

**DIVECHA CENTRE FOR CLIMATE CHANGE
INDIAN INSTITUTE OF SCIENCE, BANGALORE**

**NATIONAL CONFERENCE ON HIMALAYAN CRYOSPHERE
(NCHC-2017)**

DETAILED SCHEDULE

JANUARY 23, 2017		
10:00 - 10:30	INAUGURAL SESSION - Inauguration	
10:30 - 11:00	Tea Break	
TECHNICAL SESSION-1 OBSERVATIONS OF HIMALAYAN CRYOSPHERE		
11:00 - 11:30	Invited Speaker	Dr. D.P. Dobhal, WIHG, Dehra Dun
Oral Presentations		
11:30 - 11:45	Analysis of Automatic Weather Station data and Surface Energy balance of Sutri Dhaka Glacier, Himachal Pradesh, India	Parmanand Sharma, Lavkush K Patel, Ajit K Singh, Vinay K. Gaddam, Bhanu Pratap and Thamban Meloth
11:45 - 12:00	Estimation of change in glacier ice volume using Historical and Recent data: A case study in Khatling glacier	Babu Govindha Raj K., K. Vinod Kumar and V.V. Nageswara Rao
12:00 - 12:15	Mass balance and flow studies on debris covered Satopanth glacier, Central Himalaya, Uttarakhand	Sunil Shah, Tushar Sharma, Argha Banerjee, H.C. Nainwal and R. Shankar
12:15 - 12:30	Quantifying Mass Changes in the Gangotri Glacier of Central Himalayas using Geodetic Technique	Shashank Bhushan, T.H. Syed and A.V. Kulkarni
Poster display		
12:30 - 13:00	Using remote sensing derived ELA estimates for retrieval of the mass balance of the Chhota Shigri glacier from 2002-2013	Aparna Shukla, Purushottam Garg and Prashant Rawat
	Impact assessment of increasing surface temperature in Alaknanda Valley at Srinagar, Garhwal Himalaya Uttarakhand	R. S. Negi, Alok S Gautam
	Decadal Variations of Land Surface Temperature and Associated Cryospheric Elements of Karakoram Himalayas – A Geo-Spatial Appraisal	PN Joglekar, Sujata Dash, MR Bhutiyani, Anitha Revi
	Monitoring of Naradu Glacier, Baspa Valley, District Kinnaur, Himachal Pradesh, India using remote sensing techniques	Randhawa Surjeet Singh, Kumar Rajesh, Sharma Anjana, Singh Shruti, Rana J.C.
	Fluctuation Record of Janappa Garang glacier from LIA	Bhushan S. Deota, Mudit D. Mankad
	Observing multi-decadal changes in Chorabari glacier, Central Himalaya, India using remote sensing data	D. Bandyopadhyay, F. Birajdar, G. Singh
	Monitoring Evolution of Supraglacial Debris Cover in Baspa Basin, Western Himalaya	Pratibha S and Anil V Kulkarni
	Remote Sensing based characterization of the glaciated regions in Dhauliganga Basin, Uttarakhand	Ashim Sattar, Ajanta Goswami, Anil. V.Kulkarni
	Mass redistribution of glaciated areas in the Chandra Valley, Western Himalaya? A geospatial approach linked to erosion-deposition pattern	Manish Pandey, AL. Ramanathan, Shyam Ranjan, Naveen Kumar, Yogesh Ray, Om Kumar, Thupstan Angchuk, Mohammad Soheb, Arindan Mandal, Sarvagya Vatsal, Aman Arora

