

# INDIAN SOCIETY OF GEOMATICS



## Prof. Kakani Nageswara Rao Endowment Young Achiever Award

### CITATION

Dr. Arabinda Sharma born in Sambalpur town of Odisha, on 12<sup>th</sup> November 1978, obtained his M. Tech in Remote Sensing (2003) from BIT – Mesra and PhD in Soil and Water Conservation Engineering (2011) from IIT Kharagpur. Dr. Arabinda Sharma is currently working as Assistant Professor and HOD, Civil Engineering Department at BRCM College of Engineering & Technology, Bahal.



He has around ten years of research and teaching experience. His broad research areas include Geomatics, Water Resource and Environmental Engineering. During his professional career of ten years, he has provided his expertise on Geomatics to various projects in the areas of forestry, wildlife habitat and biodiversity assessment, ground water quality and noise pollution mapping, hydrological modeling, spatial data quality assessment and uncertainty and error propagation in spatial data. Dr. Sharma is an outstanding scholar, admirable teacher, modest person and has been a perfect mentor to several young students interested to work in the area of Geomatics.

Some of his path breaking works includes the use of Fragstat software as an alternative tool to BIOCAP for landscape level biodiversity characterization during 2003. His work also embraces the characterization of uncertainty in LULC classifications of images from LISS III sensor onboard different satellites i.e. IRS 1D and IRS P6. Dr. Sharma also developed a complete method to characterize and reduce the DEM error that may arise from different source such as choice of interpolation techniques, choice of cell size, source of elevation data, DEM preprocessing etc. He has contributed to DEM error prediction and propagation of DEM error during terrain analysis and hydrological modeling using Latin Hypercube sampling based Monte Carlo simulation and ArcSWAT hydrological model simulation. He has also developed two physically based hydrological connectivity indices using the concept of neutral landscape model. This is a pioneer and completely new approach in understanding the pattern process relationship in hydrological modeling. Thus, his contributions substantiate the current state of knowledge in many aspects of GIS based hydrological modeling. His work has been well accredited by his thirty-eight research publication in various reputed journals and conferences, and several awards including Jawaharlal Nehru Outstanding Doctoral Thesis Award-2012 from ICAR, New Delhi.

**IN RECOGNITION OF HIS OUTSTANDING CONTRIBUTIONS TOWARDS APPLICATIONS OF GEOMATICS IN WATER RESOURCES AND ENVIRONMENTAL ENGINEERING IN GENERAL AND FOR CATCHMENT HYDROLOGY IN PARTICULAR, INDIAN SOCIETY OF GEOMATICS CONFERS THE PROF. KAKANI NAGESWARA RAO ENDOWMENT YOUNG ACHIEVER AWARD FOR THE YEAR 2013 ON DR. ARABINDA SHARMA.**

**(N.S. Mehta)**  
Secretary, ISG

**(Shailesh Nayak)**  
President, ISG

**December 4, 2013**  
**Visakhapatnam**