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SEMINAR NOTICE

Title: “Anomalous Dynamics and Disintegration of Glaciers in Western Himalaya”

Speaker: Dr. Anil V Kulkarni, Divecha Centre for Climate Change, IISc

Date: June 09, 2020 (Tuesday)

Time: 3:30 PM

Abstract: Advanced Land Observing Satellite 2 (ALOS 2) was launched by Japan in year 2014 and it has provided unique data to study Himalayan glaciers. The satellite has Phased Array type L-band Synthetic Aperture Radar-2 (ALOS-2/PALSAR-2), which can be used to generate differential interferometry pair images with a 14-days temporal gap. This technique has been used to estimate surface velocity of glaciers and change in their elevation. Investigation was carried out in Chandra and Bhaga river basins in Himachal Pradesh to understand glacier dynamics, and we have observed unusual changes in glacier surface velocity and elevation. We will discuss field observations made at Samudra Tapu, Parbati and Patsio glaciers on bottom topography, melt water contribution from tributary glaciers and water bodies on glacier surfaces. These secondary processes will help us to understand the abnormal behavior of glacier flow and mass loss, which have potential to accelerate loss in glacier area and mass. These processes are not generally considered in conventional methods, therefore future loss in glacier area and mass will be higher than current predictions.

ALL ARE WELCOME