

PERSONAL INFORMATION



Dr Deepak Kumar

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Scopus Author ID 57203026436 | Web of Science Researcher ID I-7334-2019

PERSONAL STATEMENT

My current research emphasizes broader areas of satellite image processing and geospatial technology to utilize cutting-edge technology for exploring the potential of interdisciplinary research including:

- *Remote Sensing and GIS, Hyperspectral Remote Sensing*
- *Microwave/ Radar Remote Sensing, Image Processing and Analysis*
- *Satellite Image Processing, Pattern Recognition and Object-Based Image Analysis*
- *Sustainable Urban Environment, Infrastructure and Climate Change Management*
- *Urban Landscape Informatics and Analytics for Smart Cities*
- *Spatial Data Management and Spatio-Temporal Data Analytics*
- *Renewable Energy Economics, Management, and Integration*

WORK EXPERIENCE

01/08/2022–Present

Post-Doctoral Research Scientist

Center Of Excellence in Weather & Climate Analytics

Atmospheric Science Research Center (ASRC), State University of New York, University at Albany (UAlbany) Campus, Albany, NY 12226, USA.

- **Academic Activities:** Research & Teaching Guidance to doctoral, postgraduate, and undergraduate students
- **R & D Activities:** R&D Projects, Research Supervision, Promotion, and Consultancy.
- **Administrative Activities:** Training, and Laboratory Management

14/06/2016–20/07/2022

Assistant Professor (On Study Leave since 21st July 2022)

Amity Institute of Geoinformatics and Remote Sensing (AIGIRS)

Amity University, Sector –125, Noida-201 303, Uttar Pradesh, India.

- **Academic activities:** Design, Development, and Offering of new courses. Teaching, Research, Academic guidance to doctoral, postgraduate, and undergraduate students,
- **R & D activities:** R&D Projects, Research Supervision, Research Promotion, Consultancy projects.
- **Administrative Activities:** Actively involved in training, mentoring, laboratory management, career counselling & guidance.

01/08/2014–09/06/2016

Senior Research Fellow [DST-INSPIRE]

School of Earth Sciences, Central University of Karnataka, Kalaburagi, India.

- Research Work
- Teaching to postgraduate and undergraduate students

06/08/2012–31/07/2014

Junior Research Fellow [DST-INSPIRE]

School of Earth Sciences, Central University of Karnataka, Kalaburagi, India.

- Research Work
- Teaching to postgraduate and undergraduate students

EDUCATION AND TRAINING

- 08/2012–06/2016 **Doctor of Philosophy (PhD)**
School of Earth Sciences, Central University of Karnataka, Kalaburagi, India.
Renewable Energy & Geospatial Technology
- 08/2010–06/2012 **Master of Science**
School of Earth Sciences, Central University of Karnataka, Kalaburagi, India.
Remote Sensing and GIS / Geospatial Applications in Regional Development
- 08/2005–07/2009 **Bachelor of Technology (B. Tech)**
Biju Patnaik University of Technology, Odisha, India.
Information Technology

SPONSORED RESEARCH PROJECT

1. Received ERASMUS+ KA107: Staff Mobility grant to visit Department of Geoinformatics – Z_GIS, Paris Lodron University of Salzburg, Schillerstrasse 30, 5020 Salzburg, Austria as Visiting Researcher from 23rd April to 3rd May 2022.
2. Investigated/ Supervised and completed a government-sponsored research project entitled **Hybrid Urban Landscape Analysis for Green Smart Cities through Geospatial Technology** under the DST Early Career Research Award scheme as Sole Principal Investigator funded by Science and Engineering Research Board, Department of Science and Technology, Government of India during June 2017 to March 2021.
3. Investigated/ Supervised and completed a government-sponsored research project entitled **Meta-sensing of the urban footprint from airborne synthetic aperture radar (ASAR) data** under NISAR Research Announcement scheme as Sole Principal Investigator funded by Space Applications Centre, Indian Space Research Organization, Department of Space, Government of India during November 2017 to March 2021.

RESEARCH CONTRIBUTIONS

1. Completed PhD Research on the thesis entitled *Solar Energy Modelling and Feasibility Analysis of Smart Solar Grids Using Geospatial Technology* from School of Earth Sciences, Central University of Karnataka, Kalaburagi (Gulbarga), India.
2. Completed Research Project entitled *Lunar Digital Surface Modelling & Analysis Using Chandrayaan-1 TMC Stereo Data for Implementing Navigation Techniques Based on Surface Derivatives Criterion* from Space Applications Centre (ISRO), Ahmedabad, Gujarat, India.
3. Contributed to data processing and product generation work related to *Chandrayaan-1 Mission* and also worked on preliminary activities for *Chandrayaan-2 Mission* like Terrain Surface Modeling & Visualization as well as understanding Geo-Information pipeline for data processing.
4. Worked on multiple on-going projects (*related to high-resolution data processing and output generation*) related to *Chandrayaan-1 Mission* during three months internship at HRDPD/SPDCG/SIPA, Space Applications Centre (ISRO), Ahmedabad, Gujarat.

PATENT FILED

1. **Title:** A METHOD AND SYSTEM FOR PROVIDING ENVIRONMENTAL SUSTAINABILITY DATA MODELING FOR SMART CITIES
Ref. No. /Application No: 202211045515 / **App. Number:** TEMP/E1/51793/2022- DEL
Inventors: Dr. Deepak Kumar, Ms. Sukanya Ghosh, Dr. Sulochana Shekhar, and Dr. Rina Kumari
Filed Date: 2022/08/09 17:06:00
2. **Title:** AN IOT BASED DEVICE FOR SENSING QUALITY OF FOOD ITEMS USING SENSORS
Ref. No. /Application No: 202111025729 / **App. Number:** TEMP/ E-1/ 28845/2021-DEL
Inventors: Dr. Deepak Kumar, Mr. Vaibhav Maini, Mr. Garv Jindal, Mr. Sparsh Bisht, Dr. Seema Rawat, and Dr. Praveen Kumar
Filed Date: 2021/06/09 19:38:50

3. **Title:** URINE COLLECTOR SYSTEM WITH A PATIENT DATA COLLECTOR WEARABLE DEVICE

Ref. No. /Application No: 202111011070 / **App. Number:** TEMP/E-1/ 12288/ 2021-DEL

Inventors: Mr. Sumit Gautam, Dr. Dolly Sharma, Dr. Seema Rawat, Dr. Shabana Urooj, and **Dr. Deepak Kumar**

Filed Date: 2021/03/16 15:09:55

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1. **Title:** GASOFY: LPG leakage and stove locking system

Diary Number: 2884/2022-CO/L

Inventors: Seema Rawat, Tanya Jain, Praveen Kumar, **Deepak Kumar**, Sunil Kumar Khatri

Filed Date: 2022/02/09

FELLOWSHIPS, ACADEMIC AWARDS AND HONOURS

1. Received **ERASMUS+ KA107: Staff Mobility funds** to visit as ERASMUS+ Visiting Faculty to Department of Geoinformatics – Z_GIS, Paris Lodron University of Salzburg, Schillerstrasse 30, 5020 Salzburg, Austria during the Academic Year 2021/2022.
2. Received **Certificate of Appreciation** for a contribution towards on BASIIC E-Dialogue on "Building Cities for All- A perspective on Disability Inclusion" jointly awarded by the National Institute of Urban Affairs, Delhi and All India Institute of Local Self Government (AIIISG) of the Ministry of Housing and Urban Affairs on 31st January 2022.
3. Received **Certificate of Appreciation** For delivering an invited talk in *NGP-DST Winter School on Geospatial Technologies (Level 1)* conducted by Suresh Gyan Vihar University, Jaipur (Online Mode) supported by Department of Science and Technology Govt. of India, New Delhi on 19th January 2022.
4. Received **Certificate of Primary Evaluator** for exceptional contribution in "Toycathon, 2021" awarded jointly by AICTE, Ministry of Education Innovation Cell.
5. Received **International Travel Support (ITS) Grant** from Science and Engineering Research Board, Department of Science and Technology, Government of India for presenting a paper in the USA.
6. Received **Best Paper Award** for the paper entitled *Evaluating solar exergy for alternate energy systems* at 37th INCA International Congress on Geoinformatics for Carto-Diversity and Its Management at National Hydrographic Office, Dehradun-248 001, India.
7. Received **Certificate of Appreciation** from Indian Institute of Remote Sensing (ISRO), Dehradun for a contribution towards promoting Geospatial Technology and Its Applications in the Year 2017.
8. Recipient of **Early Career Research (ECR) Award** from Science and Engineering Research Board, Department of Science and Technology, Government of India on the project entitled *Hybrid Urban Landscape Analysis for Green Smart Cities through Geospatial Technology* with research funding of ₹17.44 lakhs.
9. Recipient of a **Research Grant** from SAC-ISRO, Govt. of India under NISAR mission of NASA-ISRO on the project entitled *Meta-sensing of the urban footprint from airborne synthetic aperture radar (ASAR) data* with funding of ₹15.86 lakhs.
10. Recipient of **University Gold Medal** from the Central University of Karnataka, Kalaburagi (*Awarded from the President of India*) for securing highest marks at post-graduate level.
11. Recipient of **Junior Research Fellowship (JRF)** from National Remote Sensing Centre, Indian Space Research Organization, Department of Space, Government of India.
12. Recipient of **DST-INSPIRE Fellowship** [IF120639] in the year 2012-2013 by the Department of Science & Technology, Ministry of Science & Technology, Government of India for pursuing the Doctoral Program in Science & Technology.
13. Recipient of **University Research Fellowship** in the year 2012-2013 by the Central University of Karnataka for pursuing the Doctoral Program in Earth Sciences domain.

