

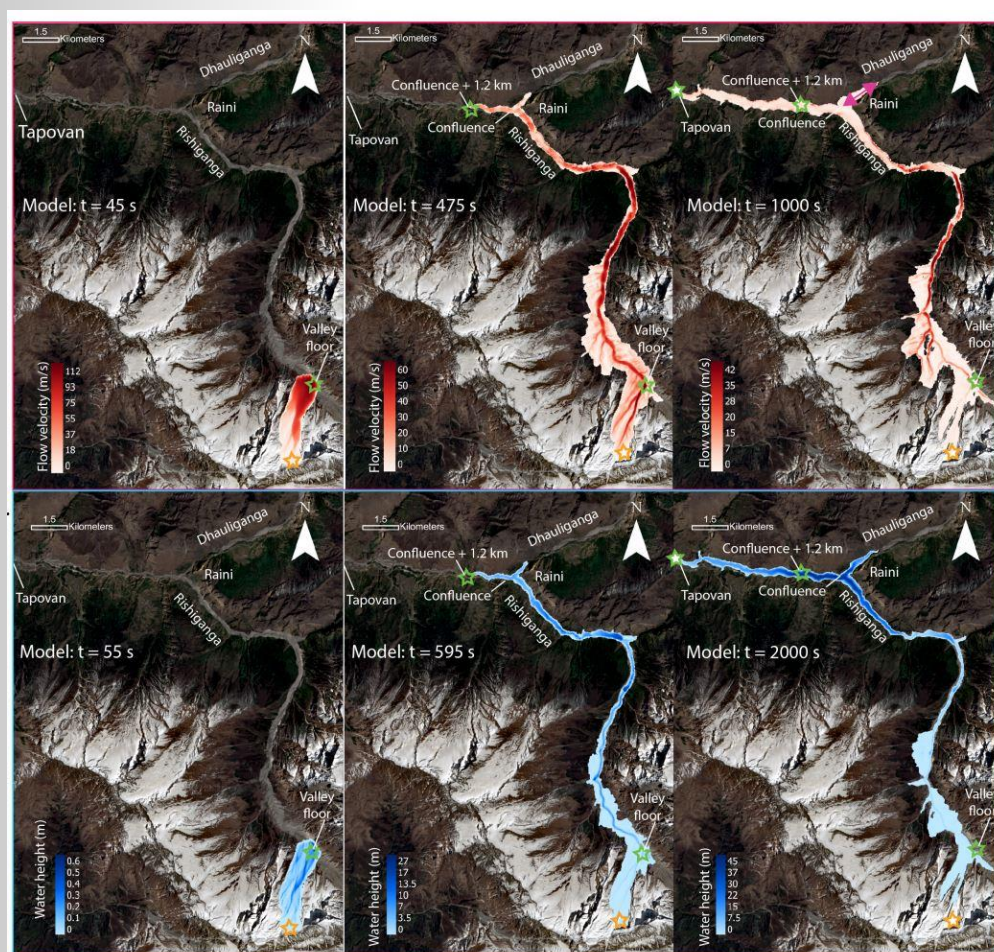


Modelling Rock-Ice Avalanches, Rockfalls, and Debris Flows

Hands on Training

November 20-22, 2024

Organised under the aegis of CSIR Integrated Skill Initiative



Organised By

CSIR-CBRI, Roorkee, India

The Council of Scientific and Industrial Research (CSIR) is the largest public-funded research establishment in India and Central Building Research Institute is one of the 37 research laboratories of CSIR. The Central Building Research Institute, Roorkee has been vested with the responsibility of generating, cultivating and promoting building science and technology in the service of the country. Since its inception in 1947, the institute has been assisting the building construction and building material industries in finding timely, appropriate and economical solutions to the problems of materials, rural and urban housing, energy conservation, efficiency, fire hazards, structural and foundation problems and disaster mitigation. CSIR-CBRI under one of the disaster mitigation thrust areas, contributes in engineering geological investigations, landslide hazard-vulnerability-risk assessment, landslide dynamics through instrumentation and monitoring, landslide modeling, landslide early warning, debris flow modeling and hazard assessment, UAV based landslide mapping & monitoring, and remote sensing & GIS applications. The Institute has carried out a large number of infrastructure and landslide disaster mitigation related projects in India.

