


FACULTY PROFILE

Title (Ms/Mr/Dr/Prof)	Dr.	First Name	Manish	Last Name	Kumar	
Designation	Assistant Professor					
Department	Geography					
Address (Official)	School of Basic Sciences Central University of Haryana Mahendergarh-123031					
Phone No.	9555851874					
Email	manish.ks@cuh.ac.in ; manish.ks1@gmail.com					

EDUCATIONAL QUALIFICATION

Subject	Institution	Year	Details
B.A. Geography (Hons)	Dyal Singh College, University of Delhi	2001	(63.13%)
M.A. Geography	Jamia Millia Islamia University, New Delhi	2006	(71.81%) Gold Medal
Ph.D. Geography	Kumaun University, Nainital	2014	Topic: Application of Remote Sensing and GIS for Sustainable Land Use and Land Cover Management
National Eligibility Test (NET)	University Grant Commission	2012	-
Masters of Geoinformatics	Uttarakhand Open University	2013	(73.37%)
P.G. Diploma in Remote Sensing and GIS	Indian Institute of Remote Sensing, ISRO, Dehradun	2008	Grade-First Division

CAREER PROFILE

Organisation/Institution	Designation	Duration		Role
		From	To	
Central University of Haryana	Assistant Professor	25-02-2020	Till date	Teaching and Research
Kalindi College, University of Delhi	Assistant Professor (Adhoc)	05-01-2016	24-02-2020	Teaching and Research
<i>School of Planning and Architecture, Delhi</i> <i>An "Institution of National Importance" Under MHRD</i>	Visiting Faculty	18-07-2015	31-12-2015	Teaching PG students and faculty members of SPA, Delhi
<i>Delhi Policy Group</i> (Independent Think Tank)	Research Associate	02-02-2015	17-07-2015	Worked on UNDP Project titled 'Rurbanisation'
<i>Kumaun University</i> , Nainital	Lecturer (Contractual)	15-01-2009	31-12-2014	Teaching and Research

RESEARCH INTERESTS/SPECIALIZATION

Area of research domain includes application of remote sensing and GIS in urban and regional planning, land use and land cover dynamics etc.

ADMINISTRATIVE ASSIGNMENT

1. Coordinator IIRS Outreach Programme
2. Member, Board of Studies (Geography)
3. Member, School Board of Basic Sciences

4. Member, UGC Quality Mandate

RESEARCH PROJECT COMPLETED AS PRINCIPAL INVESTIGATOR

Sponsored by Kalindi College, University of Delhi

1. GIS Based Emergency Response System of Kalindi College (2017-18)
2. Health Care Management Information System: A Spatial Study of NCT of Delhi (2018-19)
3. Modelling for the Future Flood Vulnerability and Risk Assessment Analysis: A case study of Yamuna Catchment Area of NCT of Delhi using – Geo-Mathematical Spatial Techniques (2018-19)

