Objectives of the Summer School

Rural regions are essential for hydrology. The inhabitants act both as consumers and as stakeholders for a sustainable management of catchments. The aim of this summer school is to learn how to manage these regions with an interdisciplinary and holistic approach. After basic lectures and introductions we will use hydrological models to calculate management scenarios for water resources. In addition we will estimate the economic and ecological consequences and integrate them in the final decisions. We will also work out and use environmental indicators as a valuable tool for an integrated and sustainable management of the water resources in rural regions. The theoretical exercises will be supplemented by excursions and discussions with local stakeholders in Schleswig-Holstein.

Indo-German Centre for Sustainability (IGCS)

The IGCS is a joint Indo-German centre developing fundamental and applied interdisciplinary research, teaching and training, and dissemination of information in the area of sustainable development. The IGCS wishes to be one of the premier centres of excellence in the field of engineering and environmental sciences. It aims at offering cutting edge solutions in sustainable research through bilateral relations between India and Germany. IGCS is coordinated by RWTH Aachen University and IIT Madras and funded by the German Academic Exchange Service (DAAD) in the programs “A New Passage to India”. Research projects are funded by DST, Government of India. Further information: www.a-new-passage-to-india.de

Contact

For all matters concerning visa and funding please contact portius@igcs-chennai.org. For all course related matters please enquire by e-mail to ghoermann@hydrology.uni-kiel.de.

Organizers

IGCS Centre Coordinators

Prof. Dr. Sudhir Chella Rajan, Department of Humanities and Social Sciences, IIT Madras

Prof. Dr. Rafig Azzam, Head of Department of Engineering Geology and Hydrogeology, RWTH Aachen University

IGCS Area Coordinators

Prof. Dr. Nicola Fohrer, Department of Hydrology and Water Resources Management, CAU Kiel

Prof. Dr. B. S. Murty, Dept. of Civil Engineering, IIT Madras

IGCS Staff

Dr. Sasidhar Palagummi, IGCS Senior Scientist, IIT Madras

Ms. Eva Portius, IGCS Project Manager, RWTH Aachen University

Christian-Albrechts-Universitaet zu Kiel

Dr. Georg Hoermann, Dept. of Hydrology and Water Resources Management, CAU Kiel

For further information visit: www.igcs-chennai.org
Course Schedule

**Tuesday, 26 May 2015**
- Arrival

**Wednesday, 27 May 2015**
- am: Inauguration and Key Note Speaker
- pm: Lecture; Definition of projects

**Thursday, 28 May 2015**
- am: Lecture
- pm: Project: Hands on SWAT Model

**Friday, 29 May 2015**
- am: Field Visit (Technical)
- pm: Project: Hands on SWAT Model

**Saturday, 30 May 2015**
- Field Visit (Social)

**Sunday, 31 May 2015**
- Field Visit (Social)

**Monday, 1 Jun 2015**
- am: Lectures
- pm: Work on Projects

**Tuesday, 2 Jun 2015**
- am: Lectures
- pm: Work on Projects

**Wednesday, 3 Jun 2015**
- Field Visit (Technical)

**Thursday, 4 Jun 2015**
- am: Lectures
- pm: Work on Projects

**Friday, 5 Jun 2015**
- am: Field Visit (Technical)
- pm: Project: Hands on Flow Health

**Saturday, 6 Jun 2015**
- Field Visit (Social)

**Sunday, 7 Jun 2015**
- Field Visit (Social)

**Monday, 8 Jun 2015**
- am: Lecture
- pm: Project: Hands on Flow Health

**Tuesday, 9 Jun 2015**
- Projects Presentations & Valedictory Function

**Wednesday, 10 Jun 2015**
- Departure

**Participants**

The course is open to German and Indian Master and Ph.D. students in academic fields of engineering, environmental and social sciences (specialisation in sustainable development is desirable). The number of participants is limited to a maximum of 30 (15 German / 15 Indian).

The number of participants is limited to a maximum of 0
55(1 German / 1 Indian).

**Application**

Interested students may apply with the following: (1) a cover letter with residential contact details, a description of the applicant’s scientific interests and motivation for attending the course, (2) academic CV, (3) a letter of recommendation from the professor/Head of Department (Indian Students). (4) Copy of passport. Applications and enclosures should be sent in a single pdf-file to palagummi07@gmail.com (India) / portius@igcs-chennai.org (Germany) until 1 March 2015. Applications received after this date will not be considered.

**Evaluation of applications and admission**

Applications will be evaluated by the organizers. Accepted applicants will be informed by e-mail by mid March 2015.

German Students please address their queries to Ms. Eva Portius portius@igcs-chennai.org.

**Funding**

The IGCS, including the schools, is part of the “A New Passage to India” initiative funded by the German Academic Exchange Service (DAAD) on behalf of the German Federal Ministry of Education and Research. Indian participants of the School receive a travel grant (575 EUR), German students receive a travel reimbursement. All students receive a per diem and lump sum for further expenses.

**Accommodation**

The selected students will be accommodated in the Bekpek Hostel Kiel (five people per room).

**Lecturers**

The resource personnel for the Summer School includes IGCS Professors, lecturers of Kiel University and other selected experts.

**Work groups**

Participants will work in groups of up to 5 members to develop small research projects, prepare reports on their findings and present them to the supervisors for discussion.

**Topics to explore**

Topics by the workgroups, based on interest, may be
- Sustainability in River Basin Management
- Integrated Water Resources Management
- Stream Water Modeling and Management