

**Bio - Data**

1. Name, Designation and Department : Dr. K. Kumaraswamy  
Professor and Head,  
Department of Geography  
School of Geosciences  
Bharathidasan University  
E-mail ID:  
[kkumargeo@gmail.com](mailto:kkumargeo@gmail.com)  
[kkumargeo@yahoo.com](mailto:kkumargeo@yahoo.com)

2. Age and Date of Birth : 53 Years, 13-03-1956

3. Educational Qualification : M.Sc. (Geography)  
: B.Ed. (Geography and  
Education)  
: Intl. P.G. Dip. Hydrology  
(Budapest)  
: Ph.D. (Water Resources  
Management)

***a) Academic Qualification***

Institution Mark/Grade	Year	Degree	Major	Class
Department of Geography - University of Madras Management) Chennai - 600 005	1985	Ph.D	Geography (Water	--- Resources --
- do - 78% OGPA)	1971	M.Sc	Special Geography	I (6.00/6.00 (Madras University First Rank)

Government Arts College      1970      B.A      Geography    II  
59%  
Coimbatore - 641 109      (Madras University First  
Rank)

---

-----  
Title of thesis Ph.D: “Spatial Aspects of Water Resources and Management in the Vaippar Basin, Tamil Nadu”

***b) Work Experience in Research Projects***

1. Worked as Research Assistant in the *Indo-Japan Collaborated Research Project on ‘Rural Base in a South Indian Village: A Study into its Structural and Spatial Patterns in Mahizambadi village of Tamil Nadu’*, Department of Geography, University of Madras, Chennai (September 1979 - February 1980)
2. Worked as Junior Research Fellow in the UGC Sponsored Research Project on ‘Development and Management of Land and Water Resources of Vaigai - Vaippar Basins, Tamil Nadu,’ Department of Geography, University of Madras, Chennai (March 1980 - March 1982)
3. Worked as a Research Associate in the Richardson and Cruddas and University of Madras collaborated consultancy Project on ‘Environmental Impact Assessment of Nagarjuna Fertilizers and Chemicals Limited, Kakinada,’ Department of Geography, University of Madras, Chennai ( November 1987 - March 1988)

***c) Attended Courses and Programmes***

***i). Special Trainings and Academic Participation in India***

1. *Aerial Photo Interpretation Training* at Survey of India (Southern Circle), Bangalore on Water Resources and Land Management ( March 1982)
2. *Computer Course* in BASIC and passed the examination conducted by Department of Employment and Training, Government of Tamil Nadu, Madras (April - July 1986)
3. *Certificate Course in Photogrammetry and Remote Sensing* at Indian Institute of Remote Sensing (Department of Space, Government of India), Dehra Dun and passed the course with Distinction. ( March - May 1987)

4. *Summer Institute on Indigenous Instrumentation for Agro-Climatological Investigations* at Central Institute of Fisheries Technology (Indian Council of Agricultural Research), Cochin ( June 1989)
5. *Crash Course on Advanced Techniques in Water Management* at Regional Engineering College, Tiruchirapalli( December 27, 1991)
6. *UGC Sponsored Refresher Course on Environmental Remote Sensing* at Bharathidasan University, Tiruchirappalli ( March 3 - 30, 1994)
7. *Workshop on Calamity Relief Fund Policy, Financing and Working Review*, Ministry of Agriculture, Government of India, NCDM, IIPA, New Delhi, March 6 – 8, 2002

***ii) Trainings and Academic Participation in Other Countries***

1. UNESCO sponsored International Post - Graduate Course on Hydrology at Water Resources Research Center (VITUKI), Budapest, Hungary and passed the course with Excellent Grade (February - July, 1993).
2. International Workshop on SEACHANGE '93 organized by the Ministry of Transport, Public Works and Water Management, Government of Netherlands at Leeuwenhorst, The Netherlands (April 19 - 23, 1993).
3. International Training Course on Storm Surges, River Flow and Their Combined Effects in Low Lying Areas - Data Acquisition, Data Processing and Data Analysis at The Asian Institute of Technology, Bangkok, Thailand (February 14 - 25, 1994).
4. UNESCO - IHP International Symposium on Integrated Water Management in Urban Areas - Searching for new Realistic Approach with Respect to Developing World, at University of Lund, Lund, Sweden (September 26 - 30, 1995)
5. International Workshop on HYDROCOAST - 95 Water Related Problems in Low lying Coastal Areas, organized by UNECSCO - IHP at the Asian Institute of Technology, Bangkok, Thailand (November 13 - 17, 1995).
6. International Conference BORDOMER'97 at Bordeaux, France Organised by the International Agency for Cooperation - Bordomer Organisation at Bordeaux Cedex - France (October 27 - 29, 1997).

7. International Training Workshop on Environmental Impact Assessment with Special Regard to Water Resources Management (German IHP / OHP Programme), AIT, Bangkok Thailand (November 12 – 16, 2001)
6. International Symposium on Low – lying Coastal Areas: Hydrology and Integrated Coastal Zone Management and also Chaired the Session II on Tools for Coastal Zone Management, Bremerhaven, Germany (September 9 – 12, 2002)
9. International Conference on Sustainable Water Resource Management In The Changing Environment Of The Monsoon Region, Colombo, Sri Lanka, 17 – 19 November 2004.
10. Environmental Protection and Water Management Research Institute (VITUKI), Budapest under Long – Term Indo-Hungarian Educational Exchange Programme – UGC, New Delhi during June-July, 2006.

#### 4. Service Details

Name of the Institution	Description & Scale of Pay	Period		Total Number of Services	
		From	To	Years	Months
Department of Geography, University of Madras, Chennai	Research Associate (Rs 2,200 + Allowances)	December 1986	December 1988	2	-
Bharathidasan University, Tiruchirappalli	Lecturer (Rs. 2,200 + Allowances)	December 1988	December 1993	5	-
	Senior Lecturer (Rs. 3,000 + Allowances)	December 1993	December 1994	1	-
	Reader (Rs.12,000 + Allowances)	December 1994	December 2002	8	-
	Professor (Rs. 16,400+ Allowances)	December 2002	Till Date	Six years	

#### 5. Research Contribution:

*a). Papers in Books / Symposium Volumes*

1. Kumaraswamy, K. (1992) "Coastal Geomorphology and Salt Water Intrusion in the Vaippar Estuary" *Tamil Nadu Science Congress Volume (Earth and Atmospheric Sciences)*, Bharathidasan University, Tiruchirappalli, pp 100-103.
2. Kumaraswamy, K. (1992) "Water Resources Development and Management in the Vaippar Basin - A Geographical Outlook" *Tamil Nadu Science Congress Volume (General)*, Bharathidasan University, Tiruchirappalli, pp 66 – 70.
3. Kumaraswamy, K. (1995) "Fluvio-Marine Sediment Deposit Patterns and Hydro - geomorphology of Tamil Nadu Coast, India" *Proceedings of the International Workshop on Water Related problems in Low-lying Coastal Areas*, Asian Institute of Technology, Bangkok, pp. 116 - 122
4. Kumaraswamy, K. and V. Gopal (1996) "Earthquake Prediction by Analysing the Anomalous Behaviour of the Animals through Satellites", *Proceedings of the Fourth Tamil Nadu Science Congress (Earth and Atmospheric Sciences)*, Tamil Nadu Agricultural University, Coimbatore, pp. 83 - 85.
5. Kumaraswamy, K. Jawahar Raj, N. Florence Annal, C. and M.Kamaraj (1996) "Pollution Along Tamil Nadu Coast: Reasons and Remedies", *Proceedings of the Fourth Tamil Nadu Science Congress (Earth and Atmospheric Sciences)*, Tamil Nadu Agricultural University, Coimbatore, pp. 94 - 98.
6. Kumaraswamy, K. Florence Annal, C. Jawahar Raj, N. and M. Kamaraj (1996) "Impact of Tannery Effluents on Land and Water Resources Around Dindigul Anna District, Tamil Nadu", *Proceedings of the Fourth Tamil Nadu Science Congress (Earth and Atmospheric Sciences)*, Tamil Nadu Agricultural University, Coimbatore, pp. 99 - 103.
7. Kumaraswamy, K. (1996) "An Integrated Approach to the Drinking Water Problems of Madras City, India" in *Integrated Water Management in Urban Areas (Ed. Janusz Niemczynowicz)*, Transtech Publications, Zuerich - Uetikon, Switzerland, pp.209 - 220.
8. Kumaraswamy, K. Jawahar Raj, N. Florence Annal, C and K.Unnikrishnan (1997) "Prawn Farming and the Environmental

Impacts Along Tamil Nadu Coast: Reasons and Remedies”, *Proceedings of the Fourth Tamil Nadu Science Congress (Earth and Atmospheric Sciences)*, Annamalai University, Annamalainagar, pp. 71 - 79.

