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EDUCATION

Maulana Azad College of Technology, Bhopal, India Affiliated To Barkatullah University,Bhopal
Department of Architecture and Planning

- **Ph.D. in Architecture Engineering** (Remote Sensing & GIS technology), July 1999 to Oct 2002
 - Ph.D. thesis title : (Monitoring Of Urban Planning and Development using Remote Sensing and GIS)
 - In the process of monitoring urban development the need for data input in terms of latest unbiased information has been a serious constraint. Non-availability of suitable spatial data that is up to date maps at appropriate scale is a bottleneck. Invariably by the time the data is collected by conventional method which is later used, analyzed and plans made, gets outdated. It is here that remote sensing technology can come to the aid of planners in terms of making an inventory of existing land use and constant monitoring.
 - Supervisor: Dr. A.K. Khare MPCST Bhopal, & Prof. S.C. Garg (H.O.D) HOD, Architecture & Planning Department, MACT, Bhopal(M.P)

School of Planning and Architecture, New Delhi, India
Department of Urban planning

- **Master of Planning** (Urban Planning),July 1992- Feb 1994- **Gold Medalist**
 - Thesis score : 82 out of 100 (**Krishna Sahani Award for best thesis**)
 - Master thesis title: Changing trends of commercial areas of city

Maulana Azad College of Technology, Bhopal
Department of Architecture and planning

- **Bachelor of Architecture** 1992
 - GPA : 7.92 out of 10(**1st division with distinction**)

Indian Institute of Remote Sensing, National Remote Sensing Agency under Department of Space, Gov. of India, Dehradun, India
Department of Human Settlement Analysis Group(HUSAG)

- **Post graduate diploma in Human Settlement Analysis using Remote Sensing Techniques** , (04-04 94 to 03-02-1995)
 - Percentage : 78 (Distinction and Grade "A")
 - Master thesis title: Appraisal of development plan with existing land use study using remote sensing and Geographical Information System- case study Bangalore
 - Description: the present study is an attempt in using aerial photographs to make an inventory of land use / land cover types, appraisal of spaces.
 - Supervisor: B.Ramesh (PROF. N.D. Sharma)Scientist, HUSAG ,Head

International Institute for Geo-Information Science and Earth Observation , ITC , The Netherlands, Europe
Department of Urban Management

- ***Applications of GIS in Urban Management*** (urban planning and land administration) 3 month (equivalent to 20 ECTS (European credit transfer system)
 - GPA : 8 out of 10
 - Description: planning infrastructure provision and managing infrastructure assets. urban process and urban base data analysis using remote sensing and GIS
 - Supervisor: Drs E.J.M Dopheide, Programme Director, Urban planning and Land Administration.

International institute of earth sciences, Athens, Greece, Europe

- ***Short term course in fuzzy logic technology***-Specialization course in Fuzzy logic technology from International Institute of Earth Sciences, Greece, Europe.

ACADEMIC HONORS

- Best Research Paper Award(Merit) in International Conference 2013“ World Conference on Engineers And Computer Science, 23-25th Oct 2013 Held At University of California Berkeley, San Francisco USA, Organized By International Associations of Engineers. The Research Paper Was Outcome of Research Funded By Department of Science & Technology (DST Under NRDMS Projects), New Delhi.
- AICTE Career Award for Young Teacher – 2002, All India Council for Technical Education, New Delhi, India, Grants 3.0 Lac for the research projects of monitoring of urban sprawl using *remote sensing and GIS Technology* + Salary for 3 Years .The career was awarded and sponsored by AICTE new Delhi, Based upon merits and research proposals submitted to AICTE.
- Best Research paper Award in ESRI International Conference, Map Middle East 2007 held between 9th to 11th April 2007 at international convention and exhibition center Dubai for the research work on change detection in urban sprawl using Shannon’s entropy & digital techniques.
- Best research paper presentation award in International conference MAP INDIA 2001 on Remote Sensing, GIS & GPS, 07-09 FEB 2001, New Delhi, India for the research paper “role of remote sensing and GIS in urban fringe development”.
- Best paper Award in International conference MAP INDIA 2003 on Remote Sensing GIS GPS, 28-31 Jan, 2003, New Delhi, India, for the research paper “Web GIS based human settlement planning & Geospatial information system for monitoring growth of urban settlement.”
- Best poster research paper award in international conference map India 2004, for the work on “Environmental strategies for development of Vidisha and surrounding regions” held at New Delhi at hotel Taj palace.
- National award for louis khan trophy at 33rd Annual Convention of the NASA (National Association of Students Of Architecture) held on 1-2nd Feb 1991 for data collection and management of Balampur village , Madhya Pradesh.
- Award for Research paper “Identification, Evaluation, Adaption of traditional elements and modern technique for the development of rural area Balampur in national seminar on “Heritage and contemporary Architecture of M.P” held on 19-20th march 1990
- Krishna Saini Gold Medal For standing 1st in thesis at the Masters of Planning with specialization in Urban Planning examination held during the session 1992-94 from School of Planning and Architecture, New Delhi, India.
- Award for documentation of Accurate measurement of building, producing fine drawings and caring out social and tourist service in the project comprehensive conservation study of Ujjain conducted under The Indian National Trust For Art And Cultural Heritage(INTACH), New Delhi.
- National Awards for National Association of Students of Architecture, Louis I Khan trophy in 1990 &1991 for urban development of Hoshangabad Ghats.
- National Merit Scholarship At Undergraduate Level “GATE SCHOLARSHIP” For PG
- Award of Indian Air Force (IAF) benevolent scholarship, 1987-1992
- Merit-cum-Means scholarship, Ministry of Defense, 1985-87