14. Received **Certificate of Outstanding Contribution in Reviewing** for the contributions made to the quality of the SCIENCE OF THE TOTAL ENVIRONMENT Journal by The Editors of SCIENCE OF THE TOTAL ENVIRONMENT, Elsevier, Amsterdam, The Netherlands.
15. Received **Certificate of Outstanding Contribution in Reviewing** for the contributions made to the quality of the SUSTAINABLE CITIES AND SOCIETY Journal by The Editors of SUSTAINABLE CITIES AND SOCIETY, Elsevier, Amsterdam, The Netherlands.
16. Received **Certificate of Outstanding Contribution in Reviewing** for the contributions made to the quality of the SOLAR ENERGY Journal by The Editors of SOLAR ENERGY, Elsevier, Amsterdam, The Netherlands.

PUBLICATIONS

Published Manuscripts in International Peer-Reviewed Journals (Indexed in Scopus/ SCI/ WoS)

(Published Manuscripts)

1. Ghosh, Sukanya; Kumar, Deepak*; and Rina Kumari (2022). **Assessing spatiotemporal variations in land surface temperature and SUHI intensity with a cloud-based computational system over five major cities of India**, *Sustainable Cities and Society (SCS)* (Elsevier), **ISSN: 2210-6707**. <https://doi.org/10.1016/j.scs.2022.104060>, **Impact Factor- 10.696, Scopus/SCI Indexed.**
2. Kumar, Ashwani; Kumar, Deepak*; and Veerabhadrapa, S. M. (2022). **Analysing Effects on Ground Water Levels Due to Conversion of Rural to Urban Landscapes**, *Journal of Landscape Ecology (Scienco)*, **Electronic ISSN: 1805-4196 (Online)**. Cite Score: 1.3, **Scopus Indexed- Accepted.**
3. Ghosh, Sukanya; Kumar, Deepak*; and Rina Kumari (2022). **Assessing Spatiotemporal Dynamics of Land Surface Temperature and Satellite-Derived Indices for New town development and suburbanization planning**, *Urban Governance (Elsevier)*, **ISSN: 2664-3286**. <https://doi.org/10.1016/j.ugj.2022.05.001>, **Peer Reviewed.**
4. Kikon, Noyingbeni; Kumar, Deepak*; and Ahmed, S. A. (2022). **Spaceborne synthetic aperture radar (SAR) earth observations for surface deformation analysis and mapping**, *Arabian Journal of Geosciences (Springer)*. **Electronic ISSN-1866-7538/ Print ISSN-1866-7511**. <https://doi.org/10.1007/s12517-022-10370-5>, **Impact Factor- 1.985, Scopus/SCI Indexed.**
5. Ghosh, Sukanya; Kumar, Deepak*; and Rina Kumari (2022). **Google earth engine based computational system for the earth and environment monitoring applications during the COVID-19 pandemic using thresholding technique on SAR datasets**, *Physics and Chemistry of the Earth, Parts A/B/C (Elsevier)*. **ISSN: 1474-7065**. <https://doi.org/10.1016/j.pce.2022.103163>, **Impact Factor- 3.311, Scopus/SCI Indexed.**
6. Kumari, Maya; Kumar, Deepak*; and Vaishnavi (2022). **Dynamic drought risk assessment and analysis with multi-source drought indices and analytical hierarchy process**, *International Journal of Environmental Science and Technology (IJEST)* (Springer). **Electronic ISSN: 1735-2630 (Online)/ Print ISSN: 1735-1472**. <https://doi.org/10.1007/s13762-022-04041-x>, **Impact Factor - 3.083, Scopus/SCI Indexed.**
7. Ghosh, Sukanya; Kumar, Deepak*; and Rina Kumari (2022). **Assessing the influence of floods over selected states of eastern India with cloud-based geo-computing platforms**, *Geocarto International (Taylor & Francis)*, **Electronic ISSN: 1752-0762 (Online)/ Print ISSN: 1010-6049**. <https://doi.org/10.1080/10106049.2022.2047230>, **Impact Factor- 4.889, Scopus/SCI Indexed.**
8. Kikon, Noyingbeni; Kumar, Deepak*; and Ahmed, Ashfaq (2022). **Analysing transition of land surface temperature and derived indices with respect to elevation values in Kohima Saddar**, *GeoJournal (Springer)*. **Electronic ISSN: 1572-9893 (Online)/ Print ISSN: 0343-2521**. <https://doi.org/10.1007/s10708-022-10580-0>, **Scopus/SCI Indexed.**
9. Ghosh, Sukanya; Kumar, Deepak*; and Rina Kumari (2022). **Evaluating the impact of flood inundation with the cloud computing platform over vegetation cover of Ganga Basin during COVID-19**, *Spatial Information Research (Springer)*.

Electronic ISSN: 2366-3294 (Online)/ **Print ISSN:** 2366-3286. <https://doi.org/10.1007/s41324-022-00430-z>, **Scopus/SCI Indexed.**

