

## Venue and schedule

Outreach Auditorium, Indian Institute of Technology Kanpur, Kanpur 208016, UP, India

4<sup>th</sup> January, 2012: Arrival and registration

5<sup>th</sup> January, 2012: Inauguration and technical session

6<sup>th</sup> January, 2012: Technical session

7<sup>th</sup> January, 2012: Field excursion

8<sup>th</sup> January, 2012: Departure

## Financial Assistance

IGCP-582 funds will be available to partially support a limited number of speakers from developing countries including host country. Preference will be given to younger scientists who present a paper at the conference. Such funds will be provided cash-in-hand to receipts during the conference. Applications for such funding, including the abstracts of the proposed paper and your short CV, should be submitted to Rajiv Sinha <rsinha@iitk.ac.in> by **October 15, 2011**

## Travel Arrangements

There are direct flights from Delhi to Lucknow airport which is 90 kms from the IIT Kanpur campus. A taxi can be arranged for pick-up, if requested. There are also direct train connections between Delhi and Kanpur (visit [www.indianrail.gov.in](http://www.indianrail.gov.in)). India requires a valid visa for the citizens of most nations. All participants are requested to check with their local consulate regarding current procedures and application process. Letters from the local host and home institute in India will be provided to assist participants with their visa application.

## Accommodation

All participants will be accommodated in the guest house of IIT Kanpur which is simple but very reasonably priced (Rs. 600-1000 per night). Hotels are also available outside the campus and they can be arranged, if requested. The costs range from Rs. 2000-5000 per night.

## Weather and Currency

The weather in Kanpur in January is typically dry and sunny, although occasional cold wave can bring cool, damp conditions (about 5°C below normal). Typical temperatures in January are 20-24°C for the daily high and 10-15°C for the daily low. The currency in India is Rupee (1 US\$ = Rs 45). Foreign currency is best exchanged at the airport upon arrival, but can also be done at local banks.

## For further information, please contact:

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## IGCP 582 Annual Meeting and Conference

on

## TROPICAL RIVERS: HYDRO-PHYSICAL PROCESSES, IMPACTS, HAZARDS AND MANAGEMENT

Indian Institute of Technology Kanpur, 5-7 January 2012



## Conference coordinators

Rajiv Sinha, IIT Kanpur, India

Snigdha Ghatak, Geological Survey of India, New Delhi

## Project Background and objective

River systems are considered as the economic engine in tropical regions; they sustain the bulk of agricultural production, contribute to hydro power generation and other high-value economic activities based on natural resources extraction (mining, fishing, timber). At the same, time they can be drivers of natural disasters such as floods, bank erosion and rapid channel migration.

This conference is being organized as a part of the International Geoscience Programme (IGCP) 582 project on Tropical Rivers which aims (1) to analyse past and present behavior of key hydro-physical indicators of climate change (e.g. mean discharges, flood frequency, drought occurrence, sediment transport, geomorphic processes), and its manifestations (soil degradation, desertification, ecotope distribution); (2) to study spatial and temporal human impacts on land use (agriculture, deforestation, river engineering, mining) and related changes to water resources; and (3) to establish a set of methods for river management to decrease hydro-physical impacts of global change, flood disasters and direct impacts by river engineering and mining. An important activity of this project is to organize international conferences on tropical rivers annually to bring together the scientists in different countries on a common platform. The first meeting was linked to the 45<sup>th</sup> Brazilian Congress on Geology, held in Belem, Brazil from September 26<sup>th</sup> to October 1<sup>st</sup> 2010 and the second meeting was organized as a part of the XIV Geological congress at Medellin, Colombia from August 29 to September 2, 2011.

### IGCP 582 co-Leaders

- **Edgardo Latrubesse**, University of Texas , Austin, USA ([latrubesse@austin.utexas.edu](mailto:latrubesse@austin.utexas.edu))
- **Jose Candido Stevaux**, Universidade Estadual de Maringá, Brazil ([jcstevaux@uem.br](mailto:jcstevaux@uem.br))
- **Rajiv Sinha**, Indian Institute of Technology Kanpur, INDIA ([rsinha@iitk.ac.in](mailto:rsinha@iitk.ac.in))
- **Zhonguan Chen**, East China Normal University, Shanghai, China ([z.chen@ecnu.edu.cn](mailto:z.chen@ecnu.edu.cn))

### Conference Introduction

The third meeting of the IGCP 582 will be organized in India at the Indian Institute of Technology at Kanpur located on the banks of the Ganga, one of the largest tropical rivers in the world. This meeting will focus on long-term, direct impacts of human-induced change and climate variability and management of tropical rivers basins. We plan to organize talks on identification, quantification and modeling of key hydro-geomorphologic indicators during the past and present times. The potential impacts of global change on river systems and of their socio-economic implications will also be discussed. The meeting will also include a day-long field excursion along the banks of the Ganga and Yamuna rivers which are characterized by 15-30 meters high excellent cliff sections exposing alluvial stratigraphy for a time span of 100 ka. There are excellent spots to observe the morphology and modern processes of these magnificent rivers.

## Target participants

The conference is open to all geomorphologists, river engineers, hydrologists and ecologists working in the area of river science and management. It is hoped that the participation from a large and varied group of scientists will allow a very interesting interaction. Apart from scientific contributions in this project, we will also invite river managers, local communities and NGOs working on rivers to make them aware of modern developments in river science and management strategies. We would like to emphasize the geomorphic controls on flooding and river dynamics. We are planning to invite stake holders and representatives of local communities as well as scientists and field engineers. The aims are to impress upon the river management authorities to incorporate geomorphic considerations in designing long-terms solutions for river management, and educate the local communities towards adaptive strategies.

### Programme content and sessions

- River Science and processes - hydro-physical processes, morphology-ecology linkages
- River Hazards - River dynamics, floods: hydrology and geomorphology, bank erosion and related hazards
- Human impact on river systems - impact of engineering structures on hydro-physical processes; River pollution and water quality, Impact on biodiversity
- Response of river systems to climate change – short and long term impacts, downscaling of climate models and basin-scale response
- River management - role of geomorphology in river management, eco-system based management of rivers, flood and floodplain management
- Case Studies
- Field excursion in the adjoining Ganga and Yamuna plains

### Call for Abstracts

Abstracts should be e-mailed or sent by post to Rajiv Sinha ([rsinha@iitk.ac.in](mailto:rsinha@iitk.ac.in)) by **November 15, 2011**. Abstract format: MS Word file; title, authors, affiliation(s), e-mail address of corresponding author, main text (A4, 1 page including figures, less than 500 words). All abstracts will be published in an abstract volume that will be distributed to all participants.

### Key dates:

**October 15, 2011:** Application of financial support

**November 15, 2011:** Registration form and abstract submission.