RESEARCH PAPER PUBLISHED

Scopus Report: Citations: 343 and h-Index: 4

Google Scholar: Citations: 744, h-Index: 8; i10-Index: 7

Web of Science: Citations: 255 and h-Index: 4

Year of Publication	Title	Journal (Name of the Journal, Vol Issue ISSN)	Authors
2020	Identification and Mapping of Dengue Epidemics using GIS Based Multi-Criteria Decision Making. The Case of Delhi, India https://doi.org/10.24193/JSSPSI.2020.6.07	Journal of Settlements and Spatial Planning, Special Issue; 61-69 <i>Scopus Indexed Journal</i>	Seema Sahdev and Manish Kumar
2020	Land Use Planning for Hillside Development Using GIS Based Analytic Hierarchy Process https://doi.org/10.24193/JSSPSI.2020.6.04	Journal of Settlements and Spatial Planning, Special Issue, 6: 29-39 <i>Scopus Indexed Journal</i>	Seema Sahdev and Manish Kumar
2018	Impact of land cover change on land surface temperature: a case study of spiti valley https://doi.org/10.1007/s11629-018-4902-9	Journal of Mountain Science, Springer, 15(8): 1658-1670 Impact Factor: 1.550 <i>Scopus Indexed Journal</i>	Pankaj Kumar, Arif Husain, R B Singh, Manish Kumar
2018	Urban Growth Dynamics and Modelling using Remote Sensing Data and Multivariate Statistical Techniques https://doi.org/10.18520/cs/v114/i10/2080-2091	Current Science 114 (10), 2080-2091 ISSN: 0011-3891 Impact Factor: 0.756 <i>Scopus Indexed Journal</i>	Manish Kumar , R B Singh, Ram Pravesh, Pankaj Kumar, D.K.Tripathi and Netrananda Sahu
2018	Retreat of Pindari glacier and detection of snout position using remote sensing technology https://doi.org/10.1016/j.rsase.2018.04.011	Remote Sensing Applications: Society and Environment Elsevier , 11, 64–69. ISSN: 2352-9385 <i>Scopus Indexed Journal</i>	Arvind Pandey, Mriganka Shekhar Sarkar, Manish Kumar , Gajendra Singh, Shashank Lingwal, Jiwan Singh Rawat
2017	Probabilistic Seasonal Streamflow Forecasts of the Citarum River, Indonesia, Based on General Circulation Models https://doi.org/10.1007/s00477-016-1297-4	Stochastic Environmental Research and Risk Assessment, Springer , 31(7),1747–1758 ISSN: 1436-3240 (Online) Impact Factor: 2.251 <i>Scopus Indexed Journal</i>	Netrananda Sahu, Andrew W. Robertson, Rizaldi Boer, Swadhin Behera, David G. DeWitt, Kaoru Takara, Manish Kumar , R B Singh,
2016	Snow cover dynamics and geohazards: a case study of Bhilangna watershed,	Geoenvironmental Disasters, Springer , 3(2); 1-	Manish Kumar and Pankaj

	Uttarakhand Himalaya, India https://doi.org/10.1186/s40677-016-0035-z	8 ISSN: 2197-8670 Scopus Indexed Journal	Kumar
2015	Comparison of Weights Assessment Techniques and its Integration with GIS-Based Multicriteria Decision Making https://doi.org/10.1007/s40010-014-0186-9	Proceedings of the National Academy of Sciences, India Section A: Physical Sciences, Springer , 85(1), 197-209 ISSN 0369-8203 Impact Factor: 0.921 Scopus Indexed Journal	Manish Kumar , Ram Pravesh and D.K.Tripathi
2015	Monitoring land use/cover change using remote sensing and GIS techniques: A Case study of Hawalbagh Block, District Almora, Uttarakhand, India https://doi.org/10.1016/j.ejrs.2015.02.002	Egyptian Journal of Remote Sensing and Space Sciences, Elsevier , 18: 77-84 ISSN 1110-9823 Scopus Indexed Journal	J.S.Rawat and Manish Kumar
2014	Spatial Monitoring of Urban Growth of Nagpur City (India) Using Geospatial Techniques	Journal of Settlements and Spatial Planning, 5(2), 91-98 ISSN 2248-2199 Scopus Indexed Journal	Manish Kumar and D.K.Tripathi
2014	Mapping Snow Cover from Landsat TM Data using Normalized Difference Snow Index in Alaknanda Watershed, Garhwal Himalaya, India.	Punjab Geographers, 10, 45-56 ISSN: 0973-3485 Scopus Indexed Journal	Manish Kumar and D.K.Tripathi
2014	Land use/cover Dynamics Using Multi-Temporal Satellite Imagery: A case study of Haldwani Town area, district Nainital, Uttarakhand, India	International Journal of Geomatics and Geosciences, 4(3): 536- 543 ISSN 0976-4380	J.S.Rawat and Manish Kumar and Vivekananda Biswas
2014	Mointoring of Snow Cover in Bhagirathi Watershed, Garhwal Himalaya Using Remote Sensing and Geographical Information System	National Geographical Journal of India, 60(3): 289-300 ISSN 0027-9374	D.K.Tripathi and Manish Kumar
2014	Land use/cover Dynamics of Kail Watershed, Central Himalaya, India using Remote Sensing and GIS Techniques	International Journal of Advancement in Remote Sensing, GIS and Geography, 2(2), 68-72 ISSN: 2321–8355	Harender Singh Rawal, J.S. Rawat, Manish Kumar , N.C. Pant and Neha Rani
2014	Study of Snow Cover Dynamics of Pinder Watershed in Central Himalaya using Remote Sensing and GIS Techniques	International Journal of Advanced Earth Science and Engineering, 3(1), 122-128 ISSN: 2320-3609	J.S. Rawat, Manish Kumar , N.C. Pant and Neha Rani
2013	Site Suitability Analysis For Urban Development Using GIS Based Multi-Criteria Evaluation Technique: A Case Study of Mussoorie Municipal Area, Dehradun District, Uttarakhand, India https://doi.org/10.1007/s12524-012-0221-8	Journal of Indian Society of Remote Sensing, Springer , 41(2): 417-424 ISSN 0255-660X Impact Factor: 0.997 Scopus Indexed Journal	Manish Kumar and Vasim Sheikh
2013	Changes in land use/cover using geospatial	Egyptian Journal of Remote	J.S.Rawat,