10. Sunita; Kumar, Deepak*; and Sulochana Shekhar (2021). **Spatial distribution analysis of urban blue-green spaces for mitigating excessive heat with Earth Observation Systems**, Environmental Challenges (Elsevier), Volume 5, December 2021, 100390, **Electronic ISSN:** 2667-0100 (Online). <https://doi.org/10.1016/j.envc.2021.100390>, **WoS/Scopus Indexed.**
11. Sunita; Kumar, Deepak*; and Sulochana Shekhar (2021). **Developing an approach for assessing urban blue-green spaces towards sustainable urban growth through retrospective cyber metrics analysis of operational estimations approaches**, Journal of Landscape Ecology (Scienco), **Electronic ISSN:** 1805-4196 (Online). <https://doi.org/10.2478/jlecol-2021-0016> Cite Score: 1.3, **Scopus Indexed.**
12. Kumar, Deepak*; and Tewary, Tavishi (2021). **Design and analysis of grid-connected sustainable urban residential energy systems**, International Journal of Energy Sector Management (Emerald), **Electronic ISSN:** 1750-6220 (Online). <https://doi.org/10.1108/IJESM-02-2021-0025>, **Impact Factor- 1.72, WoS/Scopus/SCI Indexed.**
13. Upreti, Manjari; and Kumar, Deepak* (2021). **Investigating Capability of Open Archive multispectral and SAR datasets for Wheat Crop Monitoring and Acreage Estimation**, Earth Science Informatics (Springer). **Electronic ISSN:** 1865-0481 (Online)/ **Print ISSN:** 1865-0473. <https://doi.org/10.1007/s12145-021-00656-9>, **Impact Factor- 2.878, WoS/Scopus Indexed.**
14. Rawat, Seema; Kumar, Deepak*; Kumar, Praveen; and Khattri, Chaya (2021). **A Systematic Analysis Using Classification Machine Learning Algorithms to Understand Why Learners Drop Out of MOOCs**, Neural Computing and Applications (Springer). **Electronic ISSN:** 1433-3058/ **Print ISSN:** 0941-0643. <https://doi.org/10.1007/s00521-021-06122-3>, **Impact Factor- 5.606, WoS/Scopus Indexed.**
15. Kumar, Praveen; Jain, Rishabh; Kumar, Deepak*; and Rawat, Seema (2021). **Interdisciplinary Implementation of Supervised Real-Time Waste Management**, SN Computer Science (Springer). **Electronic ISSN:** 2661-8907(Online). <https://doi.org/10.1007/s42979-021-00651-3>, **ProQuest/ EBSCO Indexed.**
16. Rawat, Seema; Rawat, Aakankshu; Kumar, Deepak*; and Sabitha A. Sai (2021). **Application of machine learning and data visualization techniques for decision support in the insurance sector**, International Journal of Information Management Data Insights (Elsevier). **Electronic ISSN:** 2667-0968 (Online), Volume 1, Issue 2, November 2021, 100012. <https://doi.org/10.1016/j.jiimei.2021.100012>, **WoS/ DOAJ Indexed.**
17. Kumar, Deepak* (2021). **Urban objects detection from C-band synthetic aperture radar (SAR) satellite images through simulating filter Properties**, Scientific Reports (Nature), **Electronic ISSN:** 2045-2322 (Online). <https://doi.org/10.1038/s41598-021-85121-9>, **Impact Factor- 5.133, WoS/Scopus/DOAJ Indexed.**
18. Kumar, Deepak (2021). **Spatial variability analysis of the solar energy resources for future urban energy applications using Meteosat satellite-derived datasets**, Remote Sensing Applications: Society and Environment (Elsevier), **Electronic ISSN:** 2352-9385 (Online). <https://doi.org/10.1016/j.rsase.2021.100481>, **CiteScore: 4.0, WoS/Scopus Indexed.**
19. Kumari, Pooja; Kumari, Rina*; and Kumar, Deepak (2021). **Geospatial approach to evaluate the morphometry of Sabarmati River Basin, India**, Arabian Journal of Geosciences (Springer) **14**, Article number: 206 (2021), **Electronic ISSN** 1866-7538 (Online)/ **Print ISSN:** 1866-7511, **14**, 206 (2021). <https://doi.org/10.1007/s12517-021-06577-7>, **Impact Factor- 1.827, WoS/Scopus Indexed.**
20. Kumar, Aman; and Kumar, Deepak* (2020). **Urban Features Identification from Dual-Pol SAR Images with Filter Properties**, Journal of Landscape Ecology (Scienco), Vol: 13 / No. 3, Page Range: 39-62, **Electronic ISSN:** 1805-4196 (Online). <https://doi.org/10.2478/jlecol-2020-0016>, **Cite Score: 1.3, Scopus Indexed.**
21. Kumar, Deepak*; and Tewary, Tavishi (2021). **Techno-economic assessment and optimization of a standalone residential hybrid energy system for sustainable energy utilization**, International Journal of Energy Research (John

- Wiley & Sons Ltd), **Electronic ISSN:** 1099-114X (Online). <https://doi.org/10.1002/er.6389>, **Impact Factor- 5.164, WoS/ Scopus Indexed.**
22. Kumar, Deepak*; and Kumar, Aman (2020). **Evaluating Filter Properties for Urban Feature Identification from Dual-Pol SAR Images**, Modelling Earth Systems and Environment (Springer), **7**, pages 1337–1352 (2021), ISSN 2363-6203/**Electronic ISSN:** 2363-6211 (Online)/ **Print ISSN:** 2363-6203. <https://doi.org/10.1007/s40808-020-00981-w>, **WoS/ Scopus Indexed.**
 23. Misra, Mandvi; and Kumar, Deepak* (2020). **A hybrid indexing approach for sustainable smart cities development**, Journal of the Indian Society of Remote Sensing (Springer), **48**, pages 1639–1643 (2020), **Electronic ISSN:** 0974-3006 (Online) / **Print ISSN:** 0255-660X. <https://doi.org/10.1007/s12524-020-01171-y>, **Impact Factor- 1.563, WoS/ Scopus Indexed.**
 24. Kaushik, Kavita; and Kumar, Deepak* (2020). **Forest Disturbance Mapping with Microwave Remote Sensing**, Journal of landscape ecology (Sciencd), Vol: 13 / No. 2, Page(s): 95-128, **Electronic ISSN:** 1805-4196 (Online). <https://doi.org/10.2478/jlecol-2020-0012>, **Cite Score: 1.3, Scopus Indexed.**
 25. Kumar, Deepak* (2020). **Urban energy system management for enhanced energy potential for upcoming smart cities**, Energy Exploration & Exploitation (SAGE Publishing), Volume: 38, Issue: 5, Page (s): 1968-1982, **Print ISSN:** 0144-5987/ **Electronic ISSN:** 2048-4054 (Online). <https://doi.org/10.1177/0144598720937529>, **Impact Factor-2.139, WoS/ Scopus Indexed.**
 26. Kumar, Deepak* (2020). **Satellite-based solar energy potential analysis for southern states of India**, Energy Reports (Elsevier), Volume 6, November 2020, Pages 1487-1500, **Electronic ISSN:** 2352-4847 (Online). <https://doi.org/10.1016/j.egy.2020.05.028>, **Impact Factor- 6.870, WoS/Scopus Indexed.**
 27. Misra, Mandvi; Kumar, Deepak*; and Shekhar Sulochana (2020). **Assessing Machine Learning-Based Supervised Classifiers for Built-Up Impervious Surface Area Extraction from Sentinel-2 Images**, Urban Forestry & Urban Greening (Elsevier), Volume 53, August 2020, 126714, August 2020, 126714, **Electronic ISSN:** 1618-8667 (Online). <https://doi.org/10.1016/j.ufug.2020.126714>, **Impact Factor- 4.537, WoS/ Scopus Indexed.**
 28. Kumar, Deepak* (2019). **Hyper-temporal variability analysis of solar insolation with respect to local seasons**, Remote Sensing Applications: Society and Environment (Elsevier), Volume 15, August 2019, 100241, **Electronic ISSN:** 2352-9385 (Online). <https://doi.org/10.1016/j.rsase.2019.100241>, **Cite Score: 4.0, WoS/ Scopus Indexed.**
 29. Kumar, Deepak* (2018). **Mapping solar energy potential of southern India through geospatial technology**, Geocarto International (Taylor & Francis), Volume 34, 2019 - Issue 13, Pages 1477-1495, **Electronic ISSN:** 1752-0762 (Online)/ **Print ISSN:** 1010-6049. <https://doi.org/10.1080/10106049.2018.1494759>, **Impact Factor- 4.889, WoS/ Scopus Indexed.**
 30. Kumar, Deepak*; Tewary, Tavishi; and Shekhar, Sulochana (2018). **Enhanced Adaptive Technique for surface Temperature Variability Analysis**, Iranian Journal of Science and Technology Transactions A: Science (Springer), Volume 42, Issue 3, pp 1309–1316, **Electronic ISSN:** 2364-1819 (Online)/ **Print ISSN:** 1028-6276. <https://doi.org/10.1007/s40995-017-0469-5>, **Impact Factor-1.194, WoS/ Scopus Indexed.**
 31. Kumar, Deepak* (2018). **Surface temperature variability analysis of an urban area using Landsat ETM+ thermal images**, Asian Geographer (Taylor & Francis), Volume 34, Issue-1, page 25-37, **Electronic ISSN:** 2158-1762 (Online)/ **Print ISSN:** 1022-5706. <https://doi.org/10.1080/10225706.2017.1322992>, **Cite Score: 2.4, WoS/Scopus Indexed.**
 32. Kumar, Deepak* and Shekhar, Sulochana (2016). **Linear Gradient Analysis of Kinetic Temperature through Geostatistical Approach**, Modelling Earth Systems and Environment (Springer), **2**, Article number: 145 (2016), ISSN 2363-6203, **Electronic ISSN:** 2363-6211 (Online)/ **Print ISSN:** 2363-6203. <https://doi.org/10.1007/s40808-016-0198-3>, **WoS/ Scopus Indexed.**
 33. Kumar, Deepak* (2016). **Adaptive Hierarchical Cell Sub-Division (AHCS) Method for Enhanced Surface Radiance Temperature Variability Analysis**, Modelling Earth Systems and Environment (Springer), **2**, Article number: 136 (2016),

Electronic ISSN: 2363-6211 (Online)/ **Print ISSN:** 2363-6203, <https://doi.org/10.1007/s40808-016-0194-7>, **WoS/ Scopus Indexed.**