9. Kumaraswamy, K. (1997) “Evolution and Morphology of Southern Coromandal Coast - A Study Based on IRS I A/B Data” in *Proceedings of the BORDOMER 97 CONFERENCE*, Bordeaux, France, pp. 434 - 438.
10. Sivakumar, C. and K.Kumaraswamy (1998) “Riverine Landscape Features: A Global View” *Proceedings of the Fourth Tamil Nadu Science Congress (Earth and Atmospheric Sciences)*, Manonmanium Sundaranar University, Tirunelveli, pp.117 - 124.
11. Kumaraswamy K. and R.Jagan Kumar (1998) “ Impact of Monsoon Currents on the Movement and Transportation of Sediment Along the Coast of South India and Sri Lanka” *Proceedings of the Sixth Tamil Nadu Science Congress (Earth and Atmospheric Sciences)*, Avinasilingam Deemed University, Coimbatore, pp. 43 - 48.
12. Kumaraswamy, K. (1998) “Patterns and Processes of Sediment Transportation Along South Indian Coast”, *Proceedings of the UNESCO - IHP International Workshop on Aspects and Impacts of a Changing Sediment Regime*, Asian Institute of Technology, Bangkok, Thailand, pp 143 - 148.
13. Kamaraj, M. Moses Edwin, J and K. Kumaraswamy (2000) “Integrated Approach to Identification of Groundwater Potential Zones in Tiruchirappalli District, Tamil Nadu” *Proceedings of the Conference on Groundwater Exploration Techniques*, Department of Geology, National College, Tiruchirappalli, pp 72 - 85.
14. Usha Bhuvaneshwari, S. and K. Kumaraswamy (2000) “Hydro geomorphological Study of Noyil Basin, Tamil Nadu, India Using Remote Sensing Techniques” *Proceedings of the Conference on Groundwater Exploration Techniques*, Department of Geology, National College, Tiruchirappalli, pp 72 - 85.
15. Kumaraswamy, K (2002) “Diagnosing Saltwater Intrusion in the Coastal Estuary of Tamil Nadu, India” *Proceedings of the International Symposium on Low – lying Coastal Areas: Hydrology and Integrated Coastal Zone Management*, Bremerhaven, Germany, pp 211 – 217.

16. Balaselvakumar, S. Kumaraswamy, K. Srileka, S. and Jawahar Raj, N. (2003), *Remote Sensing Techniques for Land Use Mapping of Arjuna Basin, Tamil Nadu*, Paper accepted for the poster presentation by Map Asia 2003 Conference (Asian Conference on GIS, GPS, Aerial Photography and Remote Sensing) at Kula Lumpur, Malaysia on October 13-15, Organized by Malaysian Centre for Remote Sensing, Malaysia. – Proceeding Volume.
17. Balaselvakumar, S. Srileka, S. Kumaraswamy, K. and Jawahar Raj, N. (2004), Applications of *Remote Sensing Data for Geomorphological Mapping of Arjuna Basin, Tamil Nadu*, in Map India 2004 International Conference (7<sup>th</sup> International Conference of Map India), Organized by CSDMS, GIS Development, New Delhi, January 28-30, 2004.
18. Kumaraswamy. K. (2004), *Spatial Aspects of Water Resources Management In Vaipar Basin In Tamil Nadu, India*, Proceedings Of The International Conference On Sustainable Water Resource Management In The Changing Environment Of The Monsoon Region, Volume II, Colombo, Sri Lanka, 17 – 19 November 2004.
19. Kumaraswamy, K. (2004), “Environmental study of Tamil Nadu Coast using Indian Remote Sensing Data” Proceedings of the National Conference on Ecological Movements and Sustainable Development, organized by Department of History, St. Joseph’s College, Autonomous, December 21, 2004.
20. Alagappa Moses, A., Kumaraswamy, K. and Vasanthi, M. (2005), “Multidisciplinary Nature of Environmental Studies” Proceedings of the National Workshop on Remote Sensing for Environmental Studies, organized by Department of Geography, Bharathidasan University, Tiruchirappalli, between 21 and 25 February, 2005.
21. Kumaraswamy, K. (2005), “Principles of Satellite Remote Sensing” Proceedings of the National Workshop on Remote Sensing for Environmental Studies, organized by Department of Geography, Bharathidasan University, Tiruchirappalli, between 21 and 25 February, 2005.
22. Kumaraswamy, K. (2005), “Sensor Characteristics of Resources Satellites” Proceedings of the National Workshop on Remote Sensing for Environmental Studies, organized by Department of Geography, Bharathidasan University, Tiruchirappalli, between 21 and 25 February, 2005.

23. Kumaraswamy, K. (2006) *Water Resources Evaluation and Management in Vaippar Basin* in Proceedings of the National Workshop on Integrated Water Resources Development & Management with special Emphasis on Institutional and Legal Aspects, Central Water Commission, Pune, pp 61-68.
24. Narayanakumar, R. and Kumaraswamy, K. (2006) "Choosing the Right Digital Terrain Model" in Applications of Geospatial Technology, (Ed: A. Ganesh), Satish Serial Publishing House, New Delhi, pp 43-50.
25. Sundararaj, P., Narayanakumar, R., Kumaraswamy, K., and Sasikala, K. (2006) "Creating Topology for Surface Water Features" in Applications of Geospatial Technology, (Ed: A. Ganesh), Satish Serial Publishing House, New Delhi, pp 151-157.
26. Jegan Kumar, R., Kumaraswamy, K., Rutharvel Murthy, K. and Muruganandam, R. (2008) "Landuse / Landcover Influences on Land Surface Temperature: A Remote Sensing and GIS Approach", Environment, Resource & Development Disparities (Ed. M.B. Bhiradi), Shrigiri Publication, Bijapur, pp168-173.
27. Kumaraswamy, K (2008) "Sensor Characteristics of Resources Satellites" in Proceedings of the National Workshop on *GIS for Natural Resources and Disaster Management* (Ed: K. Kumaraswamy) Organised by Department of Geography, Bharathidasan University, Tiruchirappalli, pp 8-24.
28. Narayanakumar, R. and Kumaraswamy, K. (2008) "Quantitative Image Analysis of the Spectral Characteristics on Alagar Hills Forest Vegetation" in Proceedings of the National Workshop on *GIS for Natural Resources and Disaster Management* (Ed: K. Kumaraswamy) Organised by Department of Geography, Bharathidasan University, Tiruchirappalli, pp 60-68.
29. Sundararaj, P., Rutharvel Murthy, K., Muruganandam, R., Balachandar, D. and Kumaraswamy, K. (2008) "GIS in Water Quality Evaluation for Irrigated Agriculture in Pambar Basin" in Proceedings of the National Workshop on *GIS for Natural Resources and Disaster Management* (Ed: K. Kumaraswamy) Organised by Department of Geography, Bharathidasan University, Tiruchirappalli, pp 69-82.
30. Bhaskaran, G., Jaganathan, R., and Kumaraswamy, K. (2008) "Resources Assessment for Prioritizing of Wastelands in Nagalar Sub-Watershed of Vaigai Basin – A Geoinformatics Approach" in

Proceedings of the National Workshop on *GIS for Natural Resources and Disaster Management* (Ed: K. Kumaraswamy) Organised by Department of Geography, Bharathidasan University, Tiruchirappalli, pp 83-105.

31. Balaselvakumar, S., and Kumaraswamy, K. (2008) “Space Technology for Disaster Management” in Proceedings of the National Workshop on *GIS for Natural Resources and Disaster Management* (Ed: K. Kumaraswamy) Organised by Department of Geography, Bharathidasan University, Tiruchirappalli, pp 106-131.
32. Kumaraswamy, K. (2008) “Spatio-Temporal Analysis of Earthquake Distribution and Management Strategies for South India” in Proceedings of the National Workshop on *GIS for Natural Resources and Disaster Management* (Ed: K. Kumaraswamy) Organised by Department of Geography, Bharathidasan University, Tiruchirappalli, pp 150-160.
33. Kumaraswamy, K., Jawahar Raj, N., and Rutharvel Murthy, K., (2008) “Application of GIS in Salt Water Intrusion – A Case Study in Vaippar Estuary, Coromandel Coast, India” in the edited volume of training course on *Application Remote Sensing and GIS Tools for Coastal and Ocean Resource Mapping, Monitoring and Management* (Ed: T. Thangaradjou et. al.) Organised by Centre of Advanced Study in Marine Biology, Annamalai University, pp 274-278.