SLF, Switzerland

The SLF is an interdisciplinary research and service centre located in Davos. Around 180 researchers study snow, the atmosphere, natural hazards, permafrost and mountain ecological systems and develop innovative products which put their knowledge to practical use. The SLF is part of the WSL, the Swiss Federal Institute for Forest, Snow and Landscape Research, and therefore belongs to the ETH domain. The SLF researches various aspects related to snow, such as how it is built up and how it changes under various conditions, with the objective of learning how weak layers are formed in the snowpack or how materials – for example, skis – can best glide over snow. Another core competence of the SLF is researching how avalanches occur and how they move over terrain. The SLF also researches other natural hazards with similar processes, such as debris flow and rock fall, as well as permafrost and mountain ecological systems. The SLF also provides various services, including the Avalanche Bulletin, advice on avalanche protection measures, expert opinions on avalanche accidents, and is active in the development of warning systems for natural hazards.

SDC (SCA-Himalayas)

The Strengthening Climate Change Adaptation in Himalayas (SCA-Himalayas) project of Swiss Agency for Development and Cooperation (SDC) focuses on Disaster Risk Management (DRM) and Water Resource Management (WRM) in mountain ecosystems fostering resilience against climate change in the according sectors. The project supports pilots in the Himalayan states of Sikkim, Uttarakhand, Manipur and Himachal Pradesh. It aims to enhance resilience of the mountain communities in the Indian Himalayan Region by integrating climate actions into national and sub-national planning and implementation.



About the Workshop

Three days workshop on “Modelling Rock-Ice avalanches, Rockfalls, and Debris Flows: Hands on Training” is being organised during November 20-22, 2024 at CSIR-Central Building Research Institute, Roorkee. The workshop is being organised as a joint activity of CSIR-CBRI, Roorkee and WSL Institute for Snow and Avalanche Research SLF, Switzerland and Swiss Agency for Development and Cooperation (SDC) under the on-going Indo-Swiss Collaborative project, Strengthening Climate Change Adaptation in Himalayas (SCA-Himalayas). The main objective of the workshop is to expose the participants with the state of the art practices being used at National and International level for modelling debris flows, rockfalls, snow avalanches, and rock-ice avalanches. Lectures and demonstrations with real field case studies through hands on training by renowned experts will be helpful for early career researchers and professionals working in this field.

Themes

- Debris Flows
- Rock falls
- Snow Avalanches
- Rock Ice Avalanches

Resource Persons



Dr. Perry Bartelt

WSL Institute for Snow & Avalanche Research SLF, Davos, Switzerland



Dr. Yves Bühler

WSL Institute for Snow & Avalanche Research SLF, Davos, Switzerland



Dr. Andrea Maconi

WSL Institute for Snow & Avalanche Research SLF, Davos, Switzerland



Dr. D.P. Kanungo

Geotechnical Engineering & Geohazards Group, CSIR-CBRI, Roorkee, India



Dr. Jessica Munch

WSL Institute for Snow & Avalanche Research SLF, Davos, Switzerland



Dr. Joel Borner

WSL Institute for Snow & Avalanche Research SLF, Davos, Switzerland



Dr. Rajesh Kumar Dash

Geotechnical Engineering & Geohazards Group, CSIR-CBRI, Roorkee, India

Registration

Number of participants for this workshop is limited to 30. The delegates are requested to register for this workshop by using the registration link. There is no registration fee for participation in this workshop. The last date for submission of registration form is 10th November, 2024.

Who should attend

The young faculty/professionals and PhD Scholars engaged in research and teaching, in the specific themes of this workshop will be preferred to attend the workshop.

Selection Criteria

The young faculty/professionals with research engagement and credentials on the workshop themes and PhD Scholars with research topic on the specific workshop themes will be given preference over other applicants. Only one participant per Institute/Organization will be preferred. CSIR-CBRI reserves the right for the shortlisting of participants for the workshop.

Accommodation, Food, & Travel

Paid accommodations will be provided to the participants at CSIR-CBRI guest house by the organisers. However, no TA/DA will be provided to participants from organisers. Only working lunch and session tea will be arranged for the participants.

Patron

Prof. R. Pradeep Kumar
Director, CSIR-CBRI, Roorkee

Convener

Dr. D. P. Kanungo
Chief Scientist & Head, GEGH Group
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Mr. Bhupendra Bhaire
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Registration Link

<https://forms.gle/RPQcqH6zdKCfHfr58>

Venue

CSIR-Central Building Research Institute Roorkee (Uttarakhand), India

 <http://www.cbri.res.in/>

 <https://www.linkedin.com/in/csircbri/>

 https://www.instagram.com/csir_cbri/

 <https://www.youtube.com/c/CbriResIn-roorkee>

 <https://www.facebook.com/csircbri>

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(Ministry of Science & Technology, Govt. of India)

