.40 billion cubic meters (Live storage of 26.15 billion cubic meters) resulting into largest reservoir of India.

ISRMTT, founded in 1992, is going to complete two decades of its existence in 2012 and during this period lots of activities have been done by the Society to promote and co-ordinate effective participation of programs related to rock mechanics, geotechnical engineering, tunnelling technology and geological science. In this direction the publication of Journal of Rock Mechanics and Tunnelling Technology was also a humble effort to cater to the needs of researchers, academicians, practising engineers,

and research scholars. My friends Prof. M.N. Viladkar, Prof. Mahendra Singh, Prof. N.K. Samadhiya from IIT Roorkee and Dr. R.K. Goel, Chief Scientist, Mr. R.D. Dwivedi, Sr. Scientist from CIMFR Regional Centre, Roorkee deserve special appreciation for their significant contribution and all-round efforts in organizing different activities of ISRMTT at Roorkee during last one decade.

I hope that the continued support from researchers, academicians and practising engineers would further accelerate the activities of ISRMTT at regional and national level as well.

Through this, I take an opportunity to wish you all a very Happy New Year-2012.

**- Dr. Subhash Mitra**  
*Chief Editor, JRMTT*