#### ***b) Books / Edited Volumes***

1. Jagadeesan M.S, Ganesh A and K. Kumaraswamy, (1992) **Tamil Nadu Science Congress Volume (Earth and Atmospheric Sciences)**, Bharathidasan University, Tiruchirappalli, pp 1 – 174.
2. Ganesh A, Kumaraswamy K and S. Aruchamy (2000) **Proceeding of the Regional Workshop on Earthquake Prone Zones of India – Popular Lecturers on Facts and Myths of Earthquakes - Indian Contest**, Department of Geography, Bharathidasan University, Tiruchirappalli, December 19, 2001
3. Kumaraswamy, K. (2004) (Ed) **Proceedings of the Workshop on Environmental Studies**, CCCD, Bharathidasan University, Tiruchirappalli, pp.1-550.
4. Kumaraswamy, K. Alagappa Moses, A and M. Vasanthy, (2004), **Environmental Studies**, Publication Division, Bharathidasan University, Tiruchirappalli, pp.1-272.

5. Kumaraswamy, K. Alagappa Moses, A and M. Vasanthi, (2005), **Environmental Studies**, Publication Division, Bharathidasan University, Tiruchirappalli. (*in Tamil*), pp. 1-282.
6. Kumaraswamy, K et al., (2006) **Fundamentals of Physical Geography**, CBSE Higher Secondary Text Book, National Council for Educational Research and Training, New Delhi.
7. Kumaraswamy, K (Ed) (2006) **Remote Sensing for Environmental Studies**, Department of Geography, Bharathidasan University, Tiruchirappalli.
8. Kumaraswamy, K. (Ed) (2008) **GIS for Natural Resources and Disaster Management**, Department of Geography, Bharathidasan University, Tiruchirappalli.

**c). Research Articles in Journals**

1. Sivagnanam N. and K.Kumaraswamy (1983) "Groundwater Quality in Vaippar Basin" *Indian Geographical Journal*, 58(2), pp 127-142
2. Kumaraswamy K. (1984) "Evaluation of Groundwater Quality and Use in Vaippar Basin, Tamil Nadu" *Geography Teacher (India)*, 19(4), pp 63-72
3. Kumaraswamy K. (1984) "Patterns of Cholera in Madras City 1958-1980" *Indian Geographical Journal (Special Issue)*, 59(1), pp 29-45
4. Kumaraswamy K. (1987) "Water Resources Development in India with Special Reference to Tamil Nadu" *Geography Teacher (India)*, 22(4-6), pp 108-118
5. Kumaraswamy K. and N. Sivagnanam (1988) "Surface Water Aspects of Vaippar Basin, South India" *Indian Geographical Journal*, 63(1), pp 1-56
6. Kumaraswamy K. and N. Sivagnanam (1988) "Morphometric Characteristics of Vaippar Basin, Tamil Nadu - A Quantitative Approach" *Indian Journal of Landscape Systems and Ecological Studies*, 11(1), pp 94-101
7. Sivagnanam N. and K. Kumaraswamy (1988) "Groundwater Quality Mapping for Agricultural Planning in the Vaippar Basin, Tamil Nadu" *Deccan Geographer*, 24(2 & 3), pp 407-416

8. Sivagnanam N. and K. Kumaraswamy (1988) "Spatial Aspects of Salt Water Intrusion in the Vaippar Estuarine Tract, Tamil Nadu" *Annals of the National Association of Geographers, India*, 20(1), pp 39-44
9. Sivagnanam N. and K. Kumaraswamy (1988) "Regional Resource Appraisal Through Factor Analysis Technique - A Study on the Countries of Monsoon Asia" *Indian Journal of Regional Science*, 20(1), pp 39-44
10. Kumaraswamy K. (1989) "Atmospheric Ozone Depletion and Environmental Problems" *Geography Teacher (India)*, 24(6), pp 61-69
11. Kumaraswamy K. (1991) "Precipitation Trends and Water Balance in Vaippar Basin, Tamil Nadu" *The National Geographical Journal*, 37(3), pp 237-245
12. Kumaraswamy K. (1991) "Methods of Studying Salt Water Intrusion: A Case Study in the Coromandal Coastal Aquifers" *Deccan Geographer*, 29(1), pp 15-20
13. Kumaraswamy K. and N. Sivagnanam (1991) "Diagnosing Salt Water Intrusion in Vaippar Estuary of the Cholamandal Coast, India" *Transactions of the Institute of Indian Geographers*, 13(1), pp 43-51
14. Kumaraswamy K. and N. Sivagnanam (1992) "Application of Geochemical Indicators in Recognizing Salt-Water Intrusion - A Case Study" *Indian Journal of Landscape Systems and Ecological Studies*, 14 (2), pp 46-49
15. Kumaraswamy K. (1992) "Studying Some Aspects of Resolution, Annotations and Applications of the Remotely Sensed Data Products" *Geography Teacher (India)*, 26 (1-6), pp 38 - 51
16. Kumaraswamy K. Jayakumar, R. and M. Kamaraj (1994) "Morphostatistical Analysis of Vaippar Basin, Tamil Nadu" *National Geographer*, 29(2), pp 107 - 113
17. Kumaraswamy K. Kamaraj M. and K. Unnikrishnan (1994) "A Study on the Sea Water Intrusion in the Ponnaiar - Gadilam Coastal Tract, Tamil Nadu", *Deccan Geographer*, 32(2), pp 1 - 8
18. Haridas V.R. Chandrasekaran V.A. Kumaraswamy K. Rajendran S. and K. Unnikrishnan (1994) "Geomorphology and Lineament

Studies of Kanjamalai Using LISS IA Data With Special Reference to Groundwater Potentiality”, *Transactions of the Institute of Indian Geographers*, 16 (1), pp 35-41

19. Kumaraswamy K. (1994) “Impact of Sea Level Variations along Tamil Nadu Coast, South India - A Remote Sensing Based Study”, *Indian Geographical Journal*, 69(1), pp. 66 - 69
20. Kumaraswamy K. (1995) “Getting in Touch with the Emerging Fields of Geography,” *The Geography Teacher (India)*, New Series, 2(2), pp 1 - 421
21. Kumaraswamy K. Unnikrishnan K. and M.Kamaraj (1995) “Hydrogeochemical Evaluation of Sea Water Intrusion in the Vaippar Estuary, Tamil Nadu” *Journal of Applied Hydrology*, XIII (1-4), pp. 93 – 97
22. Jawahar Raj N. Kumaraswamy K. and K. Ponnaiyan (1998) “Morphometric Analysis of the Noyil Basin, Tamil Nadu” *Deccan Geographer*, 36(2), pp. 15 - 30
23. Jawahar Raj N. and K.Kumaraswamy (1999) “Status of the Coral Reef Environment of the Gulf of Mannar, South India” *Journal of Nature Conservators*, 11(2), pp 161 - 168
24. Kumaraswamy K. Kamaraj M. and K.Unnikrishnan (2000) “A Study on Salt Water Intrusion through Geophysical Method in Ponnaiyar - Gadilam Estuaries, Tamil Nadu Coast,”. *Indian Journal of Geomorphology*, 5 (1&2). pp.123-128
25. Balaselvakumar S. Kumaraswamy K. Srilekha S. and N. Jawahar Raj (2000) “Morphometric Characteristics of Arjuna River Basin of Tamil Nadu – A Quantitative Approach,” *Deccan Geographer*, 38(1& 2) , pp. 31-40.
26. Jawahar Raj N. and K.Kumaraswamy (2001) “ Assessment of Salt Water Intrusion Around the Vaippar River Estuary of Tamil Nadu, India”. *International Journal of Ecology and Environmental Sciences*, 27, pp 121-124
27. Moses Edwin J. Bhaskaran G. and K.Kumaraswamy (2001) “Remote Sensing: An Operational Tool for Prospective Groundwater Resources Management in Malattar Watershed, Tamil Nadu”, *Deccan Geographer*, 39 (1) pp 15-23

