

Curriculum Vitae

Name: **Dr. (Ms) Sulochana Shekhar**

Designation: **Associate Professor**

Dean, School of Earth Sciences

Head, Department of Geography

Employer Address: Department of Geography
School of Earth Sciences
Central University of Karnataka
Aland road
Kadaganchi
Kalaburagi-585367

Mail: sulogis@gmail.com and sulochanashekhar@cuk.ac.in



ACADEMIC QUALIFICATIONS

Post Doctorate Fellowship
(Sep2010 - Feb2011)

: Received European Commission Scholarship for Post- Doctoral Research on Object Oriented Image analysis at ITC, The Netherlands

M.Sc. Geographic Information Science& System
(Aug 2010)

: From University of Salzburg
(UNIGIS M.Sc.)

Ph.D. in Geography
(April 2006)

: Awarded on the Thesis entitled "Monitoring urban sprawl of Pune by Remote sensing and GIS techniques" under the guidance of Dr Jaymala Diddee, Professor (Retd), Department of Geography, University of Pune, Pune.

Master of Education
(May 1998)

: From Annamalai University, Chidambaram, TN

Bachelor of Education
(May 1993)

: From Bharathiyar University, Coimbatore, TN

Master of Science in Geography
(April 1992)

: From Madurai Kamaraj University, Madurai, TN

Bachelor of Science in Geography
(April 1990)

: From Madurai Kamaraj University, Madurai, TN

ACADEMIC AWARDS AND DISTINCTIONS

University Rank Holder (Gold Medallist) in Under Graduation (B.Sc Geography)

University Rank Holder (Gold Medallist) in Post-Graduation (M.Sc Geography) Awarded the Dr.M.Varadarajan Memorial Endowment Medal for Securing 1st rank in M.Sc (Geo)

University Rank Holder (Second in Merit) in under graduation (B.Ed) Awarded the National Scholarship by the Ministry of Human Resources Development, Government of India for securing 2nd rank in B.Ed

Qualified for the National Eligibility Test for Lectureship conducted by the University Grants Commission in December 1998.

Qualified for the State level Eligibility Test for Lectureship of Tamil Nadu State in March 1998

Awarded Erasmus Mundus European Commission Scholarship –Post Doctoral research

Awarded Commonwealth Academic Fellowship (Sep-Dec 2013) : Worked on Spatial Decision Support System (SDSS) at UCL, London

Received Best Paper Award at INCA XXXIV International Conference, Dec, 2014.

Major scientific fields of interest: *Urban Geography, Applications of Geoinformation Science in Urban Environment.*

List of publications:

1. Sulochana Shekhar (2001) "Colonial urban development in India-A conceptual clarification", Transactions of the Institute of Indian Geographers, 2001, Vol 23 No: 1 &2, Page 29 – 38, 10 pages.
2. Sulochana Shekhar (2004), "Urban sprawl assessment - Entropy approach", GIS Development, May 2004, Vol 8 issue 5, Page 43 – 48. 6 Pages.
3. Sulochana Shekhar (2005), "Modelling Urban Development with Fuzzy Logic and cellular automata", Asian Journal of Geoinformatics, Vol 6 No 1 2006. Page 3-10. 8 pages.
4. Sulochana Shekhar (2007), "Changing Space of Pune- A GIS Perspective", a paper published in the Net. . Full paper is available in www.gisdevelopment.net.
5. R Nijagunappa, Sulochana Shekhar, B. Gurugnanam, PLN Raju, and Prabir DE (2007), "Road network analysis of Dehradun city using high resolution satellite data and GIS", Photo nirvachak, Journal of ISRS, Vol 33 No 3, 2007. Page 267-274, 8 pages.

