

Project under Hydrology & Cryosphere

Title	PI	Institute	Sanction Order and Date	Duration	Status	Major Equipment
Isotope techniques to evaluate the seasonal and inter-annual variation of glacial and snowmelt discharge in the Ganges River at Gomukh and Mana	Dr Indra Sekhar Sen	Department of Earth Sciences, IIT Kanpur.	MoES/PAMC/H&C/47/2013-PC-II 25 September 2014	18 Months	On-going	

Abstract:

Glacial and snowmelt contribution in the Ganges River is important to understand the linkages between the high altitude cryosphere and the Himalayan rivers. The project proposes to investigate how contributions of snowmelt are changing over seasonal to inter-annual timescales. To trace snowmelt contributions and to enable future predictions of change, the project will develop a hydro-geochemical model for snow/glacial melt-waters to the Ganges River at Gomukh and Mana. The model will be developed using time-series observations of physical and chemical parameters, as well as $\delta^{18}\text{O}$ and $\delta^2\text{H}$ isotope composition of river water. Findings of this project will give important insights into seasonal and inter-annual variability of glacial and snowmelt contribution in Ganges River. The project will quantify the importance of glacial and snow melt discharge in Bhagirathi and Alaknanda river basin.