58th Annual Convention
Indian Geophysical Union(IGU)

IGU-Krishnan Medal 2021

Dr. Sreejith K .M, born on May 26, 1981 obtained his B.Sc. (Physics) in 2001 from University of Calicut, Kozhikode and M.Sc. (Tech) (Marine Geophysics) in 2004 from Cochin University of Science and Technology, Kochi. He has carried out his doctoral research work at National Institute of Oceanography, Goa during 2005-2007 before joining Space Applications Centre (SAC), ISRO, Ahmedabad as a Scientist in 2007. He received Ph.D. Degree in 2011 from Goa University in the field of Marine Geophysics.

Dr. Sreejith K.M. has made outstanding contributions in the field of Tectonic Geodesy and Marine Geophysical studies of the Indian Ocean lithosphere.

Dr. Sreejith's contributions in tectonic geodesy involve studies related to continental deformation and earthquake processes using Interferometric Synthetic Aperture Radar (InSAR). InSAR imaging and source modelling of the 2015 Nepal and 2019 Mirpur earthquakes provided new insights on earthquake rupture processes along the Main Himalayan Thrust. Interseismic-coupling model generated for the Main Himalayan Thrust provided new constraints on seismogenesis and earthquake hazards in central Himalaya. He has contributed significantly in understanding the mechanism of reservoir-induced deformation (Tehri and Koyna dams), earthquake swarm (Palghar), groundwater-caused subsidence (Indo-Gangetic plains), volcanic processes (Barren Island) and characterisation of nuclear explosion (North Korea).

Dr. Sreejith was instrumental in the generation of improved marine geoid and gravity fields using satellite altimetry data. Detailed investigations on isostasy, structure and evolution of aseismic ridges of the Indian Ocean have provided new insights on relationship between hotspot volcanism, kinematics of tectonic plates and evolution of the oceanic lithosphere. Analysis of high-resolution satellite gravity data led to discover the presence of pseudofaults and uncharted seamounts in the western Indian Ocean.