MOIAN SOCIETY OF GEOMATICS

## Prof. Kakani Nageswara Rao Endowment Young Achiever Award

## CITATION

Mrs. Shweta Sharma born in Lucknow city of Uttar Pradesh, on 20th March 1979, obtained her M.Sc. degree in Physics with specialization in Electronics in the year 2002 from Lucknow University. She has done her M.Tech from IIT Roorkee in 2004 and in the same year she joined Space Applications Centre, ISRO, Ahmedabad as a Scientist. Mrs. Shweta Sharma is currently pursuing part-time Ph.D. from IIT Bombay in the field of Geo-informatics using SAR data.



Mrs. Shweta Sharma during her professional career of around 10 years at the Space Applications Centre, has significantly contributed to the broad area of applications of Geomatics in the field of urban and disaster applications. She has significantly contributed in development of methodology for city growth simulation, evaluation of DLR and SAC-ASAR data using textural analysis, urban heat island analysis, urban morphological studies and land subsidence mapping and quantification using microwave data. She has also developed an earthquake damage scenario simulation shell for assessing the impact of earthquake on human settlements. She is actively involved in developing Persistent Scatterer Interferometry Technique for land deformation studies.

She has made an effort to assess the potential of cool roofs to counteract the green house effect. Her study has impact on societal benefits as it shows that installation of high-albedo "cool roofs" across urban areas will indirectly decrease CO<sub>2</sub> emissions. She is responsible for formulating a simple analytical model to study the effect of urban surface albedo enhancement on radiative forcing, land surface temperature change and quantified associated CO<sub>2</sub> offsets.. She is a gold medalist and a recipient of awards and prizes in academics as well as in the field of sports. She is a recipient of Best paper Awards in ISRS Annual Convention and National Symposium in 2008 and also in National conference of ISG in 2011. She has also contributed in publication of two books showing satellite images covering various unique landform features and cultural heritage sites in India.

IN RECOGNITION OF HER OUTSTANDING CONTRIBUTIONS TOWARDS APPLICATIONS OF GEOMATICS IN URBAN AND DISASTER STUDIES, INDIAN SOCIETY OF GEOMATICS CONFERS THE PROF. KAKANI NAGESWARA RAO ENDOWMENT YOUNG ACHIEVER AWARD FOR THE YEAR 2013 ON MRS. SHWETA SHARMA.

(N.S. Mehta) Secretary, ISG (Shailesh Nayak) President, ISG

December 4, 2013 Visakhapatnam