	techniques- A case study of Ramnagar town area, district Nainital, Uttarakhand, India https://doi.org/10.1016/j.ejrs.2013.04.002	Sensing and Space Sciences, <i>Elsevier</i> , 16: 111-117 ISSN 1110-9823 <i>Scopus Indexed Journal</i>	Vivekananda Biswas and Manish Kumar
2013	Identification of Potential Sites for Urban Development Using GIS Based Multi Criteria Evaluation Technique: A case study of Shimla Municipal Area, Shimla District, Himachal Pradesh, India	Journal of Settlements and Spatial Planning, 4(1): 45-51 ISSN 2248-2199 <i>Scopus Indexed Journal</i>	Manish Kumar and Vivekananda Biswas
2013	Built-up Area Monitoring Using Multi-Temporal Satellite Data: A Case study of Nainital Town, Uttarakhand	National Geographical Journal of India, 59(2): 85-94 ISSN 0027-9374	D.K.Tripathi and Manish Kumar
2013	Quantifying Land use/cover dynamics of Nainital Town (India) using Remote Sensing and GIS Techniques,	Asian Journal of Geoinformatics, 13(2): 7-12 ISSN 1513-6728	J.S.Rawat, Vivekananda Biswas and Manish Kumar
2013	An Integrated Approach of Remote Sensing and GIS for Land use/cover Change Detection: A Case Study of Bhimtal Tourist Town (India),	Bulletin of Environmental and Scientific Research, 2(2-3): 1-6 ISSN 2278-5205	J.S.Rawat, Manish Kumar and Vivekananda Biswas
2013	Spatio-Temporal Dynamics of Almora Town Area, India	International Journal of Advanced Remote Sensing and GIS, 2(1): 425-432 ISSN 2320-0243	J.S.Rawat, Manish Kumar , and Ravindra Nath Pathak
2013	Monitoring Land Use/Cover Change of Kanpur City by Using Geospatial Techniques	Punjab Geographers, 9: 93-102 ISSN: 0973-3485 <i>Scopus Indexed Journal</i>	Manish Kumar and Vivekananda Biswas
2012	Urban Growth and Its Impact on Surface Temperature in Greater Mumbai District, Maharashtra: A Geographical Analysis Using Geospatial Techniques	Annals of the National Association of Geographers, India, 32 (2): 68-79 ISSN 0970-972X	Manish Kumar , Pankaj Kumar and D.K.Tripathi
2012	Remote Sensing Based Analysis of Land use/Land Cover Dynamics in Takula Block, Almora District (Uttarakhand) https://doi.org/10.1080/09709274.2012.11906489	Journal of Human Ecology, 38(3): 207-212 ISSN 0970-9274 <i>Scopus Indexed Journal</i>	D.K.Tripathi and Manish Kumar
2012	Application of Remote Sensing and GIS in Land Use and Land Cover Change Detection: A Case study of Gagas Watershed, Kumaun Lesser Himalaya, India	Quest – Journal of UGC-ASC Nainital, 6(2): 342-345 ISSN 0974-5041	Pooja Kamal, Manish Kumar and J.S.Rawat
2011	Monitoring of Urban Sprawl using Remote Sensing Technique: A Case Study of Gurgaon City, Haryana	Punjab Geographer, 7: 46-58 ISSN: 0973-3485 <i>Scopus Indexed Journal</i>	Manish Kumar and D.K.Tripathi
2011	Development of Village Information System for Resource Planning Using Remote Sensing and GIS Techniques: A	Research Journal of Science and Technology, 3(5): 247-250	Manish Kumar and Uma Gole