34. Kumar, Deepak* and Shekhar, Sulochana (2015). **Statistical Analysis of Land Surface Temperature–Vegetation Indexes Relationship through Thermal Remote Sensing**, Ecotoxicology and Environmental Safety (Elsevier), Volume 121, Issue-1, Page 39-44, **Electronic ISSN:** 0147-6513 (Online). <https://doi.org/10.1016/j.ecoenv.2015.07.004>, **Impact Factor- 6.291. WoS/ Scopus Indexed.**
35. Kumar, Deepak* (2015). **Economic Assessment of Photovoltaic Energy Production Prospects in India**, Elsevier Earth and Planetary Science Procedia (Elsevier), Volume 11, 2015, Pages 425-436, **Electronic ISSN:** 1878-5220 (Online). <https://doi.org/10.1016/j.proeps.2015.06.042>, (SNIP-1.088). **WoS/Scopus Indexed.**
36. Kumar, Deepak* (2015). **Remote Sensing Based Vegetation Indices Analysis to Improve Water Resources Management in Urban Environment**, Elsevier Aquatic Procedia, [Volume 4](#), 2015, Pages 1374-1380, **Electronic ISSN:** 2214-241X (Online). <https://doi.org/10.1016/j.aqpro.2015.02.178>, **WoS/Scopus Indexed.**
37. Kumar, Deepak* and Shekhar, Sulochana (2015). **Renewable Energy Potential for Green Networks**, Research J. Science and Tech. 7(2): April-June, 2015, PP 125-132, **Electronic ISSN:** 2349-2988 (Online)/ **Print ISSN:** 0975-4393. <http://dx.doi.org/10.5958/2349-2988.2015.00017.0>, **ICI Indexed.**

National Peer Reviewed Journal (Published Manuscripts)

1. Kumar, Deepak* (2018). **Evaluating Solar Exergy for Alternate Energy Systems**, Indian Cartographer, Vol-37, 2017 (ISSN 0927-8392), INCA, Hyderabad, India, PP 1-10.
2. Kumar, Deepak* (2014). **Spatial Variation of Surface Energy Fluxes with respect to land-use changes across Gulbarga city**, Indian Cartographer, Vol. XXXIV (2014).

International Conference/ Proceedings (Published)

1. Kumar, Deepak* and Shekhar, Sulochana (2014). **Computing Building Rooftop Solar Potential for Photovoltaics**, Conference Proceedings papers of ISRS Special Interactive Session in ISPRS TC VIII Mid-Term Symposium on “Operational RS Applications: Opportunities, Progress and Challenges” held during December 9-12, 2014, at Hyderabad, India.
2. Kumar, Deepak* and Shekhar, Sulochana (2013). **Modelling Solar Energy Using Geospatial Technology**, Conference Proceedings of International Conference on Geospatial Momentum for Society and Environment, CEPT University, Ahmedabad, AGSE Publishing, Germany, PP 351-364, ISBN: 978-3-943321-12-8.

National Conference/ Proceedings (Published)

1. Misra, Mandvi and Kumar, Deepak* (2018). **Base Map Preparation with Multi-Source Datasets for Urban Landscape Analysis**, Conference Proceedings of ESRI India User Conference 2018, Delhi, NCR.
2. Rana, Diksha and Kumar, Deepak* (2018). **Analysing Impact on Urbanization Pattern of Delhi NCR Region due of Delhi Metro**, Conference Proceedings of ESRI India User Conference 2018, Delhi, NCR.
3. Garg, Pratibha and Kumar, Deepak* (2018). **Assessing lateral expansion along Delhi Meerut Expressway Corridor**, Conference Proceedings of ESRI India User Conference 2018, Delhi, NCR.
4. Girish, Aditya and Kumar, Deepak* (2018). **Analysing decline of Green Cover due to Eastern Peripheral Expressway**, Conference Proceedings of ESRI India User Conference 2018, Delhi, NCR.

Authored Book (Accepted/ Published)

1. Shekhar, Sulochana; and Kumar, Deepak (2022). **Geoinformatics for Sustainable Urban Development**, CRC Press (Taylor & Francis Group) Publishing Company, USA (Accepted).
2. Kumar, Deepak (2021). **Renewable Energy Scenarios in Future Indian Smart Cities: A Geospatial Technology Perspective**, Springer

Nature Switzerland AG (Accepted).

3. Kumar, Deepak (2021). Urban Energy Systems, WILEY/ Scrivener Publishing LLC, 100 Cummings Center, Suite 541J, Beverly, MA 01915-6106 (Accepted)
4. Kumar, Deepak (2014). Remote Sensing Applications for Planetary Surfaces, LAP Lambert Academic Publishing, ISBN: 978-3-659-47507-8.

Book Chapters (Published)

1. Rana, Disksha; Kumar, Deepak *, Kumari, Maya; and Kumari, Rina (2022). **Assessing the Impact of Delhi Metro Network Towards Urbanisation of Delhi-NCR**. In Praveen Kumar Rai (Eds): *Geospatial Technology for Landscape and Environmental Management: Sustainable Assessment and Planning*, <https://doi.org/10.1007/978-981-16-7373-3> (Springer Nature Switzerland AG 2021), eBook ISBN 978-981-16-7372-6, Hardcover ISBN.
2. Kumar, Deepak *, and Tewary, Tavishi (2022). **Countering Challenges of Smart Cities Mission Through Participatory Approach**. In Praveen Kumar Rai (Eds): *Geospatial Technology for Landscape and Environmental Management: Sustainable Assessment and Planning*, https://doi.org/10.1007/978-981-16-7373-3_12 (Springer Nature Switzerland AG 2021), eBook ISBN 978-981-16-7372-6, Hardcover ISBN.
3. Bhartiya, Anubhav; Kumar, Deepak *, and Rai, Praveen Kumar (2022). **Multispectral Remote Sensing for Urban Planning and Development**. In Praveen Kumar Rai (Eds): *Geospatial Technology for Landscape and Environmental Management: Sustainable Assessment and Planning*, https://doi.org/10.1007/978-981-16-7373-3_19 (Springer Nature Switzerland AG 2021), eBook ISBN 978-981-16-7372-6, Hardcover ISBN.
4. Kumar, Deepak *, and Ekata Paul (2021). **Analyzing urban landscape changes with multi-sensor datasets on a temporal scale**. In Varun Narayan Mishra, Praveen Kumar Rai, and Prafull Singh (Eds): *Geo-information Technology in Earth Resources Monitoring and Management*, Page 103-122, Nova Science Publishers (USA) 2021, Hardcover ISBN: 978-1-53619-669-6.
5. Das, Punam; and Kumar, Deepak * (2021). **Supervised classification and clustering algorithms for spatiotemporal change analysis assessment of urban growth**. In Poonam Tanwar, Praveen Kumar, Seema Rawat, Masoud Mohammadian and Saif Ahmad (Eds): *Computational Intelligence and Predictive Analysis for Medical Science*, Page 85-113, <https://doi.org/10.1515/9783110715279-005> (De Gruyter GmbH 2021), eBook ISBN 9783110715347, Hardcover ISBN 9783110714982.
6. Kalita, Pranjit; Anubhav, Kumar; Kumar, Deepak *; and Aashish, Kumar (2021). **Computational intelligence for analysis of urban surface temperature over various urban land cover features**. In Poonam Tanwar, Praveen Kumar, Seema Rawat, Masoud Mohammadabad and Saif Ahmad (Eds): *Computational Intelligence and Predictive Analysis for Medical Science*, Page 285-299, <https://doi.org/10.1515/9783110715279-015> (De Gruyter GmbH 2021), eBook ISBN 9783110715347, Hardcover ISBN 9783110714982.
7. Mani, Ashish; Kumar, Dharmendra; and Kumar, Deepak * (2021). **Evaluating Decadal Change in Green Cover of Dehradun City**. In Poonam Sharma (Eds): *Geospatial Technology and Smart Cities*, Page 1-15, https://doi.org/10.1007/978-3-030-71945-6_26 (Springer Nature Switzerland AG 2021), eBook ISBN 978-3-030-71945-6, Hardcover ISBN 978-3-030-71944-9.
8. Kumar, Deepak *, and Tirthankar Ghosh (2021). **Monitoring Changes in Land Cover in the Indian Sundarbans Region, Using Geospatial Sciences**. In Ripudaman Singh et al. (eds.), *Re-envisioning Remote Sensing Applications: Perspectives from Developing Countries*, Page 137-150, (Taylor & Francis Group 2021), eBook ISBN 9781003049210.
9. Kumari, Juli; Kumar, Deepak*, and Kumar, Ela (2021). **Analyzing Knowledge Representation of University Ontology Through Semantic Web: Representation of University Ontology**. In Amit Tyagi (Eds.), *Multimedia and Sensory Input for Augmented, Mixed, and Virtual Reality*. ISBN13: 9781799847038, ISBN10: 1799847039, EISBN13: 9781799847045, <https://doi.org/10.4018/978-1-7998-4703-8.ch007>, (IGI Global. 2020).

