

Prof. J K Garg

Joined Space Applications Centre, (ISRO), Ahmedabad in July 1976 and played a pivotal role in initiating and furthering the use of geospatial techniques for wetland conservation and rehabilitation, Natural Hazard Assessment and Zonation (Landslides, forest fires, earthquakes, besides doing pioneering work for ecosystem analysis and monitoring, environmental appraisal of developmental activities (mining, thermal power generation, river valley projects), GHG Emissions, and optimal resource use etc. A singular contribution is the initiation of the use of geospatial techniques for wetland research in India for which I have received global recognition. First scientific inventory (1998) and creation of wetland information system are the notable contributions to the science of wetland ecology and to the country. Some other major contributions include use of geospatial techniques for EIA, biomonitoring of river systems (Yamuna) and water quality studies.

Joined Guru Gobind Singh Indraprastha University, New Delhi in February 2008 and has been Dean of the School of Environment Management, and Director, Centre for Disaster Management Studies. Recently, after superannuation (January 31, 2019) joined TERI School of Advanced Studies as Senior Fellow. At GGSIPU besides teaching guided students to carry out basic and applied research on bio-optical monitoring of aquatic ecosystems, riverine landscape ecology, Urban Heat Island studies, and forest fragmentation etc. Delineation of boundaries of unauthorized colonies of Delhi using aerial and satellite imagery was also carried out as a consultancy project (during 2008-09).

Publications:

- Sangeeta Bansal, J. K. Garg, C. S. Sharma & Deeksha Katyal (2018) Spatial methane emission modelling from wetlands using geospatial tools, *International Journal of Remote Sensing*, 39:18, 5907-5933, DOI: 10.1080/01431161.2018.1513182

- Richa Bhardwaj, Anshu Gupta, J.K. Garg (2017), Evaluation of heavy metal contamination using environmetrics and indexing approach for River Yamuna, Delhi stretch, India, doi.org/10.1016/j.wsj.2017.02.002
- Ridhi Saluja & J. K. Garg (2017): Macrophyte species composition and structure along littoral region in relation to limnological variables of a tropical wetland ecosystem, Chemistry and Ecology, DOI: 10.1080/02757540.2017.1328502
- Ridhi Saluja & J. K. Garg (2017): Trophic state assessment of Bhindawas Lake, Haryana, India, DOI 10.1007/s10661-016-5735-z
- Ridhi Saluja, Satish Prasad, J. K. Garg (2017), Field spectroradiometry for discrimination of wetland components: a case study of a tropical inland wetland in India, DOI.org/10.1007/s11273-018-9620-0
- J.K. Garg (2015), Wetland assessment, monitoring and management in India using geospatial techniques
- Reshu Agarwal and J. K. Garg(2009), Methane emission modelling from wetlands, and waterlogged areas using MODIS data, Current Science, Vol. 96, No. 1
- Agarwal R and Garg J. K (2008), Knowledge Base Classification of Wetlands from Coarse Resolution Satellite Data,International Journal of Geoinformatics. Vol. 4, No. 3
- C. K. Varshney , J. K. Garg , W. K. Lauenroth & R. K. Heitschmidt (1979), Plant responses to sulfur dioxide pollution, C R C Critical Reviews in Environmental Control, 9:1, 27-49, DOI: 10.1080/10643387909381667
- Ridhi Saluja, Satish Prasad & J. K. Garg, Field spectroradiometry for discrimination of wetland components: a case study of a tropical inland wetland in India, DOI.org/10.1007/s11273-018-9620-0