BOOKS/EDITED BOOKS/CHAPTERS IN EDITED BOOKS

1. Seema Sahdev, R. B. Singh and **Manish Kumar** (2020) *Geoecology of Landscape Dynamics, Advances in Geographical and Environmental Sciences (Series)*, **Springer International Publishing**, ISBN 978-981-15-2096-9 (<https://doi.org/10.1007/978-981-15-2097-6>).
2. Seema Sahdev, **Manish Kumar** and R. B. Singh (2020) *Seismic Vulnerability Assessment of NCT Of Delhi Using GIS Based Multiple Criteria Decision Analysis*. In **Sahdev**, Seema, **Singh**, R. B., **Kumar**, Manish (Eds.), *Geoecology of Landscape Dynamics, Advances in Geographical and Environmental Sciences (Series)*, **Springer International Publishing**, ISBN 978-981-15-2096-9 (https://doi.org/10.1007/978-981-15-2097-6_2).
3. Arvind Pandey, Mriganka Shekhar Sarkar, Gajendra Singh, Sarita Palni, Nisha Chand and **Manish Kumar** (2020) *Robust and Reliable Technique of Automatic Building Extraction from High Resolution Imagery*. In **Sahdev**, Seema, **Singh**, R. B., **Kumar**, Manish (Eds.), *Geoecology of Landscape Dynamics, Advances in Geographical and Environmental Sciences (Series)*, **Springer International Publishing**, ISBN 978-981-15-2096-9 (https://doi.org/10.1007/978-981-15-2097-6_6).
4. Pawan Kumar Thakur, **Manish Kumar** and Vaibhav E. Gosavi (2020) *Monitoring and Modelling of Urban Sprawl Using Geospatial Techniques—A Case Study of Shimla City, India*. In **Sahdev**, Seema, **Singh**, R. B., **Kumar**, Manish (Eds.), *Geoecology of Landscape Dynamics, Advances in Geographical and Environmental Sciences (Series)*, **Springer International Publishing**, ISBN 978-981-15-2096-9 (https://doi.org/10.1007/978-981-15-2097-6_17).
5. **Manish Kumar**, Dinesh Kumar Tripathi, Vinay Maitri and Vivekananda Biswas. *Impact of Urbanisation on Land Surface Temperature in Nagpur, Maharashtra. Sustainable Smart Cities in India*. In P. Sharma and S. Rajput (eds.), *Sustainable Smart Cities in India*. The Urban Book Series (pp.226-240). Switzerland: **Springer International Publishing**. https://doi.org/10.1007/978-3-319-47145-7_15
6. **Manish Kumar** and Pankaj Kumar (2016). *Snow Cover Dynamics and Timberline Change Detection of Yamunotri Watershed Using Multi-Temporal Satellite Imagery*. In R.B. Singh, Udo Schickhoff and Suraj Mal (Eds.), *Climate Change, Glacier Response, and Vegetation Dynamics in the Himalaya* (pp. 391-399) **Springer International Publishing**. https://doi.org/10.1007/978-3-319-28977-9_20
7. J. S. Rawat, **Manish Kumar**, V. Viswas, V. S. Rawat, N. Gahlaut (2016). *The Impact of Climate Change on the Shifting of the Vegetation Line in the Indian Himalaya: A Case Study from the Kutiyangti Watershed*. In R. Chand and W. Leimgruber (Eds.), *Globalization and Marginalization in Mountain Regions*, Volume 1 of the series *Perspectives on Geographical Marginality* (pp 191-198). **Springer International Publishing**. https://doi.org/10.1007/978-3-319-32649-8_14
8. Seema Sahdev and **Manish Kumar** (2017). *Environment and Sustainable Development: A Geographical Appraisal*. Concept Publishing Company Pvt. Ltd., ISBN-13: 978-93-5125-189-7
9. **Manish Kumar**., Pankaj Kumar and Pavan Thakur (2016). *Seoul City: A Land use/cover Pattern and Dynamics*. In S. Narsimhan and K. D. Young (Eds.), *Evolving Indo-Korea Relations: Perspectives on South Asia* (pp 263-276). Delhi: Manak Publications.

CONFERENCES/SEMINAR ORGANISED

1. As **Co-Convener** organized a Ministry of Earth Sciences, DST, ISRO and ICSSR Sponsored **International Conference** on "*Spatial Decision Support Systems for United Nations Sustainable Development Goals*" on 1st and 2nd February 2017 held at Department of Geography, Kalindi College, University of Delhi.
2. As **Organising Secretary** Organized two day UGC Sponsored **National Seminar** on "*Environmental Ethics, Resource Depletion and Sustainable Development*" on 25-26 Feb. 2016 held at Department of Geography, Kalindi College, University of Delhi.