10. Kumar, Deepak* (2020). **Statistical Image Processing for Enhanced Scientific Analysis**. In A. K. Somani et al. (Eds.), *Smart Systems and IoT: Innovations in Computing, Smart Innovation, Systems and Technologies*, 141, https://doi.org/10.1007/978-981-13-8406-6_1, (Springer Nature Singapore Pte Ltd. 2020).
11. Kumar, Deepak* (2017). **Mitigating Climate Change through Efficient Agroforestry Methods**. In C.B. Pandey, Mahesh Kumar Gaur and R.K. Goyal (Eds.): *Climate Change and Agroforestry*, pp. 95-108, New India Publishing Agency, New Delhi, India, ISBN: 9789386546067.
12. Kumar, Deepak*; and Shekhar, Sulochana (2015). **Rural Energy Supply Models for Smart Villages**. In Rao, Madhava V.; Rao, Kesava P.; Kumar Phanindra T. & Murthy D.S.R. (1st Ed.): *Geoinformatics Applications in Rural Development*, Professional Books Publisher, Hyderabad, PP 166-178, ISBN: 978-81-909728-9-5.
13. Kumar, Deepak* (2014). **Overview of Open-Source Virtual Learning Environment for Scientific Research**. In Kattimani P.S., & Jange, Suresh (1st Ed.): *Integrating ICT in Academic Libraries: Making a Difference in Knowledge Age*, Neoti Book Agency, New Delhi, PP 672-683, ISBN: 9788-19275-6912.

DOCTORAL RESEARCH SUPERVISION

1. Research supervision to **Ms. Belormi Chattopadhyay** on the topic entitled **Assessing the impact of Urban Heat Stress on adjoining areas with Thermal Infrared Remote Sensing** at Amity Institute of Geoinformatics and Remote Sensing (AIGIRS), Amity University, Sector –125, Noida-201 313, Uttar Pradesh, India from January 2022.
2. Research supervision to **Ms. Mandvi Misra** on the topic entitled **Evaluating urban green landscape through hybrid approach for smart cities** at Amity Institute of Geoinformatics and Remote Sensing (AIGIRS), Amity University, Sector – 125, Noida-201 313, Uttar Pradesh, India from July 2018 - *Thesis Submitted*.
3. Research supervision to **Ms. Sunita** on the topic entitled **Assessing Urban Blue-Green Spaces through SAR Remote Sensing** at Amity Institute of Geoinformatics and Remote Sensing (AIGIRS), Amity University, Sector –125, Noida-201 313, Uttar Pradesh, India from Jan 2019 - *Thesis Submitted*.
4. Research supervision to **Ms. Sukanya Ghosh** on the topic entitled **Exploring Deep Learning Techniques for Complex Remote Sensing Datasets** at Amity Institute of Geoinformatics and Remote Sensing (AIGIRS), Amity University, Sector – 125, Noida-201 313, Uttar Pradesh, India from July 2019 - *Thesis Submitted*.
5. Research supervision to **Ms. Noyingbeni Kikon** on the topic entitled **Advanced spatial information retrieval and quantification (ASIRQ) from SAR and optical images** at Amity Institute of Geoinformatics and Remote Sensing (AIGIRS), Amity University, Sector –125, Noida-201 313, Uttar Pradesh, India from July 2018 - *Thesis Submitted*.

MEMBERSHIPS

1. Member of International Geographical Union (IGU) Commission on Modeling Geographical Systems Commission (MGSC) // Member ID is IGU-MGSC-2022-0004.
2. Corresponding Member of the International Geographical Union (IGU) Commission on Research Methods in Geography.
3. IEEE SA-P4006 Working Group Member under IEEE Geoscience and Remote Sensing Society/ Standards Committee (GRSS/SC) for Remote Sensing Frequency Band Radio Frequency Interference (RFI) Impact Assessment.
4. IUCN Regional Commission Member 2017-2020 and 2021-25 CEESP Asia, Eastern Europe and Central Asia.
5. IUCN Commission Member 2017-2020 and 2021-25
 - a) CEC Higher Education, Knowledge Management and Capacity Development.
 - b) CEC NatureForAll, Outreach, CEPA, Young Professional, Social and Behaviour Change Communications.
 - c) CEESP Environment and Peace Thematic Group.
 - d) CEESP Human Wellbeing and Sustainable Livelihoods.
 - e) CEESP Local Economies, Communities and Nature Specialist Group.
 - f) CEESP Natural Resource Governance Framework Working Group.

- g) *CEESP People in Nature Working Group.*
- h) *CEESP Sustainable Use and Livelihoods Network.*
- i) *CEESP Young Professional Network.*

6. Member of International Society for Photogrammetry and Remote Sensing-2019, 2021, 2022.
7. Member, Global Land Programme (GLP), 2019-
8. Life Member of Indian Society of Remote Sensing (ISRS) // Membership. No-L-4491.
9. Life Member of Indian National Cartographic Association (INCA) // Membership. No-LM-2763.
10. Member of European Geosciences Union (EGU) // ID No.265275
11. Registered Professional Engineer of Engineering Council of India // Membership. No-L-4023.
12. Life Member of Indian Meteorological Society (IMS) // Membership. No-LM-3545.
13. Life Member of the Indian Science Congress Association (ISCA) // Membership. No-L-40160.
14. REN21 member for REN21 Secretariat.
15. Life Member of the International Association for Promoting Geoethics (IAPG).

EDITOR/ EDITORIAL BOARD OF JOURNALS

1. **Article Editor**, [SAGE Open](#) (*Social Sciences Citation Index (SSCI) Directory of Open Access Journals (DOAJ), Scopus Indexed*)
2. **Member of Editorial Board**, [PLOS Climate](#) (*Directory of Open Access Journals (DOAJ), Scopus Indexed*)
3. **Member of the Scientific Committee** of the 3 Conference of the Arabian Journal of Geosciences (CAJG), held online from 2nd to 5th November 2020.
4. **Member of Editorial Board**, [Journal of Oil and Gas Research](#)
https://www.omicsonline.org/editor-profile/Deepaki_Kumar/
5. **Member of Editorial Board**, [Satellite Oceanography and Meteorology \(SOM\)](#)
<http://ojs.whioce.com/index.php/som/about/editorialTeam>

REVIEWERS OF JOURNALS

- IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, Institute of Electrical and Electronics Engineers Inc. (IEEE).
- Meteorological Applications-Wiley
- Optik - International Journal for Light and Electron Optics, Elsevier.
- Journal of the Indian Society of Remote Sensing, Springer Nature.
- International Journal of Remote Sensing, Taylor & Francis Group.
- IEEE Access-The Multidisciplinary Open Access Journal, Institute of Electrical and Electronics Engineers Inc. (IEEE).
- Geo-Spatial Information Science, Taylor & Francis Group.
- Geocarto International, Taylor & Francis Group.
- Clean Technologies and Environmental Policy, Springer.
- Environmental monitoring and assessment, Springer
- Environmental Progress & Sustainable Energy, Wiley.
- SAGE Open
- European Journal of Remote Sensing, Taylor & Francis Group.
- Energy Exploration & Exploitation, SAGE Publishing.
- Arabian Journal of Geosciences, Springer Nature.
- Science of the Total Environment, Elsevier.
- Sustainable Cities and Society, Elsevier.
- IEEE Sensors Letters, Institute of Electrical and Electronics Engineers Inc. (IEEE).
- Solar Energy, Elsevier.
- Intelligent Systems in Accounting, Finance & Management: International Journal, Wiley.
- IGI Global Book Chapter Peer Reviews

- Stochastic Environmental Research and Risk Assessment, Springer.
- International Journal of Energy Sector Management, Emerald Group Publishing
- Meteorological Applications, Wiley
- MDPI-Atmosphere
- MDPI- Sustainability
- Indonesian Journal of Electrical Engineering and Computer Science
- PLOS One

