

# Glaciers and Water Resource Management



A course under  
Global Initiative of Academic  
Networks (GIAN)

Organized by  
School of Environmental Sciences (SES)  
Jawaharlal Nehru University  
New Delhi

**25<sup>th</sup> to 30<sup>th</sup> July 2016**

## The Faculty



**Prof. Dr. Matthias Braun** is the Head of Department Geography and Geosciences at Institute of Geography, Friedrich-Alexander Universität Erlangen-Nürnberg, (FAU) in Germany. His research interests include Remote Sensing, GIS, glaciers, ice shelf, climate change, Polar Regions, high mountains.



**Prof. AL. Ramanathan** is a Professor at SES, JNU, New Delhi. His research interests include Climate-Glacier interaction, Glacier mass balance (in-situ), energy balance, geodetic measurements Glacier meltwater hydrogeochemistry, glacier hydrology, and Biogeochemistry of Coastal Environment-Mangroves.



**Prof. A. P. Dimri** is a Professor at School of Environmental Sciences, JNU, New Delhi. His research interests include Regional climate modeling over western Himalayan region, Climate Dynamics and variability, Climate Change, glacier change.



### Course overview

Since the glaciology, as a subject, is not taught in Indian Universities there are limited opportunities available for students to take up studies of glaciers as a theme for research. The proposed course “Glaciers and Water Resource Management” would strive to fill up this need by generating ample opportunities for Post graduate level students to take up research projects leading to doctorate degrees to solve dual purpose of collecting state of art remote sensing and field observational data on glaciers related to their mass balance, determining the causes of changes, assess their ecological and hydrological effects, and develop models to predict future changes and effects. Students will also be introduced to the disciplines of ecology, hydropower generation, glacial hazards, hydro-meteorological hazards, water management, socioeconomics, water disputes and water sharing etc. which all play a great role in management of water resources for multi-purpose projects and to develop conservation strategies.

Modules	Who can attend the course	Fee
<b>Module1:</b> Glacier, Glacier hydrology, Glacier Energy and Mass Balance and modeling <b>Module II:</b> Paleo-glaciation and Paleo-climate <b>Module III:</b> Glacier and water harvesting, water resource management in high mountain and Himalayan regions	This course is for students of B.Tech, M.Sc, M.Tech, MA(Geo)/PhD), researchers, teachers, managers, technicians, remediation experts, hydrologists, ecologists, limnologists, water experts, environmental engineers, disaster management personals, state/central pollution control boards personals, hydropower industry people, horticulture industries, aquaculture, project managers, activist/ journalist, policy makers, social scientist, and environmental scientists etc.	<ul style="list-style-type: none"> <li>➤ JNU PhD/MTech/Mphil/M.Sc Students and Faculty: <b>INR 1000</b></li> <li>➤ Students from other recognized educational institutions: <b>INR 1000</b></li> <li>➤ Faculty from other recognized educational institutions: <b>INR 2000</b></li> <li>➤ Members of Govt. Research Organizations: <b>INR 5000</b></li> <li>➤ Members of Private Research Institution: <b>INR 10,000</b></li> <li>➤ Participants from abroad: <b>US \$500</b></li> </ul>

Course Co-ordinator

**Prof. AL Ramanathan**

Professor, School of Environmental Science, Jawaharlal Nehru University, New Delhi-110067, India

Tel: 011-26704314 : [alr0400@mail.jnu.ac.in](mailto:alr0400@mail.jnu.ac.in) / [alrjnu@gmail.com](mailto:alrjnu@gmail.com)

Website: <http://www.jnu.ac.in/GIAN/> or <http://www.gian.iitkgp.ac.in/>