6. Gurugnanam, M Suganya,Sulochana Shekhar (2007), "Ground water quality studies in Thirumanimuthar sub basin, Salem dist, Tamil nadu, India" B. a paper published in Eco-Chronicle Vol 2 No 1, 2007. . Page 27-32, 6 pages.
7. Gurugnanam, B., Prabakaran, N., Vasudevan, S., Shekhar Sulochana and Lingeswara Rao, S.V (2008)," GIS Point Scoring for Good Water Bearing Zone Identification at Sweta River, Kallar Basin, Tamil Nadu, India ,, (October 3, 2008). *The Icfai University Journal of Earth Sciences, Vol. 2, No. 4, pp. 47-54, October 2008* Available at SSRN: <http://ssrn.com/abstract=1278316>
8. Shekhar Sulochana (2008), "Ground Truth Verification in Urban Planning and Management - A Case Study of Pune City, October 16, 2008. Available at SSRN: <http://ssrn.com/abstract=1285442>
9. Sulochana Shekhar (2012), "Modelling the Probable Growth of Slums by using Geoinformatics", *International Journal of Innovations and Development, Volume 1, Issue 8, August 2012.*
10. Sulochana Shekhar (2012), "Detecting Slums from Quick Bird Data in Pune using an Object Oriented Approach", *International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume XXXIX-B8, 2012 XXII ISPRS Congress, 25 August – 01 September 2012, Melbourne, Australia.*
11. Sulochana Shekhar (2012), *Modelling the probable growth of slums by using Geoinformatics, Indian J. Innovations Dev., Vol. 1, No. 8 (August 2012) ISSN 2277 – 5390*
12. Sulochana Shekhar (2013), "Slum modelling by using Ontology and Geoinformatics: case study of Gulbarga", *International Journal of Geoinformatics, Vol 9, No 2, June 2013. ISSN 1686-6576.*
13. Kumar, D. and Shekhar, S. (2014) "Research Prospects in Spatial Data Infrastructure for Handling Energy Linked Disaster's" *ISOR Journal of Environmental Science and Food Technology (IOST-JESTFT) e-ISSN:2319-2402,p-ISSN:2319-2399,Volume 8,Issue 5 Ver. III ,PP 53-67. Peer reviewed International Journal.*
14. Kumar, D. and Shekhar, S. (2014) "Photovoltaic Energy Assessment Using Geospatial Technology" *International Journal of Scientific & Technology Research (IJSTR) Volume 3, Issue 6, PP 54-60. Peer reviewed International Journal. ISSN 2277-8616*
15. Sulochana Shekhar (2014), " Towards Building Slum Ontology for the real stakeholders", *Journal of Urban and regional studies, Journal of the UGC Centre for Advanced study, Department of Geography, Osmania University, Hyderabad, Volume 1, No1,August 2014 page 92-104.*
16. Sulochana Shekhar (2014) , "Improving the slum planning through geospatial Decision Support system", *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume XL-2, 2014 ISPRS Technical Commission II Symposium, 6 – 8 October 2014, Toronto, Canada.*

17. Sulochana Shekhar (2014), " A study on state of geospatial courses in Indian Universities", The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences, Volume XL-8, 2014. ISPRS Technical Commission VIII Symposium, 09 – 12 December 2014, Hyderabad, India.
18. Sulochana Shekhar and Shirish Kumar (2014), " Assessing the Quality of Urban Environment through Urban Neighbourhood Green Index", ISPRS TC VIII International Symposium on "Operational Remote Sensing Applications: Opportunities, Progress and Challenges", Hyderabad, India, December 9 – 12, 2014
19. 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. Available at: http://www.isrsindia.in/isprs_doc/isrs_p_14.pdf
20. Kumar, Deepak and Shekhar, Sulochana (2014), " 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. Available at: http://www.appliedgeoinformatics.org/downloads /AGSE2014 _Full%20Paper _Preversion.pdf
21. Deepak Kumar, Sulochana Shekhar (2015) Statistical analysis of land surface temperature–vegetation indexes relationship through thermal remote sensing, *Ecotoxicology and Environmental Safety* 121 (2015) 39–44 journal homepage: www.elsevier.com/locate/ecoenv