	Long term changes in glacier area and glacial lakes in North Sikkim Himalaya.	Yogesh Karyakarte
13:00 - 14:00	Lunch Break	
TECHNICAL SESSION-2 MODELING THE HIMALAYAN CRYOSPHERE		
14:00 - 14:25	Invited Speaker	Dr. Argha Banarjee, IISER, Pune
14:25 - 14:45	Invited Speaker	Dr. R. Srinivasan, IISc, Bangalore
Oral Presentations		
14:45 - 15:00	Temporal change and flow velocity estimation of Patseo glacier, Western Himalaya	K. K. Singh, D. K. Singh, H. S. Negi, A. V. Kulkarni, H. S. Gusain and A. Ganju
15:00 - 15:15	Snowmelt Runoff Simulation using Monthly-varying Lapse Rate for Spiti Basin in Western Himalayas	Smarika Kulshrestha, RAAJ Ramsankaran, Ajay Kumar
Poster display		
15:15 - 15:35	Numerical simulation of retreat and future evolution of Chhota Shigri glacier, Western Himalaya.	Prateek Gantayat, Anil V Kulkarni and J Srinivasan
	The inverse problem for valley glaciers	Argha Banerjee, H.C. Nainwal and R. Shankar
	Applications of Geomatics Techniques for Glacier Mapping	Ajay Dashora
	Preliminary Results on Estimation of Ice Thickness of Satopanth Glacier, Central Garhwal Himalaya, Uttarakhand using Ground Penetrating Radar	Aditya Mishra, B.D.S. Negi, Argha Banerjee, R.Shankar, H.C. Nainwal
	Mass Balance of Naradu glacier, Western Himalaya, India	Rajesh Kumar, Shruti Singh, Surjeet Singh Randhawa, Anjana Sharma, Shaktiman Singh, Ramesh Kumar and Atar Singh
	Understanding glacier dynamics in North Western Himalaya	Tariq Abdullah, Irfan Rashid and Shakil A Romshoo
15:35 - 16:00	Tea Break	
16:00 - 16:20	Invited Speaker Talk on "Impacts of Climate change in the Karakoram Himalayas with reference to permafrost degradation related mass movements"	Dr. M R Bhutiyani, Defence Terrain Research Laboratory, Defence Research & Development Organization
Oral Presentations		
16:20 - 16:35	Reconstruction of Naradu glacier mass balance using Seasonal Sensitivity Characteristic and Temp index melt model	Vinay Kumar Gaddam, Anil V. Kulkarni , Anil Kumar Gupta
16:35 - 16:50	Study of Thermal Conductivity of Supraglacial Debris Layer at Hamtah Glacier	Sourav Laha, Reshma Kumari, Argha Banerjee
16:50 - 17:05	Remote Sensing based monitoring of glacial lakes and volume change estimation in Uttarakhand.	Bijay Ketan Mohanta, AshimSattar, Ajanta Goswami, Anil V.Kulkarni, Anisha Godha
17:05 - 17:20	Annual Mass balance reconstruction of Stok glacier in a cold arid Ladakh region of Trans-Himalaya, India, using temperature index model since 1991.	Mohd Soheb and AL. Ramanathan
Poster display		
17:20 - 17:50	Estimation of glacier mass balance of Chandra basin, western Himalaya for 1985 -2009 using remote sensing, a snow-melt model and AAR method	Sayli A. Tawde, Anil V. Kulkarni, G. Bala
	Estimation of glacier stored water using scaling and laminar flow model: A case study in Parbati basin.	Remya S N, Anil V Kulkarni, Pradeep S
	Evaluation of IRS-LISS III and LANDSAT-7 data for extraction of the Glacier Ice Velocity using feature tracking technique	Smriti Srivastava, I.M. Bahuguna, Raj Kumar, Sandip R. Oza