PAPER PRESENTED IN INTERNATIONAL SEMINARS/CONFERENCES/WORKSHOPS etc.

1. Paper presented entitled "*Robust and Reliable Technique of Automatic Building Extraction from High Resolution Imagery*". **International Conference** on Spatial Decision Support Systems for United Nations Sustainable Development Goals organized by Department of Geography, Kalindi College, University of Delhi held on 1-2 February 2017.
2. Paper presented entitled "*Monitoring and Modelling of Urban Sprawl Using Geospatial Techniques – A Case Study of Shimla City, India*". **International Conference** on Spatial Decision Support Systems for United Nations Sustainable Development Goals organized by Department of Geography, Kalindi College, University of Delhi held on 1-2 February 2017.
3. Presented Research Paper entitled "*Expansion of urban landscape and its impact on land surface temperature of Seoul city using RS & GIS techniques*". **International Seminar** on India-Korea Relations: Forging a Multidimensional Partnership in the 21st Century organized by Researcher's Association for the Study of Korea (RASK) in collaboration with Center for East Asian Studies, School of International Studies, JNU held on 18th & 19th April, 2016 at Convention Center, Jawaharlal Nehru University, Delhi, Sponsored by the Korea Foundation.
4. Presented Research Paper entitled "*GIS based Analytic Hierarchy Process for Land suitability analysis*". **9th IGU International Conference** on Land Use Change, Climate Extremes and Disaster Risk Reduction, organised by Department of Geography, Shaheed Bhagat Singh College, University of Delhi, Delhi held on March 18-20, 2016.
5. Presented Research Paper entitled "*Seoul City: A Land use/cover Pattern and Dynamics*". **International Seminar** on Evolving Indo- Korea Relations; Perspectives on South Asia organized by Researcher's Association for the Study of Korea (RASK) in collaboration with Department of East Asian Studies, University of Delhi, Delhi held on March 27-28, 2015 at Room No. 15, Lecture Hall, New Building, Faculty of Social Science, University of Delhi, Sponsored by the Korea Foundation.
6. Presented Research Paper entitled "*Impact of Climate Change on Vegetation Line and Snow Cover Area Using RS and GIS Technologies: A Case Study from the Uttarakhand Himalaya, India*". **International Workshop** on Mountain Biodiversity and Impact of Climate Change with special reference to Himalayan Biodiversity Hotspot, Organized by G.B. Pant, Institute of Himalayan Environment and Development, Kosi-Katarmal, Almora-263601, Uttarakhand, India, 6-8 Dec. 2010.
7. Presented Research Paper entitled "*Impact of Climate Change in Shifting of Vegetation Line in Indian Himalaya: A Case Study of Kuthiyangti Watershed*". **IGU International Conference** on Local and Regional Responses to Globalization in the Mountains and Marginal areas of the World, Organized by Department of Geography, DSB Campus, Kumaun University Nainital, India, 1-9 May 2011.

8. Presented Research Paper entitled “*Spatio-Temporal Analysis of Vegetation Line Ingression Due to Climate Change Using Remote Sensing and GIS Techniques: A Case Study of Yamuna Watershed, Central Himalaya, India*”. **International Conference** on Issues for climate change, Land Use Diversification and Biotechnological Tools for Livelihood Security, Organized by Hi-Tech Horticulture Society, S.V.P.U.A & T., Meerut, UP, India, 8-10 October, 2011.

PAPER PRESENTED IN NATIONAL SEMINARS/CONFERENCES/WORKSHOPS etc.

9. Presented Research Paper entitled “*Landslide Hazard Zonation using Geographical Information System: A Case study of Almora Municipal Area, Uttarakhand, India*”. **National Conference** on Field Study on Landslide Management organized by Centre of Excellence on Landslide, Disaster Management Cell, Uttarakhand Academy Administration, Nainital, 22—24 March, 2012.
10. Presented Research Paper entitled “*Geographic Information Science in Higher Education: The Kumaun University Initiatives*”. **National Seminar** Sponsored by the UCOST, Dehradun and UGC-Academic Staff College, Nainital held on November 30th, 2013 at Centre of Excellence for NRDMS of Uttarakhand, Department of Geography, Kumaun University, SSJ Campus, Almora.
11. Paper presented entitled “*Forest Fire Hazard Zonation: A case study of Nainital District, Uttarakhand*”. **National Conference** on Climate Change Adaptation & Sustainable Development organized by Swami Shraddhanand College, University of Delhi, In association with Ministry of Earth Sciences, Govt. of India held on 28-29 September 2016.
12. Paper presented entitled “*Urban Landscape Analysis of Pune City using Geospatial Techniques*”. **National Conference** on Geoinformatics for Natural Resource Management organized by Department of Geography, Faculty of Natural Sciences, Jamia Millia Islamia, New Delhi held on 7-8 February 2017.