WORKSHOP, TRAINING AND CERTIFICATIONS

- 1. February 2022:** Completed a **Mendeley Training Course** organized by Amity University, Gwalior on 5th February 2022.
- 2. November 2021:** Completed an **International Workshop on the Application of ocean science and technology for the practice of a sustainable “Blue Economy” in developing countries** Jointly Organized by the Centre for Science and Technology of the Non-Aligned & Other Developing Countries (NAM S&T Centre), New Delhi (India) and the Committee on Capacity Development of the Scientific Committee on Oceanic Research (SCOR), Newark, Delaware (USA) during 8th and 09th November 2021.
- 3. October 2021:** Completed NASA's Applied Remote Sensing Training Program on **Agricultural Crop Classification with Synthetic Aperture Radar and Optical Remote Sensing** organized by the National Aeronautics and Space Administration on 05, 07, 12, 14, and 19 October 2021.
- 4. October 2021:** Participated in the online talk on **Everything about open access publishing researcher's perspective** conducted by WILEY on 5th October 2021.
- 5. September 2021:** Participated in the online talk on **Bibliometrics-Measuring the impact of research course** conducted by WILEY on 28th September 2021.
- 6. July 2021:** Attended a short-term Web-based training course on **Microwave Data Analysis Software tool – MIDAS** under TREES (Training and Research in Earth Eco-System)-SRTD, an initiative of Space Applications Centre (ISRO), Ahmedabad organized by Space Applications Centre (ISRO), Ahmedabad during 29th & 30th July 2021.
- 7. July 2021:** Participated in a management webinar conducted on **Creating Dashboard Using Power BI** organised by Marwadi University on 31st July 2021.
- 8. July 2021:** Completed AICTE Training and Learning (ATAL) Academy Online Elementary FDP on **Data Science & Machine Learning with Python** organized by Manipal University, Jaipur from 5th to 9th July 2021.
- 9. July 2021:** Completed NASA's Applied Remote Sensing Training Program on **Understanding Phenology with Remote Sensing** organized by the National Aeronautics and Space Administration from 30th June to 14th July 2021.
- 10. June 2021:** Participated in the online training programme on **Disaster Management Plan** organized by National Institute of Disaster Management, Ministry of Home Affairs, Government of India in collaboration with Central University of Karnataka, Kalaburagi, Karnataka on 29th June 2021.
- 11. June 2021:** Participated in the Two-Day National Workshop on **Methods and Approaches for Health Research in Social Sciences** organized by the Indian Council of Medical Research, National Institute of Research in Mental Health, VIT-AP University, and the Central University of Karnataka on the 26th & 27th June 2021.
- 12. June 2021:** Participated in One Day International Webinar on **Role of Urban Governance in Disaster Risk Assessment and Management** organized by Centre for Urban & Built Environment (CUBE) of SAIARD on 4th June 2021.
- 13. May 2021:** Participated in online training on the **Product Demonstration of Grade scope** organized by Turnitin, South Asia on 27th May 2021.
- 14. May 2021:** Completed AICTE Training and Learning (ATAL) Academy Online Elementary FDP on **Smart Cities Infrastructure & Sustainability** organized by Indian Institute of Technology Ropar from 24th to 28th May 2021.
- 15. May 2021:** Participated in online training on the **Best Practices for Effective Assessment** organized by Turnitin, South Asia held on 27th May 2021.

16. **May 2021:** Participated in the Five Days Faculty Development Programme on **Recent Advancements in Environmental Sustainability and Conservation Strategies** organized by Amity Academic Staff College in association with Natural Resource & Environmental Science Domain, Amity University Uttar Pradesh held from 17th to 21st May 2021.
17. **May 2021:** Completed the online Six Weeks Faculty Development Program on **Disruptive Technologies in Engineering and Research** conducted by the Department of Electronics & Communication Engineering, Integral University, Lucknow from 12th April to 21st May 2021.
18. **May 2021:** Participated in the online talk on **All about GEM Sustainability Certification Program & GRM Certified Professional Online Exam** conducted by ASSOCHAM INDIA on 8th May 2021.
19. **May 2021:** Completed the Five-Day Workshop on **Handling Stress and Anxiety during Pandemic** conducted by the Amity Centre for Guidance and Counselling, Amity University Uttar Pradesh from 3rd to 7th May 2021.
20. **April 2021:** Participated in **Webinar with Taylor & Francis: Publishing in academic journals** conducted by EURAXESS Worldwide on 8th April 2021.
21. **March 2021:** Participated in the One Day Symposium on **Valuing Water: Emerging Paradigm of Water Security** (in celebration of World Water Day 2021) organized by Amity Institute of Environmental Sciences, Amity University Uttar Pradesh held on 22nd March 2021.
22. **March 2021:** Participated in the Six Days Faculty Development Programme on **Curriculum Designing, Outcome Based Learning, Effective Assessment and Life Skills for Holistic & Multidisciplinary Education** (Under Guru Dakshita, LOCF & Jeevan Kaushal UGC Quality Mandates) organized by Amity Academic Staff College, Amity University Uttar Pradesh held from 15th to 20th March 2021.
23. **February 2021:** Participated in the Online Workshop on **Urban Stormwater Management** organized by the Department of Civil Engineering, Andhra University College of Engineering (A) from 22nd to 24th February 2021.
24. **January 2021:** Participated in the 3-day online training programme on **Basics of Disaster Management** jointly organized by National Institute of Disaster Management, Ministry of Home Affairs, Govt. of India and Central University of South Bihar (CUSB), Gaya held from 27th to 29th January 2021.
25. **December 2020:** Participated in the India International Science Festival (Virtual) from 22nd to 25th December 2020.
26. **December 2020:** Participated in the IGU India International Conference (Virtual) on **Global to Local Sustainability and Future Earth** organized by the Department of Geography, Mohanlal Sukhadia University, Udaipur (Rajasthan) on 18th & 19th December 2020.
27. **November 2020:** Valuable contribution and outstanding performance as a **Member of the Scientific Committee** of the 3 Conference of the Arabian Journal of Geosciences (CAJG), held online from 2nd to 5th November 2020.
28. **November 2020:** Participated in the DST-SERB funded one-day Research Training Program on **SAR Polarimetry Image Processing, Modelling, and Application** organized by the Department of Civil Engineering, SRM Institute of Science & Technology held on 20th November 2020.
29. **October 2020:** Participated in One Day Webinar on **Advances in Sustainable Management of Water Resources** organized by Suresh Gyan Vihar University, Jaipur on 08th October 2020.
30. **August 2020:** Participated in Webinar on the topic **"How to write a good Research Grant Proposal and Research Project Management"** organized by Amity Science, Technology & Innovation Foundation (ASTIF) on 06th August 2020.
31. **July 2020:** Participated in the virtual international conference on **Natural Disasters and their Early Warning Systems (NEWS) 2020** conducted by the Centre for Disaster Mitigation and Management, Vellore Institute of Technology (VIT), Vellore on 8th & 9th July 2020.
32. **June 2020:** Participated in Webinar on the topic **"Impact & Consequences of COVID-19 on Environment"** organized by Department of Electronics & Communication, SRIMT, Lucknow on 06th June 2020.