28. Usha Bhuvaneswari S. Kumaraswamy K. and N. Jawahar Raj (2001) "Morphometric Analysis for Water Resources Management: A Case Study of the Noyil Basin, Tamil Nadu, India, *Indian Journal of Geomorphology*, 6 (1&2). pp.137-144
29. Bhaskaran G. Jayakumar R. Moses Edwin J. and Kumaraswamy K. (2002) "Identification of Influential Geomorphic Parameters in Hydrological Modeling Through Numerical Analysis", *Journal of Applied Hydrology*, 15 (1) pp 1-8
30. Balaselvakumar S. Kumaraswamy K. Srilekha S. and N. Jawahar Raj (2003) "Application of Remote Sensing Data for Land Use / Land Cover Mapping – A Case Study of Arjuna River Basin, Tamil Nadu" *International Journal of Biosciences Biotechnology Research Asia*, 1 1 (1), pp. 43-48.
31. Srilekha S, Kumaraswamy K, Balaselvakumar S and N. Jawahar Raj (2003) "Geomorphological Mapping of Arjuna River Basin, Tamil Nadu using Remote Sensing Data," *Deccan Geographer*, 41(1), pp. 65-72.
32. Kumaraswamy K, (2004) "Geohydrological Characteristics and Water Management Strategies for a Semi- Arid River Basin of South India", *Indian Journal of Geomorphology*, 8 (1 & 2), pp. 123 – 128.
33. Narayanakumar.R, Sundarraj.P and K.Kumaraswamy (2005) Delineating Possible Vulnerable Zones Using Surface Models in GIS – A Case Study of Oussudu Lake Environs, Pondicherry, *Journal of Swamy Botanical Club*, Vol. 22, pp 87 – 90.
34. Narayanakumar.R and K.Kumaraswamy (2006) Landuse and Landcover in Oussudu Lake Environs – A Remote Sensing Based Study, *Deccan Geographer*, 44 (1) pp 43-50
35. Balaselvakumar. S, Kumaraswamy.K, Jawahar Raj .N and S. Srilekha (2007) Geographic Information System for Evaluation of Groundwater and Its Suitability for Agriculture in Marudaiyar Basin, Tamil Nadu, India, *Scientific Transactions in Environment and Technovation*, 1(2), pp58-68.
36. Balaselvakumar. S, Kumaraswamy.K and Jawahar Raj. N (2008) Landuse / Landcover Mapping of Marudaiyar Basin, Tamil Nadu Using Remote Sensing Data, *Eco-Chronicle*, 3(4), pp 269 – 274.

37. Balachandar. D, Alaguraja. P, Sundararaj. P, Rutharvel Murthy. K and Kumaraswamy. K. (2010) Application of Remote Sensing and GIS for Artificial Recharge Zone in Sivaganga District, Tamilnadu, India, International Journal of Geomatics and Geosciences, Vol. 1, No. 1, pp 84-97.

*d). Supervision of M. Phil / M.Tech Dissertations / Ph.D Thesis*

*i) Ph.D Guidance (Completed):*

1. Evaluation of Suitability of Groundwater for Agriculture in Salem District, Tamil Nadu, India (Ph. D. Thesis by **Mr. I Arumugam - Awarded in November 1995** by Bharathidasan University, Tiruchirappalli)
2. Evaluation of Groundwater Resources for Irrigated Agriculture in Tiruchirappalli District, Tamil Nadu, India (Ph.D. Thesis by **Mr. M. Kamaraj - Awarded in December 1996** by Bharathidasan University, Tiruchirappalli)
3. Integrated Coastal Zone Management of a Part of Coromandal Coast, India, With Special Reference to Salt Water Intrusion (Ph. D Thesis by **Mr. K. Unnikrishnan - Awarded in September 1999** by Bharathidasan University, Tiruchirappalli)
4. Environmental Impact Assessment of Tannery Effluents in and Around Dindigul Town, Tamil Nadu, India (Ph.D. Thesis by **Ms.C.Florence Annal - Awarded in April 2000** by Bharathidasan University, Tiruchirappalli)
5. Integrated Terrain and Resources Analysis for Environmental Management of the Kolli Hills, Tamil Nadu, Using Remote Sensing and GIS (Ph.D. Thesis by **Mr. N. Jawahar Raj - Awarded in April 2003** by Bharathidasan University, Tiruchirappalli)
6. Evaluation of Groundwater Suitability for Irrigated Agriculture in the Noyil River Basin, Tamil Nadu, India, (Ph.D. Thesis by **Ms. S. Usha Buvaneswari - Awarded in November 2003** by Bharathidasan University, Tiruchirappalli)
7. An Integrated Water Resources Management Approach to Ponnaniar River Basin, Central Tamil Nadu, India (Ph.D. Thesis by **Mr. C. Sivakumar- Awarded in June 2004** by Bharathidasan University, Tiruchirappalli.)

8. Geographic Information System for Evaluation of Groundwater and Its Suitability for Irrigated Agriculture in Marudaiyar basin, Tamil Nadu, India (Ph.D. Thesis by **Mr. S. Balaselvakumar - Awarded in April 2006** by Bharathidasan University, Tiruchirappalli).
9. Evaluation of Groundwater Suitability for Irrigated Agriculture in Virudhunagar District, Tamil Nadu, India – ((Ph.D. Thesis by **Ms. S. Nageswari –Awarded in December 2007**, Bharathidasan University, Tiruchirappalli).
10. Studies on the Landscape Ecology of Alagar Hill Environs, Tamil Nadu for Conservation and Management of Forest Resources Using Remote Sensing and Geographic Information System – (Ph.D. Thesis by **Mr. R. Narayanakumar – Awarded in September 2008**, Bharathidasan University, Tiruchirappalli)
11. Geographic Information System for Evaluation of Groundwater and Its Suitability for Irrigated Agriculture in Pambar basin, Central Tamil Nadu, India (Ph.D. Thesis by **Mr. P. Sundararaj - Awarded in August 2009** by Bharathidasan University, Tiruchirappalli).

*ii) M.Tech/ M.Phil Guidance (Completed):*

1. An Analysis of Marine Transgression in Tiruchirappalli District, Tamil Nadu using Remote Sensing Method (**M.Tech.** Dissertation by **Mr. M.T.Selva Kumar - awarded in April 1991** by Bharathidasan University, Tiruchirappalli)
2. Fluvio-Marine Influences on the Coastal Geomorphology of Tamil Nadu, India - A Remote Sensing Based Study (**M.Tech.** Dissertation by **Ms. A. Uma Maheswari - awarded in April 1991** by Bharathidasan University, Tiruchirappalli)
3. An Analysis of Soil Resources of Karur Taluk, Tiruchirappalli District Using Remote Sensing Methods (**M.Tech.** Dissertation by **Mr. V. Sekar - awarded in April 1992** by Bharathidasan University, Tiruchirappalli)
4. A Remote Sensing Based Study on the Evaluation of Pulicat Lake Environment (**M. Tech.** Dissertation by **Mr. D. Gandhi - awarded in January 1995** by Bharathidasan University, Tiruchirappalli)

5. Remote Sensing and Geographical Information System Based Environmental Assessment of Ooty, The Nilgris District, Tamil Nadu (M. Tech. Dissertation by **Mr. T.Ramalingam - awarded in January 1996** by Bharathidasan University, Tiruchirappalli)
6. Geomorphic and Hydrological Influences on Landuse of Arjuna Nadhi Basin, Tamil Nadu - A Study Based on Remote Sensing (M.Tech. Dissertation by **Ms. S. Srilekha - awarded in January 1997** by Bharathidasan University, Tiruchirappalli)
7. Changing Landuse Pattern in Lalgudi Taluk, Tiruchirappalli Perumpidugu Mutharayar District, Tamil Nadu - A Study Using Remote Sensing Methods (M.Tech. Dissertation by **Mr. A. Ilanthirayan - awarded in January, 1997** by Bharathidasan University, Tiruchirappalli)
8. Evaluation of Groundwater Resources for Agricultural Purpose in Thirumanimuthar Basin, Tamil Nadu - (M.Phil. Dissertation by **Mr. N. Baskaran - awarded in January 2001** by Bharathidasan University, Tiruchirappalli)
9. Spatio-Temporal Patterns of Voting Behaviour in the Assembly Elections of Tamil Nadu 1977-2001 - (M.Phil. Dissertation by **Mr. P.Sundararaj - awarded in January 2002** by Bharathidasan University, Tiruchirappalli)
10. Spatial-Temporal Patterns of Earthquakes Occurrences in South India - (M.Phil. Dissertation by **Ms. P.Gangai - awarded in January 2002** by Bharathidasan University, Tiruchirappalli)
11. Demographic Characteristics and Urbanisation Process in Tamil Nadu- (M.Phil. Dissertation to be submitted by **Ms. K. Uma Mageswari – awarded in March 2003** to Bharathidasan University, Tiruchirappalli)
12. Analysis of Groundwater Resources of Sivaganga District, Tamil Nadu- (M. Phil. Dissertation by **Ms. S. Judith Pandia Chitra - awarded in May 2005** by Bharathidasan University, Tiruchirappalli)
13. Evaluation of Groundwater Resources of Tiruchirappalli District, Tamil Nadu, India - (M. Phil. Dissertation by **Ms. J. Maheswari - awarded in August 2005** by Bharathidasan University, Tiruchirappalli)
14. Spatio – Temporal Analysis of Water Demand and Its Availability for Inter Basin Transfer of Water (IBTW) Using Geographical Information Systems(Part – I) - (M. Tech. Dissertation by **Mr. R.**