	Climate signal from recent moraines in the Chandra-Bhaga catchments, the western Himalaya	Reshama Kumari and Argha Banerjee
	Generation and Validation of SPOT-7 DEM for glacier studies in Indian Himalaya	Vinay Kumar Gaddam, Anil V. Kulkarni , Anil Kumar Gupta
	Review of delineation methods and new possibilities for debris covered glacier	Rakesh Sahu and R. D. Gupta
	Glacier facies mapping and movement estimation using remote sensing techniques: a case study at the SamudraTapu glacier, Himachal Pradesh	Sahil Sood
	Topographical and Climatic influences on deglaciation extent: A study in Beas & Ravi basin, Western Himalayas through remote sensing techniques	Shruti Dutta , AL. Ramanathan
	Fungal diversity and characterization of cold adapted cellulase by potent isolates from Hamta Glacier, Himalaya	Gandhali Dhume, Abhas Kumar Maharana, Alok Kumar Srivastava, Shiv Mohan Singh
	Thickness and volume changes of Samundra tapu glacier between 1993 and 2015	Vivek sharma, Vinay kumar gaddam, Parmanand sharma, Meloth Thamban, Rakesh Yekula

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TECHNICAL SESSION-3 HIMALAYAN CRYOSPHERE AND CLIMATE CHANGE

09:30 - 10:00	Invited Speaker	Dr. H. S.Negi, SASE, Chandigarh
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Oral Presentations

10:00 - 10:15	Seasonal Variation of Aerosol Radiative Forcing at Alaknada Valley Garhwal Himalaya Uttarakhand, India	Alok S Gautam, Fabian Solman, R S Negi, Abhilash S Panicker
10:15 - 10:30	Past and present evolution of Himalayan glaciers: a coupled dynamical regional glacier-climate model assessment	Dr. Pankaj kumar
10:30 - 10:45	Future Response of Debris-Covered Himalayan Glaciers towards Changing Climate	Kapil Kesarwani, D.P. Dobhal, Ajay Gairola, Manish Mehta

Poster display

10:45 - 11:10	The pattern of thinning of debris-covered and debris-free glaciers in a warming climate	Argha Banerjee
	Decadal Change in glacier parameter as a key indicator of climate change- A case study of Bhaga basin (1979-2015)	Snehmani, Saurabh Kaushik and A.Ganju
	The Recent Deglaciation of Kolahoi Valley in Kashmir Himalaya, India in response to the Changing Climate	Irfan Rashid, Shakil Ahmad Romshoo, Tariq Abdullah
	Climate Change Impact on Naradu Glacier, Western Himalaya, India	Shruti Singh, Rajesh Kumar and S.S. Randhawa
	Holocene Climate and Glacial study from Dokriani, Western Himalaya: A multi-proxy approach	Ipsita Roy, Parminder S. Ranhotra, MayankShekhar, A. Bhattacharyya, Shailesh Agrawal, S.K. Patil, C.M. Nautiyal and Ashish K. Pal
	Preliminary Work done by Sikkim University, under Inter University Consortium on Climate Change (IUCCC)	Basnett, Smriti ; Karyakarte, Yogesh ; Lal, Uttam ; Ranjan, Rakesh ; Sherpa, Mingma Thundu ; Singh, Amrita ; Thakur, Nagendra
	Retreating glaciers and geology: a study of Chandra basin, Lahaul and Spiti district, Himachal Pradesh, India	Sunil Dhar, Vikas Pathania, Harvinder Singh and Dinesh Kumar
	Carbon biogeochemical cycling potentials of Himalayan cryoconite microbial communities	Aritri Sanyal, Runa Antony, Gautami Samui and Meloth Thamban