Articles Published

1. Sulochana Shekhar (2006). "Geospatial Technology for Monitoring of Development plan". An article published in the book *Applications of Geospatial Technology Edited by Dr.A.Ganesh pp 185- 194, 10 pages, published by Satish serial publishing house, New Delhi. (Reference Book)*
2. Sulochana Shekhar and Jaymala Didee (2009), "Globalising Indian cities - Special reference to Pune" An article published in the book "Globalisation: Issues and challenges for India" published by Department of Geography, Smt Parvatibai Chowgule College, Margao, Goa.
3. Sulochana Shekhar, Priya Narayanan (2012), Sub pixel analysis of Hyperion data- Case study of Jaipur city, published in Conference proceedings
4. Priya Narayanan, Sulochana Shekhar(2012), Urban Roof-Top material discrimination, through Intra-class spectral variability of Hyperspectral data published in Conference proceedings.
5. Nijagunappa.R, S.Gaikwad, A.Ahmed, Sulochana Shekhar (2012), Urban Sprawl Study on Gulbarga City using Geoinformatics and Shannon's Entropy published in Conference proceedings.
6. Sulochana Shekhar (2013), Modelling the Growth of Slums, Challenges of Urbanization in the 21st Century, Volume5, Marginalisation and Exclusion in Urban spaces, Edited by Kalpana Markandey, B. Srinagesh and Ashok Kumar Lonavath, ISBN -13: 978-81-8069-952-8(vol 5).
7. Kumar, Deepak & 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 Edi.) *Geoinformatics Applications in Rural Development*, Professional Books Publisher, Hyderabad, PP 166-178 ISBN: 978-81-909728-9-5.

Books Published:

- Edited Book **“Globalisation: Issues and challenges for India”** 2009 published by Department of Geography, Smt Parvatibai Chowgule College, Margao, Goa. Editors: nandkumar Sawant, Sulochana Shekhar, Jaymala Didee and Suresh Jog.
- **“Study on Pune by Using Remote Sensing and GIS Techniques”** By Sulochana Shekhar (Paperback-11-2010) Publisher: Lap Lambert Academic Publishing, Germany
<http://www.amazon.com/study-using-Remote-Sensing-techniques/dp/3843372934>
- **Modeling the Growth of Slums**, Application of Geoinformatics in Urban Environment By Sulochana Shekhar, Lambert Academic Publishing, Germany (2011) ISBN 978-3-8465-3401-4.

List of Conferences/Seminars/Workshops attended and Presented papers

International level:

Name of the Conference/Seminar	Place	Dates	Title of the Paper presented
International conference- Map World Forum	Hyderabad, India	22-25 Jan 2007	“Changing Space of Pune- A GIS Perspective”
International conference on Globalisation: Consequences in the Indian context	IIG, Conference Goa, India	1&2 October 2007.	“Globalising urban areas, special reference to Pune”.
International conference- Map World Forum	Hyderabad, India	10-13 Feb 2009	“Rift in the Retail Space of Pune-A GIS analysis”.
International conference- Map India	Gurgaon, India	19-21 Jan 2010	Geostatistical analysis of Particulate matter concentration: A case study of Pune
Conference on ‘Urban Development: patterns, causes, foundations and policy	HIS, Rotterdam Netherlands	13 &14 Dec 2010	Attended

Remote sensing cities Workshop European Commission, JRC	Joint Research Centre, ISPRA, Italy	15-17 th Feb 2011	Extraction of Slums of Ahmedabad city- strength and Weakness of OOA methodology
Asian Urbanisation Conference	Hyderabad, India	10-12 Dec 2011	Modelling the growth of slums by using Geoinformatics
Planet Under Pressure Rio +20	London, UK	26-29 th March	Integrating the urban poor for better urban governance
ISPRS 2012 International Congress	Melbourne Australia	25Aug-01 Sep 2012	Detecting Slums from the Quick bird data-case of Pune
Indian Geospatial Forum	Hyderabad India	22-24 Jan 2013	Spatio - temporal analysis of urban rural gradient modelling: Case of Gulbarga city
ISPRS Technical Commission II Symposium	Toronto, Canada.	6 – 8 October 2014	Improving the slum planning through geospatial Decision Support system
ISPRS TC VIII International Symposium on “Operational Remote Sensing Applications: Opportunities, Progress and Challenges”	Hyderabad, India,	December 9 – 12, 2014	Assessing the Quality of Urban Environment through Urban Neighbourhood Green Index
<i>INCA XXXIV International Congress on Cartography – Exploring New Dimensions</i>	Hyderabad, India	16-18,Dec 2014	Mapping for change- Participatory approach in slum planning

