



Protect Climate, Earth and Environment

CEHESH TRUST OF INDIA AWARD
for Excellence in Climate Science ,2023
Citation in favour of Dr.Ashit Kumar Swain



After successful completion of school, college and university studies, Dr.Ashit Kumar Swain, did his Ph.D from Ravenshaw university, Cuttack in 2015. He joined as a Geologist in the Geological Survey of India. **The forward leap taken by India in the global cryosphere studies due to the glaciological studies on Polar ice sheet of Antarctica during 36th Indian Antarctic Expedition (IAE) (2016-17) was possible due to the efforts taken by Dr.Swain, who has established a new route from the Indian station at Maitri to the Wohlthat Mountains and thereby fixing a number of DGPS stations for long-term glaciological studies in the region including the snow-layer pattern and the ice thicknesses along the entire route using Ground Penetrating Radar (GPR), velocity of the ice sheet and their change in the elevation using DGPS and snow accumulation and ablation studies.**

His induction as the winter team member during the 27th IAE (2007-09) has resulted in documenting the bathymetric characterization of 18 Polar lakes by GPR. It was only possible during Antarctic wintering period when the lakes were frozen and the subsurface basin configuration could be delineated. **The confirmatory evidence of sea link with Epi-shelf lakes occurring in northern extremities of Schirmacher Oasis was established through his GPR survey during this period.** His work on Eastern Ghats (1997–2001), Southern Granulite Terrain (2002-06) and juxtaposed Antarctic regions **is of immense scientific value in Gondwanaland reconstruction.** He was a National Working Group member of IGCP Project-597.He has also systematically carried out GPR investigations during the 29th and 30th IAEs (2009-10 and 2010-11) and **documented the distribution of Land-Ice-Sea interface in the east of Schirmacher Oasis and shelf regions, besides demarcating the triple junction.** Owing to his expertise in GPR surveys in polar region, he was selected as a member in the lone **scientific expedition to South Pole** where he estimated glacier thicknesses and their subsurface characteristics at selected locations. **He is the youngest Indian geoscientist to reach at South Pole.** During 2011-12, he was entrusted with the tasks of GPR survey in Vestre Broggerbreen glacier of Svalbard Arctic and Hamtah glacier in the Himalayas respectively to estimate the depth of the glacier-bedrock interface. During the 32nd IAE (2012-13), he carried out GPR survey of the perennial frozen lake Untersee in the interiors of Antarctica and geological mapping in Tallaksenvarden and Stenersenknatten nunataks. He initiated meteorite search programme in Antarctica and exchanged ideas with the scientists of RAP Centre for meteorites, Field Museum, Chicago. After 2013 Kedarnath disaster, he carried out GPR survey to assess the strength of the Temple foundation structure. During the 34th IAE (2014-15), he carried out extensive geomorphological research in Schirmacher Oasis to understand the nature and distribution of different moraines and extended glaciological observations to interiors of the Polar ice sheet besides the discovery of unreported lamprophyre bodies. During 2014 Arctic Expedition, apart from the regular observations in the Vestre Broggerbreen glacier, he ventured into a new Ferringbreen glacier and fixed stakes on it besides the geological work in the vicinity. His successful accomplishments of glaciological studies in Arctic, Antarctica and the Himalayas have placed him amongst very few scientists who have worked and significantly contributed in all the Polar Regions. Currently he is serving as the Director and Head of Office of Geological Survey of India, State Unit Odisha at Bhubaneswar. **Greetings from CEHESH TRUST OF INDIA for the spectacular achievement of Dr.Das . May success and enthusiasm be with him always. Wish him Good Luck!**



B. Mishra

DR. B. MISHRA

On behalf of CEHESH TRUST OF INDIA