- Advisory Committee Member, Key Note Speaker & Chair Person National / International Conferences and Expert Monitoring Committee of AICTE
- Committee member of M.P young scientist congress organized by Madhya Pradesh council of Science & technology and Department of Science and technology New Delhi.
- Assistant public Information Officer at the institute level to implement (Right to Information Act. 2004) dated:27-09-2005
- Staff Adviser to Student council of MANIT BHOPAL from 2005-08
- Warden of Girls hostel between 1999-2001 MANIT Bhopal

RESEARCH INTERESTS

My Research Areas are Land Surveying, Topographic Mapping, Remote Sensing, GIS, Cartography, Digitization & Image Processing, Web based applications, Natural Resources Inventory & Mapping, Lake And Rivers Water Quality Management, Rural Development, Environmental Impact Assessment, Wetland, Tribal Area

Visits Abroad To Present Papers and Other Research Related Work

San Francisco USA, Athens, Greece, The Netherlands, Germany, Belgium, Switzerland, Spain, Italy France, Singapore, Dubai, Egypt, Durban, Cape Town, Johannesburg

BOOKS

1. **“Geographical Information Systems & Spatial Data”**, Author- Dr. Aruna Saxena, published in 2008 by Quality Publishing Company, Delhi.
2. A Chapter-*“Appraisal of development plan and the role of various agencies in plan implementation process using remote sensing & GIS techniques”* published in **Remote Sensing of urban environment (Book)**, page 275-285, 2002, Dr. Aruna Saxena(contributor).
3. **“Remote Sensing Geographical information System & Global Positioning System in Human Settlement Planning-**, Department of Architecture & planning, Maulana Azad National Institute Of Technology Bhopal.
4. “Newsletter Institute of Town Planner” ,M.P Regional Chapter ITPI
5. **“Recent Advances in Satellite Based Remote Sensing Technology”**, edited by Dr Aruna Saxena, Quality Publishing

PhD GUIDED

- **Supervisor- Multi spectral image classification based on soft computing and artificial intelligence with web interface**, Shashi Kumar DRDO New Delhi.
- **Supervisor- Web enabled GIS based water resource management system**, Akinchan Singhai, Center for Remote Sensing & GIS , MANIT, Bhopal.
- **Supervisor- Wheat crop prediction model using multivariate AWiFS & LISS-III satellite data**, Suresh Band Goswami, Center for Remote Sensing & GIS , MANIT, Bhopal.
- **Supervisor- Integrated sustainable planning for Bina refinery industrial area using Geospatial technology**, Manish Kumar Tiwari, Center for Remote Sensing & GIS , MANIT, Bhopal.
- **Co-Supervisor- Planning Model for earthquake & flood prone town Hoshangabad**, Rajshree Kamat, Department of Architecture & Planning, MANIT, Bhopal.
- **Co-Supervisor- Planning model for Peri-urban areas of south Bhopal**, Supriya Vyas, Department of Architecture & Planning, MANIT, Bhopal.

National & International Conferences/Workshops : 62 papers presented till date

SPONSORED RESEARCH PROJECTS

- **DST-NRDMS project**, Principal Investigator- Tribal Area planning using Geospatial Technologies of Mandala, M.P, March 2011-17, 27.0 Lacs.
- **DST-NRDMS project**, Principal Investigator- Urban environmental quality evaluation using fuzzy logic & GIS, Sept 2009-13, 9.0 Lacs. Funded by Department of Science & Technology New Delhi
- **Career Award for young teachers by All India Council of Technical Education, New Delhi** Web GIS Based Human Settlement Planning, Grants 3.0 Lac + Salary for 3 Years, 2nd Feb 2003.
- **Ministry of Human Resource Development**, New Delhi, Principal Investigator, Development of Remote Sensing Technology-grant 5.0 Lac, 31st March 2000
- **Ministry of Human Resource Development**, Co-Investigator, Adaptation of Tradition techniques from energy conscious heritage buildings to low cost shelter, grant 5.5 Lac, 30th March 2000.
- **Center of Excellence, Indo U.K. REC Project** Principal Investigator R&D-Monitoring of Urban Development on Fringe Areas using Remote Sensing Techniques, Jan 1999, 1.0 lacs. Funded by: Center of Excellence, Indo U.K. REC Project.