33. **June 2020:** Participated in the Weekly Webinar/Workshop on **Atmospheric Processes and Applications of Computational Mathematics** conducted by the Department of Applied Mathematics, Gautam Buddha University & Indian Meteorology Society (Noida Chapter) from 5th to 20th June 2020.
34. **June 2020:** Participated in Webinar on the topic “**How to Become an Online Teacher**” organized by Amity University Online on 04th June 2020.
35. **August 2019:** Participated in the **Esri India User Conference 2019** conducted by Esri India Technologies Ltd. on 28th & 29th August 2019 at NCR.
36. **June 2019:** Participated in the course on **Machine Learning and its Application** conducted by Indian Institute Remote Sensing (ISRO), Dehradun during June 03-07, 2019, at Dehradun.
37. **January 2019:** Completed a course on **Hyperspectral Thermal Image Unmixing** conducted by GEO University.
38. **January 2019:** Completed a course on **Remote Sensing Applications using the Hellenic National Sentinel Data Mirror Site** conducted by GEO University.
39. **January 2019:** Completed a course on **The EOS Platform** conducted by GEO University.
40. **October 2016:** Participated in the **Inter Amity Institutions Sports Meet** conducted by Amity University, Uttar Pradesh, Noida on October 24, 2016.
41. **September 2018:** Participated in the course on **SAR Data Processing and Analysis for Land Applications with Special Emphasis on L&S Bands** conducted under TREES (Training and Research in Earth Eco-System), an initiative of Space Applications Centre, Ahmedabad from 24th to 28th September 2018.
42. **August 2016:** Participated in the professional development programme on **Amity Academic Structures and Systems** conducted by Amity University, Uttar Pradesh, Noida from 10th to 12th August 2016.
43. **April 2016:** Participated in the course on **Microwave Remote Sensing Applications** conducted by National Remote Sensing Centre, Hyderabad from 11th to 22nd April 2016.
44. **February-April 2016:** Completed advance course Off-campus outreach Certificate program on **Geospatial Technologies for Urban Planning** conducted by Indian Institute of Remote Sensing (ISRO), Department of Space, Government of India from 11th February to 15th March 2016.
45. **July 2015:** Participated in ISPRS Summer School on **Research and Teaching Methodologies for Master and Ph.D. students** conducted by Siberian State University of Geosystems and Technologies, Russia in association with Indian Institute Remote Sensing (IIRS), Dehradun from 6th to 10th July 2015.
46. **May 2015:** Participated in the National Workshop on **Basic Matlab Programming and Simulink** held at the Department of Mathematics, Central University of Karnataka, Kalaburagi (Gulbarga), India from 06th to 08th May 2015.
47. **April-May 2015:** Participated in the course on **Emerging Trends in Remote Sensing** conducted by National Remote Sensing Centre, Hyderabad from 20th April to 1st May 2015.
48. **April 2015:** Participated in the International Conference on **Global Challenges, Policy Framework & Sustainable Development for Mining of Mineral and Fossil Energy Resources: 2015-20 (GCPF:2015-20)** held at Department of Mining Engineering, National Institute of Technology Karnataka, Surathkal on 17th & 18th April 2015.
49. **February 2015:** Participated in two days' workshop on **Real-Time GIS** organised by the Department of Geography, School of Earth Sciences, Central University of Karnataka, Gulbarga on 16th & 17th February 2015.
50. **January-March 2015:** Completed advance course Off-campus outreach Certificate program on **Applications of Remote Sensing & GIS for Natural Resources** conducted by Indian Institute of Remote Sensing (ISRO), Department of Space, Govt. of India from 27th January to 27th March 2015.
51. **January 2015:** Participated in one day's Training in **Human Rights** held at the Administrative Building, Central University of Karnataka, Kalaburagi (Gulbarga) on 19th January 2015.

52. **December 2014:** Participated in Four-day Workshop on **Recent Challenges in Atmospheric and Earth Sciences (RCAES-2014)** held at Department of Chemical Engineering, National Institute of Technology Karnataka, Surathkal from 27th to 30th December 2014.
53. **December 2014:** Participated in Pre-Symposium Tutorial on **Hyperspectral Data Analysis and Applications** held at National Remote Sensing Centre, ISRO as part of ISPRS Technical Commission VIII Mid-Term Symposium, 2014 from on 07th & 08th December 2014.
54. **September 2014:** Attended Three Weeks DST-NRDMS Sponsored Winter/Summer School Training Programme on **GEOSPATIAL TECHNOLOGY-Significance, Applications and beyond** organized by Department of Earth Sciences (DST-FIST Sponsored) at Annamalai University, Annamalai Nagar, Tamil Nadu, India from 4th to 24th September 2014.
55. **February-March 2014:** Completed advance course Off-campus outreach Certificate program on **Microwave (SAR) Remote Sensing for Natural Resources** conducted by Indian Institute of Remote Sensing (ISRO), Department of Space, Govt. of India from 03rd February to 29th March 2014.
56. **February 2014:** Participated in **National Workshop on SPSS and Statistical Data Analysis** held at Faculty of Management Studies, AKS University Satna in collaboration with SPSS South Asia Pvt. Ltd., Bangalore-an IBM Company on 8th & 09th February 2014.
57. **January - February 2014:** Participated in and completed the three-week **NRDMS Geospatial Winter School on Open-Source Development of Geospatial Technology** sponsored under the NRDMS programme of DST, Govt. of India and jointly organised by the non-profit foundation Open Source Geospatial and Lab for Spatial Informatics, International Institute of Information Technology, Hyderabad from 27th January to 15th February 2014.
58. **December 2013:** Attended International **Workshop on Innovative Learning Tools 2013: ISPRS Technical Commission-VI, Working Group VI/2 with specific emphasis on Earth Resource management** organised by Faculty of Technology, CEPT University, Ahmedabad on 20th & 21st December 2013.
59. **December 2013:** Attended **Pre-Symposium Tutorial on PLANETARY EXPLORATION** conducted at Department of Geo-Engineering & Centre for Remote Sensing, College of Engineering (Autonomous), Andhra University, Visakhapatnam on 2nd & 3rd December 2013.
60. **November 2013:** Participated in one Week AICTE recognized short term course on **Soft Computing through ICT** at AKS University, Satna, Madhya Pradesh, India from 11th to 15th November 2013.
61. **July 2013:** Contributed as Technical Resource Person in a two-day workshop on **Frontiers in Geospatial Technology** organised by Dept. of Geography, School of Earth Sciences, Central University of Karnataka, Gulbarga sponsored by Karnataka Science & Technology Academy, Govt. of Karnataka on 1st and 2nd July 2013
62. **May 2013:** A completed advance course through the Off-Campus Outreach Certificate Program on **Geoweb Services-Technology and Applications** conducted by the Indian Institute of Remote Sensing (ISRO), Dehradun from 11th February to 15th March 2013.
63. **January 2013:** Attended **13th PLANEX (Planetary Sciences and Exploration Program) on Impacts on Solar System Objects** at CSIR-National Geophysical Research Institute, Hyderabad and completed a short project entitled *Numerical Modelling Using High-Performance Computers* from 6th to 12th January 2013.
64. **October 2012:** Completed basic course through Off-Campus Outreach Certificate on **Remote Sensing, Geographical Information System and Global Position System** conducted by the Indian Institute of Remote Sensing (ISRO), Dehradun from 06th August to 22nd October 2012.
65. **May 2012:** Attended a two-day National Seminar on **Frontiers of Earth Science Research** organised by School of Earth Sciences, Central University of Karnataka, in association with Mineralogical Society of India on 05th & 06th May 2012.
66. **January 2012:** Participated and Volunteered in two days' **Social Business Plan** Competition entitled *UTTHAN'12* organised by the Faculty of Management Studies, Banaras Hindu University on 06th & 7th January 2012.

- 67. October- November 2011:** Undergone one-month intensive field training on **Physical Survey & Field Techniques** along with hands-on experience with Chain, Compass, Theodolite, Total Station, Plane, GPS Survey techniques from Department of Civil Engineering, Poojya Doddappa Appa (PDA), College of Engineering, Gulbarga, Karnataka from 12th October to 15th November 2011.
- 68. May 2011:** Undertaken three-week summer internship program on **Digital Image Processing, Principles of Image Interpretation & Applications of Remote Sensing** along with hands-on training on ESRI's ArcGIS software & its extensions (like Spatial Analyst & 3-D Analyst), ERDAS Imagine, AutoCAD, ArcView from Department of Applied Geology, Kuvempu University, Shankaraghatta, Karnataka from 10th to 28th May 2011.