National level:

S.No	Name of the event	Place	Dates	Title of Paper Presented
1	National Seminar on Managing the urban Fringe of Indian cities	University of Pune.	27-29 Nov2002	“The role of Remote Sensing and GIS in the management of urban fringe”
2	Training program on Urban Environmental Management	IGIDR, Mumbai	2-6 Dec 2002	Attended
3	A course on Geo concept software- Fundamental course	System Research Institute, Pune	5-10 Feb 2003	Attended
4	Basic training on GRAM ++ software	IIT, Powai, Mumbai	24-25 Jan2005	Attended
5	National Workshop on Geoinformatics in Water Sector.	NWA ,Pune	22-23 Sep2005	Attended

6	Training the Trainers Capsule on law of ArmedConflict	NDA, Pune	05–10. Dec2005	Attended
7	National Conference on Geoinformatics	IRS, Anna University, Chennai	04-06 Jan 2006.	Monitoring of Development Plan By Using LISS IV Data –A Case Study of Balewadi Village from Pune”
8	National Conference on Geoinformatics and Its applications	Osmania University, Hyderabad	10 &11 Feb2006.	“Reliability of Geoinformatics in Urban planning & management:-A case study of Pune city”.
9	Tutorials on “Geospatial databases for Urban Planning” organized by ISPRS	Goa	25-26 Sep 2006.	participated
10	XXXth Indian Geographers 'Meet IIG, Pune	University of Pune	20-22 Feb	“Changing pattern and problems of urban settlements in Pune”
11	IXth DGS National Conference Deccan Geographical Society	Ahmednagar College	17-19 Dec2009	“Mapping of Urban Environment by Using Satellite Data”
12	FEST2010,ISG,Pune Forest, Environment sustainability trends	Pune	21 Aug 2010	participated
13	HYPERSPECTRA-2011	Dept of Earth sciences IIT, Bombay	11- 18 Nov 2011	Participated and presented
14	National Seminar	Madurai Kamaraj University	17-19, Feb 2012	Appraisal of Geospatial Technology For Managing Urban Environment
15	AAG Workshop	Bangalore	12-16 March 2012	Attended and presented case study on (Kerala) migration
16	National Seminar on Frontier Research on Earth sciences	Central University of Karnataka, Gulbarga	05-06 May 2012	Sub –Pixel analysis of hyperion data-case study of Jaipur city
17	Two days' Workshop was organised for School Teachers(Geography at School level)	Army Public School, Bangalore	01-02 June 2012	Teaching Methods – Interactive sessions were organised as co-ordinator
18.	Indian Geographers meet IIG Conference	CESS, Trivandrum	13-15 Dec 2012	Ontology based Slum analysis
19	Workshops on urban planning	CASA, UCL, London	Oct 2013	Transport planning
20	National Seminar	University of Mumbai	21-23 March 2014	Application of Geoinformatics in Natural resources management

21	National Seminar	Osmania University, Hyderabad,	21-23 Aug 2014.	Towards building Slum Ontology- Case study of Gulbarga
22	3-day National Symposium on “Re-Orienting Teaching & Research in Geography	University of Pune (SBP university)	26 to 28 Dec 2014	Geography and Geo-Spatial Education

Ongoing Projects:

1. HUDCO sponsored Project on “Application of Geoinformatics in housing the Urban poor (Gulbarga city). (18.56 lakhs)
2. UGC Major Research Project on “Assessing the environmental impact of Urbanisation on Gulbarga city by using Geoinformatics”. (12. 5 lakhs)
3. UGC-UKIERI Research Project on An interactive spatial Decision Support System for monitoring Public Health using Geoinformatics (Rs12.73 Lakhs) with University of Cambridge, UK

Project Accepted for Funding:

1. Mitigating and Managing Urban Heat Islands through Social Forestry -Using Hyper & Multi-Spectral Remote Sensing (37 lakhs)

SULOCHANA SHEKHAR