AWARDS & DISTINCTIONS

1. Gold Medalist in M.A. (Geography) at Jamia Millia Islamia, New Delhi in 2006
2. Merit Scholarship M.A (Geography), Jamia Millia Islamia, New Delhi (2004-2005)

PROFESSIONAL SOCIETIES MEMBERSHIPS

1. Life Member of “Indian Society of Remote Sensing” (Life Membership No. 4149)
2. Life Member of “National Association of Geographers of India” (Life Membership No. 2093)
3. Life Member of “The Association for Geographical Studies” (Life Membership No. 273)
4. Life Member of “Association of Punjab Geographers” (Life Membership No. 438)

LECTURES/TALKS DELIVERED

1. Delivered talk as a Speaker on the topic “*Land use and cover change impact analysis on socio-economic conditions of National Capital Territory of Delhi using Geospatial techniques*” by **Hiroshima University, Japan in a HINDAS 7th Seminar** organized by University on 15th February 2020.
2. Delivered lecture as a Resource Person in the subject “*Application of Remote Sensing and GIS in Planning (Urban/Rural)*” on **Winter School Training Programme for Capacity Building in Geospatial Technologies**, under NRDMS (DST) Programme, Ministry of Science and Technology organized by Department of Remote Sensing and GIS, University of Jammu, Jammu, on 7th January 2017.
1. Delivered lecture as a Resource Person in the subject “*Understanding Attribute Data, Importance of database, Database Management Systems and Building attribute Data*” on **Winter School Training Programme for Capacity Building in Geospatial Technologies**, under NRDMS (DST) Programme, Ministry of Science and Technology organized by Department of Remote Sensing and GIS, University of Jammu, Jammu, 21th December 2015 to 10th January 2016.
2. Delivered lecture as a Resource Person in the subject “*Understanding Data Quality and Understanding*”

Map Making” on **DST Geospatial Training Programme** held at Department of Geography, University of Rajasthan, Jaipur, 16th July to 5th August 2014.

3. Delivered lecture as a Resource Person in the subject “*Application of Geoinformatics in Spatial Sciences*” under the **K.N. Singh memorial lecture series Workshop** organized by Department of Geography, Kamla Nehru Institute of Physical and Social Sciences, Sultanpur-228118, Uttar Pradesh held on 28th November 2015.

TRAINING /ORIENTATION/FACULTY DEVELOPMENT PROGRAM ATTENDED

1. Participated in 28 days “**Online Induction Training/Orientation Programme**” for Faculty in Universities/Colleges/Higher Educational Institutions under MHRD-sponsored Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNMTT), organized by Teaching Learning Centre (TLC), Ramanujan College in association with Research Development and Services Cell, Ramanujan College held from 04th June 2020 to 01st July 2020.
2. Participated in Six day Training Programme on “**Data Handling with Excel**” organized by **School of Planning and Architecture**, Ministry of HRD, Govt. of India, 4, Block B. I.P.Estate, New Delhi-110002, 18th Jan. – 23rd Jan. 2016.
3. Participated in Two day Training Programme on “**MS-Excel Statistics**” organized by **School of Planning and Architecture**, Ministry of HRD, Govt. of India, 4, Block B. I.P.Estate, New Delhi-110002, 29th Jan. – 30th Jan. 2016.
4. Participated in Three day Training Program on **ERDAS Imagine and LPS**, organized by **Leica Geosystems**, Geospatial Imaging India Pvt. Ltd, 1 - 3 Feb 2010.
5. Participated in one week Training Program on **Remote Sensing and GIS**, organized by **Regional Remote Sensing Service Centre**, ISRO, Bangalore, Government of India, Department of Space, 30 Jan. - 3 Feb. 2006.