11:10 - 11:30	Tea Break	
TECHNICAL SESSION-4 HIMALAYAN CRYOSPHERE AND HYDROLOGY		
11:30 - 12:00	Invited speaker	Dr. Farooq Azam, National Institute of Hydrology, Roorkee
Oral presentations		
12:00 - 12:15	Understanding the role of Air temperature and Summer precipitation events on proglacial stream discharges in Chhota Shigri Glacier catchment, Indian Himalaya	AL. Ramanathan and others
12:15 - 12:30	Interpolation of meteorological variables and its applicability in glacier surface melt modelling: case study of Dokriani Glacier, Central Himalayan	Indira Karakoti and D.P. Dobhal
12:30 - 12:45	Stable oxygen and hydrogen isotope compositions of precipitation, ice and meltwater from Sutri Dhaka Glacier, Western Himalaya: apportionment of sources contributing to Chandra River	Ajit Singh, Waliur Rahaman, Laluraj C.M., Parmanand Sharma, Lavkush Patel, MelothThamban
Poster display		
12:45 - 13:10	Assessment of proglacial lakes' changes since 1971 in Chandra basin, Western Himalaya	Lavkush Patel, Parmanand Sharma, Laluraj C M, Meloth Thamban, Ajit Singh, and Rasik Ravindra
	Micro-meteorological variability in different elevation zones of Chhota Shigri Glacier: an analysis of three in situ stations during the summer season 2015	Arindan Mandal, AL. Ramanathan, Markus Engelhardt, AtleNesje
	A tree-ring based January–April discharge reconstruction of Zemu Chuu, North Sikkim Eastern Himalaya	Mayank Shekhar, and Amalava Bhattacharyya
	Discharge and Suspended Sediments Concentration in the melt water stream of Satopanth Glacier, Central Himalaya, Uttarakhand, India	Prabhat Semwal, Argha Banerjee, H.C. Nainwal and R. Shankar
	An analysis of snow cover variability in North-West Himalaya using satellite and in-situ data	D. K. Singh, H.S.Gusain, V.D.Mishra, Nenna Gupta and A. Ganju
	Microbial diversity and cold active enzymatic potential of Chhota Shigri glacier, Himalaya	Rohita Naik, Abhas Kumar Maharana, Alok Kumar Srivastava, Shiv Mohan Singh
	Microbial diversity of Patsio Glacier, Himalaya and their bio-prospective potential	Meena Rathore, Abhas Kumar Maharana, Alok Kumar Srivastava, Shiv Mohan Singh
	Application of Artificial Neural Network for glacier thickness estimation in the western Himalaya, India	Mohd Anul Haq, Mohd Farooq Azam
13:10 - 14:00	Lunch Break	
TECHNICAL SESSION-5 HIMALAYAN CRYOSPHERE AND DISASTER		
14:00 - 14:30	Invited Speaker	Dr. Ashwagosh Ganjoo, SASE, Chandigarh
Oral presentations		
14:30 - 14:45	Estimation of seasonal snow cover and the amount of melt contribution to major river basins of Indian sub-continent and its impact on Surface Heat Flux	Ajanta Goswami, Praveen K. Singh, Pritam Das, Anil V. Kulkarni
14:45 - 15:00	Glacier retreat, formation of glacial lakes and GLOF risk assessment in Lahaul Himalaya, North-West India	Sanjay Deswal and Milap Chand Sharma
Poster display		
15:00 - 15:20	Glacial Lakes Dynamics Study of Arunachal Himalaya using Earth Observation Techniques	Ajanta Goswami, Regina Thomas, Anil V. Kulkarni

	Temporal Land Surface Temperature Profiling for Identification of Probable Mass Movement Sites in Karakoram Himalayas	Sujata Dash, TS Rawat, MR Bhutiyani, PN Joglekar
	Precipitation Intensity – Duration Based Threshold Analysis for Initiation of Landslides in Upper Alaknanda Valley	Soumiya Bhattacharjee, P. K. Champati ray, Shovan L. Chattoraj, Mrinmoy Dhara
	Rainfall induced landslide susceptibility zonation of Upper Ladakh region in Karakoram Himalaya	H S Negi, A Kumar, R Mujawdiya, G Arun, A Ganju
	Algorithm based Snow Cover Area Estimation using Remote Sensing Data: A case study of Chandra Basin, Himachal Pradesh, India	Farjana Birajdar, Gopalan Venkataraman, Hrishikesh Samant and Gulab Singh
	Chorabari Lake Outburst Flood at Kedarnath	Mohammd Rafiq and Shakil Ahmad Romshoo
15:20 - 16:00	Tea break	
16:00 - 17:00	Concluding session and way forward	Dr. Anil Kulkarni, IISc