**Muruganandam - awarded in August 2005** by Bharathidasan University, Tiruchirappalli)

15. Spatio – Temporal Analysis of Water Demand and Its Availability for Inter Basin Transfer of Water (IBTW) Using Geographical Information Systems(Part – II) - (**M. Tech.** Dissertation by **Mr. B. Harikrishnan - awarded in August 2005** by Bharathidasan University, Tiruchirappalli)
16. A Study of Earthquake Occurrences in South India – (**M. Phil.** Dissertation by **Ms. A. Geetha - awarded in August 2006** by Bharathidasan University, Tiruchirappalli)
17. Development of Tiruchirappalli City a Space – Time Analysis – (**M. Phil.** Dissertation by **Ms. M. Kamala - awarded in August 2006** by Bharathidasan University, Tiruchirappalli)
18. Significance of Accuracy Assessment Using LISS-IV High Resolution Data for Agricultural Landuse – A case study of Saharapur District, Uttar Pradesh, India - (**M. Tech.** Dissertation by **Mr. J. Jagadeesan - awarded in August 2006** by Bharathidasan University, Tiruchirappalli)
19. Biomass Study of Tropical India- (**M. Tech.** Dissertation by **Mr. S. Sasikala - awarded in August 2006** by Bharathidasan University, Tiruchirappalli)
20. Changing Landuse, Irrigation and Cropping Pattern in Thiruvavur District of Tamil Nadu, 1997-2004 – (**M. Phil.** Dissertation by **Ms. L. Sivasankari - awarded in December 2006** by Bharathidasan University, Tiruchirappalli)
21. Changing Landuse, Irrigation and Cropping Pattern in Thanjavur District of Tamil Nadu – (**M. Phil.** Dissertation by **Ms. M. Rama-awarded in December 2006** by Bharathidasan University, Tiruchirappalli)
22. Micro Watershed Analysis for Sustainable Development using Remote Sensing and GIS – A Case Study in Walajpet Block, Vellore District, Tamil Nadu - **M. Tech.** Dissertation by **Mr. Karthic Kumar - awarded in August 2007** by Bharathidasan University, Tiruchirappalli)
23. Studies on Spatio-Temporal Changes of Paddy Cultivation in Different Physiographic Zones of Palakkad District – A Geospatial Approach - (**M. Tech.** Dissertation by **Ms. C. Karpaga Devi - awarded in August 2007** by Bharathidasan University, Tiruchirappalli)

24. Integrated Land and Water Resources Development and Conservation in Selected Villages of Rangareddy District of Andhra Pradesh using Remote Sensing and GIS - **M. Tech.** Dissertation by **Ms. T. R. Rajimol - awarded in August 2007** by Bharathidasan University, Tiruchirappalli)
25. Spatial Analysis of Groundwater Resources of Dindigul District, Tamil Nadu – **M. Phil.** Dissertation by **Ms. P. Tamilarasi - awarded in January 2008** by Bharathidasan University, Tiruchirappalli.
26. Spatio-Temporal Evaluation of Groundwater Quality for Irrigation Purpose in Coimbatore District, Tamil Nadu –**M. Phil.** Dissertation by **Mr D. Balachander - awarded in January 2008** by Bharathidasan University, Tiruchirappalli.
27. Spatial Aspects of Groundwater Quality in Kulathur and Illuppur Taluks, Pudukkottai District – **M. Phil.** Dissertation by **Mr. T. Thangamani in awarded in January 2008** by Bharathidasan University, Tiruchirappalli.
28. Change Detection Analysis of Indian Administrative Divisions (1872-2001) Using GIS - **M. Tech.** Dissertation by **Ms. D. Latha - awarded in April 2008** by Bharathidasan University, Tiruchirappalli
29. Geoinformatics in Micro-Level Planning - A Case Study of Ranchi District, Jharkhand State - **M. Tech.** Dissertation by **Mr. M. Saravanan - awarded in April 2008** by Bharathidasan University, Tiruchirappalli.
30. Application of GIS in School Mapping in Manamadurai Taluk, Sivaganga District, Tamil Nadu - **M. Tech.** Dissertation by **Mr V. Periyannan - awarded in April 2008** by Bharathidasan University, Tiruchirappalli.
31. Application of GIS in School Mapping in Karaikkudi Taluk, Sivaganga District, Tamil Nadu – **M. Tech.** Dissertation by **Mr. D. Vivek - awarded in April 2008** by Bharathidasan University, Tiruchirappalli.
32. Health Facilities and Common Diseases in Gudalur Town a Geographical Approach - **M. Phil.** Dissertation by **Mr. M. Kalyanasundaram - awarded in April 2008** by Bharathidasan University, Tiruchirappalli.
33. Crimes in Coimbatore City – A Geographical Analysis - **M. Phil.** Dissertation by **Mr. M. Sivasankar - awarded in April 2008** by Bharathidasan University, Tiruchirappalli.

34. Spatial Distribution of Schools in Tamil Nadu - **M. Phil.** Dissertation by **Mr.G. Muruganandam** – **awarded in September 2008** by Bharathidasan University, Tiruchirappalli.
35. Study the Changing Pattern of Ground Water Level in Chandigarh Using Remote Sensing and GIS – **M. Tech.** Dissertation by **Mr. Sukhwinder Singh** - **awarded in April 2009** by Bharathidasan University, Tiruchirappalli.
36. Estimation of Area under Winter Vegetables through Multidate AWiFS data Using Modeller Based Decision Rule Classification Approach – **M. Tech.** Dissertation by **Mr. Avtar Singh** - **awarded in April 2009** by Bharathidasan University, Tiruchirappalli.
37. Geospatial Decision Support System for Urban Landuse Planners in Tiruchirappalli Urban Region – **M. Tech.** Dissertation by **Mr. V.B. Priya** - **awarded in April 2009** by Bharathidasan University, Tiruchirappalli.
38. GIS Application in Demarcating Ground Water Potential Zones of Hosur Union, Krishnagiri District Using High Resolution IRS-P6 LISS-IV DATA– **M. Tech.** Dissertation by **Mr. Balamurugan** - **awarded in April 2009** by Bharathidasan University, Tiruchirappalli.
39. An Analysis of Urban Centres in Different Climatic Zones of Shimoga District, Karnataka Using Remote Sensing and GIS – **M. Tech.** Dissertation by **Ms. Naziya Khanum** - **awarded in April 2010** by Bharathidasan University, Tiruchirappalli.
40. Identification of Groundwater Potential Zones in Neogal Watershed, Himachal Pradesh Using Remote Sensing and GIS – **M. Tech.** Dissertation by **Mr. Lakhwinder Singh** - **awarded in April 2010** by Bharathidasan University, Tiruchirappalli.
41. Temporal Analysis of Vegetation Cover in Bangalore City Using Remote Sensing and GIS – **M. Tech.** Dissertation by **Mr. K.P. Prakash** - **awarded in April 2010** by Bharathidasan University, Tiruchirappalli.
42. Road Information System for Shillong City: A Geomatics Approach – **M. Tech.** Dissertation by **Mr. Suparno Ghosh** - **awarded in April 2010** by Bharathidasan University, Tiruchirappalli.
43. An Analysis of School Education in Tiruchirappalli Corporation - **M. Phil.** Dissertation by **Mr.C. Kannan** – **awarded in April 2010** by Bharathidasan University, Tiruchirappalli.

*iii) Ph. D (Now Guiding)*

1. Spatio – Temporal Aspects of Location of Schools and Enrolment of Students in Sivaganga District, Tamil Nadu, India – (Ph.D. Thesis Synopsis by **Mr. V. Kumar – Submitted in March, 2007**, Bharathidasan University, Tiruchirappalli).
2. Spatial Aspects of Water Resources Management in Pudukkottai District, Tamil Nadu – **Mrs. M. Sumathi (Registered for Ph.D in January 2003)**
3. Impact and Evaluation of Water Pollution in Micro Watershed in Thanjavur District, Tamil Nadu: GIS based Analysis – **Mr. D. Sivakumar (Registered for Ph.D in January 2006)**
4. Geographic Information System for Evaluation of Groundwater and Its Suitability for Irrigated Agriculture in Coimbatore District, Tamil Nadu – **Mr. D. Balachandar (Registered for Ph.D in January 2006)**
5. Industrial Air Pollution and its Impact on Human Health in and Around Mettur Industrial Complex, Salem District, Tamil Nadu – **Mr. R. Gunasekaran (Registered for Ph.D in April 2006)**
6. ANN-GIS based groundwater vulnerability assessment using regional scale model in Noyyal basin, Tamil Nadu, India – **Mr. R. Muruganandam (Registered for Ph.D in January 2007)**
7. Application of Remote Sensing and GIS for Water Resources Inventory: A Micro level Analysis – **Mr. Yasodaran Suresh (Registered for Ph.D in January 2007)**
8. Assessment of Groundwater Vulnerability to Pollution using ANN and GIS in Vellore District, Tamil Nadu, India – **Mr. K. Rutharvel Murthy (Registered for Ph.D. in April 2007)**
9. Water Resources Management in Tamil Nadu, India – **Mr. M. Mageswaran (Registered for Ph.D. in April 2008).**
10. Spatial and Temporal Evaluation of Groundwater Decline and its Implications on Land use Changes in Noyyal Basin, Tamil Nadu, India – **Ms. M. Vaheetha (Registered for Ph.D. in April 2010).**

*iv) M.Tech / M.Phil (Now Guiding)*

1. **M. Phil.** Dissertation by **Mr. Palanisamy - registered in December 2009** by Bharathidasan University, Tiruchirappalli.