CONFERENCES, SEMINAR AND SYMPOSIA

- 1. October 2019:** Presented a paper entitled *Assessing Transects and Transitions of Urban Blue Space for a smart city development* at the XIII International Geographical Union (IGU)-India Conference on Heading Towards Zero: Sustainable Development in Economy, Environment and Society during October 19-21, 2019 at Central University of Haryana, Mahendargarh (Haryana), India.
- 2. March 2019:** Presented a paper entitled *Countering Challenges of Smart Cities Mission through Participatory Approach* at the International Conference on Smart Cities during March 14-16, 2019 at Department of Civil Engineering, Jamia Millia Islamia, New Delhi -110025, India.
- 3. January 2019:** Presented a paper entitled *Enhanced Scientific Analysis through Statistical Image Processing Approach* at the International Conference on 2nd International Conference on SMART IOT SYSTEMS: INNOVATIONS IN COMPUTING (SSIC 2019) during January 18-20, 2019 at Manipal University Jaipur (Rajasthan), India.
- 4. September 2018:** Authored a paper entitled *Base Map Preparation with Multi-Source Database for Urban Landscape Analysis* at the ESRI User Meet 2018 during 11th September 2018 organized by ESRI India User Conference 2018, India.
- 5. November 2017:** Presented a paper entitled *Evaluation and Analysis of Ground Water Quality through Geospatial Technology* at the International Conference on Innovative Trends in Engineering, Science and Management (ITESM-2017) from 10th to 11th November 2017 organized by MATS University, Aarang, Raipur-493441(Chhattisgarh), India.
- 6. November 2017:** Presented a paper entitled *Evaluating solar exergy for alternate energy systems* at the 37th INCA International Congress on Geoinformatics for Carto-Diversity and Its Management from 01st to 03rd November 2017 organized by National Hydrographic Office, Dehradun-248 001, India.
- 7. October 2017:** Presented a paper entitled *Geospatial Technology for the Urban Health Equity* at the 38th Asian Conference on Remote Sensing during October 23 - 27, 2017 at Hotel-The Ashok, New Delhi, India.
- 8. October 2017:** Presented a paper entitled *Prospects of Big Data Analytics in Geospatial Sciences* at the 38th Asian Conference on Remote Sensing during October 23 - 27, 2017 at Hotel-The Ashok, New Delhi, India.
- 9. August 2017:** Presented a paper entitled *Spatio-Temporal Data Analytics in Urban Remote Sensing* at the National Seminar on Recent Trends in Mining Technology and Geosciences held on August 05th, 2017 at National Institute of Technology, Raipur (CG).
- 10. March 2017:** Presented a paper entitled *Simulation for Feasibility Assessment of Renewable Energy Systems* at the International Conference on Advances in Steel, Power and Construction Technology held during March 22nd to 23rd, 2017 at Hotel Hyatt, Raipur (CG) organized by OP Jindal University, Raigarh (CG).
- 11. March 2017:** Presented a paper entitled *Mitigating Energy Crisis through Geospatial Technology* at the International Conference on Advances in Steel, Power and Construction Technology held during March 22nd to 23rd, 2017 at Hotel Hyatt, Raipur (CG) organized by OP Jindal University, Raigarh (CG).
- 12. February 2017:** Presented a paper entitled *GIS-Based Solar Energy Potential Map for Southern India* at the International Conference Membrane Technology and Its Application (MemSep-2017) held during February 21st to 23rd, 2017 at Department of Chemical Engineering, National Institute of Technology, Tiruchirappalli 620015, India.

13. **February 2017:** Presented a paper entitled *Hyper Temporal Variability Analysis of Solar Insolation* at the International Conference Membrane Technology and Its Application (MemSep-2017) held during February 21st to 23rd, 2017 at Department of Chemical Engineering, National Institute of Technology, Tiruchirappalli 620015, India.
14. **March 2016:** Presented a paper entitled *Simulation for Feasibility Assessment of Renewable Energy Systems* at the International Conference on Recent Trends in Engineering and Material Sciences (ICEMS-2016) held during March 17th - 19th, 2016 at Jaipur National University, Jaipur, Rajasthan, India. **(ISBN No.-978-93-5254-230-7).**
15. **March 2016:** Presented a paper entitled *Empowering Smart Cities With Energy Supply Models* at the International Conference on Materials Research and Application (ICMRA-2016) held during March 11th -13th,2016 at CMR Technical Campus, Hyderabad, Telangana, India.
16. **February 2016:** Presented a poster/paper titled *Effect of Rainfall Variability on Photovoltaic Energy Production* at the Annual Workshop on Monsoon-2014 and National Symposium on Vagaries of Monsoon organized by Indian Meteorological Society, Pune Chapter held during February 23rd and 24th, 2016 at Indian Institute of Tropical Meteorology, Pune, and Maharashtra, India.
17. **March 2015:** Presented a paper titled *Rural Energy Supply Models for Smart Villages* at the National Seminar on Geo-Informatics in Rural Development organized by National Institute of Rural Development & Panchayati Raj, Hyderabad held during March 26-27th, 2015 at Hyderabad, Telangana, India.
18. **March 2015:** Presented a paper titled *Remote Sensing Based Vegetation Indices Analysis to improve Water Resources Management in Urban Environment* at International Conference on Water Resources, Coastal and Ocean Engineering (ICWRCOE'15) held during March 12 -14th,2015 organized by the Department of Applied Mechanics and Hydraulics, National Institute of Technology Karnataka, Surathkal, Mangaluru, India.
19. **March 2015:** Presented a poster titled *Variability of Monsoons and its Implications to Drifts in Energy Usage* at the Annual Workshop on Monsoon-2014 and National Symposium on Vagaries of Monsoon organized by Indian Meteorological Society, Pune Chapter held during March 02-03rd, 2015 at Indian Institute of Tropical Meteorology, Pune, Maharashtra, India.
20. **January 2015:** Presented poster titled *Feasibility Analysis of Smart Solar Grids for Handling Energy Linked Disasters* at Two days Karnataka Science and Technology Academy (KSTA) Conference on "Science and Technology for Disaster Management" organised by School of Earth Sciences, Central University of Karnataka, Kalaburagi (Gulbarga), India during January 30th and 31st, 2015.
21. **December 2014:** Presented a paper entitled *Spatial Variation of Surface Energy Fluxes with respect to Land Use Changes across Gulbarga City* at the Indian National Cartographic Association XXXIV INCA International Congress, Hyderabad held during December 16th -18th,2014 at Hyderabad, Telangana, India.
22. **December 2014:** Presented a paper entitled *Computing Building Rooftop Solar Potential for Photovoltaics* at ISPRS TC VIII Mid-Term Symposium on "Operational RS Applications: Opportunities, Progress and Challenges" held during December 9-12, 2014 at Hyderabad, Telangana, India.
23. **September 2014:** Presented paper entitled *Statistical Analysis of Land surface Temperature-Vegetation Indexes Relationship through Thermal Remote Sensing* in the International Conference on Green Technology for Environmental Pollution Prevention and Control (ICGTEPC-2014) held at National Institute of Technology, Tiruchirappalli, Tamil Nadu, India during 27th -29th September 2014.
24. **September 2014:** Presented paper entitled *Transition and Transect in Geospatial Science & Engineering* in National Conference on Emerging Trends of GIS & Remote Sensing in Modern Engineering organized in association with Chhattisgarh Council of Science and Technology (CGCOST) Raipur, Chhattisgarh, India during 14th -15th September 2014.
25. **August 2014:** Presented paper entitled *Overview of open Source Virtual Learning Environment for Scientific Research* in National Conference on Integrating ICT in Academic Libraries: Making a Difference in Knowledge Age organised by Central Library, Central University of Karnataka, Gulbarga, India during August 12-13th, 2014.

- 26. February 2014:** Presented paper entitled *Dynamics of Urban Heat Pattern in Urban Environments* at National Conference of Union of Geographic Information Technologists (UGIT) organised by Department of Geography, School of Earth Sciences, Central University of Karnataka, Gulbarga, India held during February 14-15, 2014.
- 27. January 2014:** Presented poster titled *Renewable Energy Potential Assessment through Geospatial Modelling Techniques* at Two days Karnataka Science and Technology Academy (KSTA) Regional Conference on "Science and Technology for Development" organised by School of Earth Sciences, Central University of Karnataka, Gulbarga, India during January 30th and 31st, 2014.
- 28. December 2013:** Presented paper entitled *Modelling Solar Energy Using Geospatial Technology* at International Conference on Geospatial Momentum for Society and Environment (AGSE 2013) organised by Faculty of Technology, CEPT University, Ahmedabad, Gujarat India during December 16-19, 2013.
- 29. December 2013:** Presented paper entitled *Geoinformatics Tools and Techniques for Regional Renewable Energy Assessment and Management* in the National Symposium on Remote Sensing and GIS for Environment with Special Emphasis on Marine and Coastal Dynamics held Andhra University, Visakhapatnam, Andhra Pradesh, India during December 2-3, 2013.
- 30. December 2012:** Presented Paper entitled *Geospatial Analysis for Water Conservation Structures in Gulbarga, Karnataka, India* in International Conference on Sustainable Water Resource Development and Management organised by Department of Environmental Science, Shivaji University, Kolhapur, Maharashtra, India during December 20-21, 2012.

Place: Noida

Date: 09th August 2022

(Dr. Deepak Kumar)