## **6. Research Projects**

### ***a) Completed Projects***

1. *Funding Agency:* The Ministry of Environment and Forests, Government of India, New Delhi

*Title of the Project:* Salt Water Intrusion and Environmental Implications in the Coastal Areas of Tamil Nadu

*Duration and Budget:* Three Years and five months (April 1992 - September 1995); Rs. 3,94,610 (**Principal Investigator / Major Research Project / Completed in 1996**)

2. *Funding Agency:* University Grants Commission, Government of India, New Delhi

*Title of the Project:* Impact of Tannery Effluents on Land and Water Resources around Dindigul, Tamil Nadu

*Duration and Budget:* One Year (March 1995 - February 1996); Rs. 13,000 (**Principal Investigator / Minor Research Project / Completed in 1997**)

### ***b) Inter - Institutional Projects***

1. Ministry of Environment and Forests, Government of India, New Delhi sponsored Research Project on Mapping Plant Diversity in the Eastern Ghats of Tamil Nadu (with Dr. John Britto and Dr. I. Arockiasamy, St. Joseph's College, Tiruchirappalli). *Duration and Budget:* Three Years (1997 - 2000); Rs. 6,37,679 (**Co - Investigator / Major Research Project**)
2. Ministry of Environment & Forests, Government of India, New Delhi sponsored Research Project on Evaluation of the Natural Resources and Environment of the Kolli Hills, Tamil Nadu using Remote Sensing and GIS. *Duration and Budget:* Three years (1997 - 2000); Rs. 11,61,776 (**Co - Investigator / Major Research Project**).

### ***c) Ongoing Projects***

1. *Funding Agency:* University Grants Commission, Government of India, New Delhi

*Title of the Project:* Spatial and Temporal Evaluation of Groundwater Decline and its Implications on Land use Changes in Noyyal Basin, Tamil Nadu, India.

*Duration and Budget:* Three Year (January 2010 - December 2012); Rs. 10,95,000 (**Principal Investigator / Minor Research Project**).

## **7. Academic Participation in Groups**

### ***a) Attended and Papers Presented in Conference/Workshop etc.,***

1. Presented a research paper on “Cholera in Madras City - A Space-Time Analysis” in the *National Association of Geographers, India (NAGI), Second Annual Conference*, S.V. University, Tirupati, January 9-12, 1981
2. Presented a research paper on “Patterns of Cholera in Madras City 1958-1980” in the *International Symposium on Incidence of Infectious and Chronic Diseases: A Geographical Perspective*, University of Madras, Chennai, December 1-4, 1981
3. Presented a research paper on “Persistence of Tuberculosis in Madras City” in the *Third Indian Geography Congress*, J.N. University, New Delhi, December 26-29, 1981
4. Presented a research paper on “Accuracy and Boundary Considerations in Generalizing Hydrological and Climatological Data: Proposal of Polyzone Concept” in the *Indian National Cartographic Association Conference (INCA)*, University of Madras, Chennai, December 20-22, 1982
5. Presented a research paper on “Evaluation of Salinity Ingress in Coastal Aquifers: Space Specific and Inter-ion Relationships” in the *Sixth Annual Meet of the Institute of Indian Geographers*, S.V. University, Tirupati, January 8-10, 1985
6. Presented a research paper on “Water Resources Management: Political and Administrative Problems in Tank Water Development” in the *44th All India Political Science Conference*, Indian Institute of Technology, Chennai, December 26-28, 1985
7. Presented a research paper on “Methods of Groundwater Quality Evaluation” in the *Workshop on Planning, Management and Development of Water Resources*, University of Madras, Chennai, February 20-21, 1986

8. Presented a research paper on “Irrigation, Water Contamination and Formation of Wastelands” in the *National Seminar on Waste Land Development*, Madurai Kamaraj University, Madurai, February 12-15, 1988
9. Delivered a series of lectures to the participants of the UGC Sponsored Refresher Course for Geographers on ‘*Aerial and Satellite Remote Sensing in Geographical Research*’, Madurai Kamaraj University, Madurai, February 27 - March 3, 1989
10. Presented a research paper on “A Methodology to Study Salt Water Intrusion in the Coastal Aquifers” in the *Seminar on Land and Water - Prospects and Development*, Irrigation Management Training Institute, Tiruchirappalli, February 10-11, 1990
11. Resource Person in the Indian Space Research Organisation (ISRO) Sponsored *Workshop on Remote Sensing Application in Water Resources at School of Earth Sciences*, Bharathidasan University, Tiruchirappalli, March 19 - 23, 1990.
12. Presented a research paper on “Application of IRS-IA FCC Image in Analyzing the Correlates of Geomorphic Units, Lineaments and Groundwater of Vaippar Basin, Tamil Nadu” in the *National Seminar on Thrust Areas in the Application of Remote Sensing*, Bharathidasan University, Tiruchirappalli, August 8-10, 1990
13. Delivered lectures, conducted practical and field works to the participants of the *UGC sponsored Refresher Courses conducted by the School of Earth Sciences*, Bharathidasan University, Tiruchirappalli (1990 - 1993)
  - a) Remote Sensing Applications in Earth Sciences (1 to 28, June 1990)
  - b) Remote Sensing Applications in Geomorphological Analysis (9.8.1990 to 5.9.1990)
  - c) Remote Sensing Applications in Mineral and Water Resources Evaluation (4 to 31, October 1990)
  - d) Remote Sensing Applications in Coastal Geomorphology and Coastal Zone

Management (3 to 30, January 1991)

- e) Remote Sensing Applications in Environmental Studies (1 to 28, March 1991)
- f) Remote Sensing Applications in Mineral Exploration (13.12.1991 to 9.1.1992)
- g) Remote Sensing Applications in Water Resources (16.7.1991 to 12.8.1992)
- h) Remote Sensing Applications in Geology and Geomorphology (2 to 29, April 1993)

14. Delivered a series of UGC Guest lectures to the Faculty and P.G. Students of

Department of Geography on '*Remote Sensing Applications in Geography*'

Government College, Chittur, Kerala, February 4 - 8, 1991

15. Presented a research paper on "Application of IRS-1A Data Products in Analyzing Marine Transgression Tracts of Tamil Nadu" in the *National Symposium on Remote Sensing of Environment and Annual Convention of the Indian Society of Remote Sensing*, Anna University, Chennai, December 10-12, 1991

16. Presented a research paper on "Patterns of Groundwater Utilization in Tiruchirappalli District" in the *District Development Seminar*, Department of Economics, Bharathidasan University, Tiruchirappalli, 1991

17. Presented a research paper on "Coastal Geomorphology and Salt Water Intrusion in the Vaippar Estuary" in the *First Annual Convention of the Tamil Nadu Science Congress, (Earth and Atmospheric Sciences)*, Bharathidasan University, Tiruchirappalli, November 26 - 28, 1992)

18. Presented a research paper on "Water Resources Management in the Vaippar Basin, Tamil Nadu" in the *First Annual Convention of the Tamil Nadu Science Congress*, Bharathidasan University, Tiruchirappalli, (November 26 - 28, 1992)

19. Presented a research paper on "Sea Level Variations and Salt Water Intrusion Along the Coastal Tamil Nadu" in the *International*

*Workshop on Seachange '93, Leeuwenhorst, The Netherlands, April 19 - 23, 1993*

20. Presented a research paper on “Application of RSTP - Moran Model for Sizing a Reservoir Across the River Krishna to Supply Water to Madras City, India” in the *Review Meeting of Closing Papers 1993*, Water Resources Research Centre (VITUKI), Budapest, Hungary, July 13, 1993.
21. Presented a research paper on “Emerging Fields in Geography” in the *Annual Conference of the Indian Geographical Society*, J.G.H.S.School, Salem, September 5 - 26, 1993
22. Resource person in *ISRO - NNRMS Sponsored Course on Remote Sensing for Geography*, School of Earth Sciences, Bharathidasan University, Tiruchirappalli, (9.1.1995 to 15.2.1995)
23. Presented a research paper on “Identification of Hazardous Zones Using Remote Sensing Methods” in the *First National Conference on Health and Environment*, Department of Geography, Government College, Kumbakonam, February 4 - 6, 1995
24. Presented a research paper on “Geomorphology of Tamil Nadu Coast - A Remote Sensing Based Study” in the *XVI<sup>th</sup> Meet of the Institute of Indian Geographers*, Department of Geography, Punjabe University, Chandigarh, February 12 - 14, 1995
25. Presented a research paper on “Salt Water Intrusion and Environmental Degradation Along Tamil Nadu Coast, India, in the *Second National Conference of the Deccan Geographical Society (Pune)*, School of Earth Sciences, Bharathidasan University, Tiruchirappalli, September 20 - 22, 1995
26. Presented a research paper on “Fluvio-Marine Sediment Deposit Patterns Along Tamil Nadu Coast, India - A Remote Sensing Based Study”, in the *Second National Conference of the Deccan Geographical Society (Pune)*, School of Earth Sciences, Bharathidasan University, Tiruchirappalli, September 20 - 22, 1995
27. Presented a research paper on “Study of Water Pollution by Tannery Effluents around Dindigul, Tamil Nadu”, in the *Second National Conference of the Deccan Geographical Society (Pune)*, School of Earth Sciences, Bharathidasan University, Tiruchirappalli, September 20 - 22, 1995

28. Presented a research paper on “Integrated Approach to the Drinking Water Problem of Madras City, India, in the *UNESCO - IHP International Symposium on Integrated Water Management in Urban Areas*, University of Lund, Lund, Sweden, September 26 - 30, 1995
29. Presented a research paper on “Fluvio - Marine Sediment Deposit Patterns and Hydrogeomorphology of Tamil Nadu Coast, India”, in the *UNESCO - IHP International Workshop HYDROCOAST 95*, Asian Institute of Technology, Bangkok, Thailand, November 13 - 17, 1995
30. Presented a research paper on “Salt Water Intrusion along Tamil Nadu Coast” in the *National Conference on Resources Appraisal and Management for Sustainable Development*, Department of Geography, Government College for Men (Autonomous), Kumbakonam, February 1 - 2, 1997
31. Presented a research paper on “Development of Animal Behaviour Based Early Warning System for Earthquake Prediction” in the *National Symposium on Natural Resources Management System*, Department of Botany, St. Joseph’s College, Tiruchirappalli, February 28 - 28, 1997
32. Participated and presented a research paper on “Evolution and Morphology of Southern Coromandal Coast - A Study Based on IRS 1A/B Data” in the *International Conference BORDOMER’97* at Bordeaux, France, October 27 - 29, 1997
33. Presented a research paper on “Impact of Chemical Effluents of Tannery Industries in and Around Dindigul, Tamil Nadu” in the *National Conference on Disease Ecology, Health and Health Care Longevity*, Department of Geography, Government College for Men (Autonomous), Kumbakonam, March 14 - 15, 1998
34. Presented a research paper on “Impact of Monsoon Currents on the Movement and Transportation of Sediments along the Coast of South India and Sri Lanka” in the *Sixth Tamil Nadu Science Congress, Earth and Atmospheric Sciences*, Avinashlingam Deemed University, Coimbatore, November 8, 1998
35. Presented a research paper on “Patterns and Processes of Sediment Transportation along South Indian Coast”, in the *UNESCO - IHP*

*International Workshop*, Asian Institute of Technology, Bangkok, Thailand, November 16 - 20, 1998

36. Presented a research paper on “Analysis of Landuse / Land Cover Dynamics of Ooty, the Nilgiris District, Tamil Nadu Using Remote Sensing and GIS” in the *National Symposium on Remote Sensing and GIS Applications in Spatial Science*, Department of Geography, Government College for Men (Autonomous), Kumbakonam, February 19 - 21, 1999
37. Presented a research paper on “Tamil Nadu Coastal Evolution” in the *Brain Storming Session of Department of Science and Technology, Government of India on Coastal Resources Management and Conservation*, Department of Earth Sciences, Tamil University, Thanjavur, January 21 - 22, 2000
38. Presented an Invited research paper on “Saltwater Intrusion and Status of Freshwater Aquifer” in the Technical Session V and Chaired Session II on Coastal Ecosystem and Economic Activities in the *National Seminar on Managing the Coastal Environment*, The Indian Geographical Society (Chennai) and Department of Earth Sciences, Tamil University, Thanjavur, March 24 - 25, 2001
39. Delivered a guest lecture on “Myths and Realities of Earthquakes” to *Orientation Course*, Academic Staff College, Bharathidasan University, Tiruchirappalli, October 15, 2001
40. Attended and presented a “Revised Environmental Impact Assessment Guidelines” in the *International Training Workshop on Environmental Impact Assessment with Special Regard to Water Resources Management* (German IHP / OHP Programme), AIT, Bangkok Thailand, November 12 – 16, 2001
41. Attended and presented a paper on “Earthquakes of South India and Animal Based on line Forecasting”, Proceeding of the *Regional Workshop on Earthquake Prone Zones of India – Popular Lecturers on Facts and Myths of Earthquakes - Indian Contest*, Department of Geography, Bharathidasan University, Tiruchirappalli, December 19, 2001
42. Attended and delivered a lecture on “Remote Sensing in Physical Geography” the *UGC Sponsored Regional Workshop on Remote Sensing and GIS in Geography*, Department of Geography, Meenakshi College (Autonomous), Madurai, February 14 – 15, 2002

43. Presented a research paper on “Impact of Sea Level Changes and Salt Water Intrusion Along the Coastal Tamil Nadu, India”. In the *National Seminar on Coastal Environment*, Department of Geology, National College, Tiruchirappalli, February 15 – 16, 2002
44. Attended the three days *Workshop on “Calamity Relief Fund Policy, Financing and Working Review”*, Ministry of Agriculture, Government of India, NCDM, IIPA, New Delhi, March 6 – 8, 2002
45. Attended and presented a paper on “Evaluation of Groundwater Quality for Agriculture in Coimbatore District, Tamil Nadu” in the *International Conferences on Globalization and Sustainable Development: Prospective of Digital Revolution and Environmental Management, Platinum Jubilee of the Indian Geographical Society, Chennai*, Department of Earth Sciences, Tamil University, Thanjavur, August 23 – 25, 2002
46. Attended and presented a research paper on “Spatio-Temporal Patterns of Earthquake Occurrences in South India” in the *International Conferences on Globalization and Sustainable Development: Prospective of Digital Revolution and Environmental Management, Platinum Jubilee of the Indian Geographical Society, Chennai*, Department of Earth Sciences, Tamil University, Thanjavur, August 23 – 25, 2002
47. Attended and presented a research paper on “Remote Sensing in Mapping Land Uses, Soil Types and Cropping Patterns in the Noyil River Basin, Tamil Nadu, India”, in the *International Conferences on Globalization and Sustainable Development: Prospective of Digital Revolution and Environmental Management, Platinum Jubilee of the Indian Geographical Society, Chennai*, Department of Earth Sciences, Tamil University, Thanjavur, August 23 – 25, 2002
48. Attended and presented a research paper on ”Diagnosing Saltwater Intrusion in the Coastal Estuary of Tamil Nadu, India” in the *International Symposium on Low – lying Coastal Areas: Hydrology and Integrated Coastal Zone Management and also Chaired the Session II on Tools for Coastal Zone Management*, Bremerhaven, Germany, September 9 – 12, 2002
49. Attended Hydrological Project Data Users’ Group Workshop, Hydrology Division, Water Resources Organization, Government Of Tamil Nadu, Tiruchirappalli, October 22, 2003

50. Delivered a guest lecture on “Earthquake Distribution and Forecasting Technologies” in Refresher Course in Educational Technology, Academic Staff College, Bharathidasan University, Tiruchirappalli, March 1, 2003
51. Delivered a guest lecture on “ Teaching Remote Sensing and Earthquake Forecasting Methods,” in Orientation Course, Academic Staff College, Bharathidasan University, Tiruchirappalli, March 14, 2003
52. Delivered an invited talk on “Application of Remote Sensing” in the UGC sponsored Workshop on Remote Sensing and GIS, Department of Geography, Government Arts College (Autonomous), Coimbatore, March 24, 2003.
53. Attended Hydrological Project Data Users’ Group Workshop, Hydrology Division, Water Resources Organisation, Government of Tamil Nadu, Tiruchirappalli, October 22, 2003
54. Delivered a guest lecture on “Remote Sensing for Biological Sciences” in *Leitmotiv*, Department of Plant Sciences, Bharathidasan University, Tiruchirappalli, October 1, 2003
55. Delivered a guest lecture on “Annotations and Applications of Remote Sensing Data Products,” in Geography Refresher Course, Academic Staff College, Bharathidasan University, Tiruchirappalli, December 15, 2003
56. Delivered a guest lectures on “Remote Sensing in the for Identification of Drainage related Problems” at NATP Training on Land Drainage Planning at Agricultural Engineering College and Research Institute, (TNAU), Kumulur-Tiruchirappalli, March 1, 2004
57. Delivered a guest lecture on “Application of Remote Sensing Techniques in Geography” to Geography Association, Department of Geography, E.V.R College, Tiruchirappalli, January 21, 2004
58. Delivered guest lectures on “Environmental Studies & Natural Resources Evaluation” for Science Faculty Students of Shrimati Indira Gandhi College, Tiruchirappalli, 10-11<sup>th</sup> March 2004
59. Delivered an invited lecture on *Space Education* to **Refresher Course Participants of Curriculum Development and Evaluation**

**Techniques**, Bharathidasan University, Tiruchirappalli, March 24, 2004

60. Delivered an invited lecture of Remote Sensing Application to Georesources Analysis in the **Vacation Training Programme on Bioresources for School Children**, NFMC, Bharathidasan University, Tiruchirappalli, May 03, 2004
61. Attended Tamil Nadu State Council for Higher Education – One day seminar for Principals of Colleges being considered for Grant of Autonomy, Academic Staff College, Madras University, Chennai, July 03, 2004.
62. Delivered an invited lecture on **Remote Sensing, GIS and Geoinformatics** to Computer Science Department Association, Bishop Heber College, Tiruchirappalli, July 28, 2004
63. Participated and presented a paper on Fundamentals and Application of Remote Sensing in **One Day Seminar on GIS and Resources Management** at Department of Statistics, St Josphe’s College, Tiruchirappalli, September 24, 2004.
64. Participated and presented a Research paper on “Landslide Problems in Transport Network” in **Short Term Training Course on Landslides**, organized by Department of Disaster Management, SASTRA Deemed University, Thanjavur, September 30, 2004.
65. Delivered an invited lecture on “Catastrophic Geological hazards and Environmental Management through Remote Sensing and GIS” to Environmental Science Department Association, Bishop Heber College, Tiruchirappalli, October 09, 2004
66. Delivered a guest lecture on “ Introduction of Choice Based Credit System (CBCS) in Bharathidasan University”, Academic Staff College, Bharathidasan University, Tiruchirappalli, November 13, 2004
67. Delivered a guest lecture on “Remote Sensing Applications in Earth Sciences”, Holycross College, Bharathidasan University, Tiruchirappalli, December 06, 2004.
68. Participated in International Conference on Sustainable water Resources Management in the changing Environment of the Monsoon Region and presented a paper on “Spatial Aspects of water Resources

Management in Vaippar Basin, Tamil Nadu, India”, organized by United Nations University and National Water Resources Secretariat, Sri Lanka, November 17-19, 2004.

69. Delivered an invited lecture on “Basic Principles and Applications of Remote Sensing in Geography”, Department of Geography, Kannur University, Kerala, December 02, 2004.
70. Delivered a guest lecture on Remote Sensing Applications in Earth Sciences, Association in Department of Physics, Holy Cross College, Tiruchirappalli, December 06, 2004.
71. Chaired a session and presented a research paper on “Environmental study of Tamil Nadu Coast using Indian Remote Sensing Data” in **National Conference on Ecological Movements and Sustainable Development**, organized by Department of History, St. Joseph’s College, Autonomous, December 21, 2004.
72. Delivered a guest lecture on “Satellite Sensor characteristics and Remote Sensing Applications in Geography”, Academic Staff College, Mysore University, Mysore, January 13, 2005.
73. Delivered a guest lecture on “Satellite Remote Sensing and its Applications”, **Seminar on Remote Sensing** organized by Department of Geography, Government Arts College, Coimbatore, January 28, 2005.
74. Delivered a lecture on “Basic concepts of Satellite Remote Sensing” in **National Workshop on Remote Sensing for Environmental Studies**, organized by Department of Geography, Bharathidasan University, Tiruchirappalli, February 21, 2005.
75. Delivered a lecture on “Thrust Areas of Research and Applications of Remote Sensing” in **National Workshop on Remote Sensing for Environmental Studies**, organized by Department of Geography, Bharathidasan University, Tiruchirappalli, February 23, 2005.
76. Delivered a guest lecture on **Principles of Remote Sensing and its Applications in Geography**, Academic Staff College, Mysore University, Mysore, March 17, 2005.
77. Delivered an invited lecture on “Earthquake and Tsunami occurs in South Indian”, Organized by District Employment Office, Tiruchirappalli, March 20, 2005.

78. Inaugurated and delivered a guest lecture on “Principles and Applications of Remote Sensing” in State Level Workshop on Recent Trends in Geographical Remote Sensing and GIS at College Level, Organized by Department of Geography, Periyar EVR College, Tiruchirappalli, March 22, 2005.
79. Participated and chaired the technical session on “Digital Image Processing” in the UGC Sponsored National Conference on Distributed Networks at Gobi Arts & Science College, Gobi Chettipalayam, March 26, 2005.
80. Delivered a Guest Lecture on **Introduction of CBCS in Bharathidasan University Jurisdiction**, Khadir Mohideen College, Adirampattinam. July 10, 2005.
81. Delivered a Valedictory Address in State Level Seminar on **Emerging Trends in Risk Assessment and Remedial Measures of Environmental Pollution**, Department of Chemistry & Biochemistry, TBML College, Poraiyar, August 12, 2005.
82. Delivered a Guest Lecture on *Remote Sensing for Environmental Management*, **Refresher Course in Environmental Management**, Academic Staff College, Mysore University, Mysore, October 17, 2005.
83. Delivered a Guest Lecture on *Principles of Remote Sensing and Its Applications*, AFPRO Workshop on **Application of Remote Sensing and GIS in Watershed Management**, Department of Geography, Bharathidasan University, Tiruchirappalli, October 24, 2005.
84. Delivered a Guest Lecture on *Remote Sensing for Environmental Studies* in the **Refresher Course in Environmental Education**, Academic Staff College, Bharathidasan University, Tiruchirappalli, November 22, 2005.
85. Delivered a Guest Lecture on *Principles of Remote Sensing and Its Applications in Biological Sciences* in the **Refresher Course in Plant Sciences**, Department of Plant Science, Bharathidasan University, Tiruchirappalli, November 29, 2005.
86. Delivered a Guest Lecture on *Principles of Remote Sensing and Its Applications* in the UGC Sponsored **Orientation Course**, Academic

Staff College, Bharathidasan University, Tiruchirappalli, December 02, 2005.

87. Delivered a Guest Lecture on *Cluster Colleges Concept in Bharathidasan University* in the Workshop on **Cluster College Concept in Higher Education**, Academic Staff College, University of Madras, Chennai, December 15, 2006.
88. Delivered a Guest Lecture on *Principles and Applications of Remote Sensing*, in the **Refresher Course in Environmental Sciences**, Academic Staff College, Bharathiar University, Coimbatore, February 2, 2006.
89. Chairperson for Session II and Delivered a Guest Lecture on *Curriculum Design and Evaluation Techniques in the Workshop on Liberalisation, Privatization and Globalisation of Higher Education with Special reference to Rural Areas*, Swami Dayananda College of Arts & Science, Manjakudi, February 8, 2006.
90. Delivered Guest Lectures on *CBCS in Curriculum Development* in TANCSHE and Academic Staff College, Bharathidasan University, Tiruchirappalli organized Workshops on **Curriculum Development and Evaluation Techniques** in Jamal Mohammed College, Tiruchirappalli; Bishop Heber College, Tiruchirappalli; Government Arts College for Women, Pudukkottai and Rajah Serfoji Government College, Thanjavur. ( February – March, 2006).
91. Delivered **Sathu T. Ramasamy Naicker Endowment Lecture for 2006** Special Lectures on *Remote Sensing Applications for Environmental Studies and Geography and Remote Sensing* in the Department of Geography, Madurai Kamaraj University, Madurai, March 24, 2006.
92. Delivered a Guest Lecture on *Remote Sensing as a Tool in Bio-Resources Conservation* in **Vacation Training Programme on BioResources for School Children** at Rapinet Herbarium, St.Joseph's College Campus, Tiruchirappalli, May 6 2006.
93. Delivered a Guest Lecture on *Principles of Remote Sensing and GIS and Their Applications in Agricultural Engineering* at Agricultural Engineering College and Research Institute, **Tamil Nadu Agricultural University Special Lecture Series**, Kumulur, Tiruchirappalli, August 04, 2006.

94. Delivered a Guest Lecture on *Potentials and Possibilities of Renewable Energy Resources in India*, **Rajiv Gandhi Memorial Lecture on BioEnergy**, Kurinji College of Arts and Science, Tiruchirappalli, August 17, 2006.
95. Delivered an Invited Lecture on *Geoinformatics*, in the **National Symposium New Trends in Information Technology**, Sri Ramakrishna College of Arts and Science for Women, Coimbatore, August 25, 2006.
96. Delivered a Guest Lecture on *Remote Sensing and GIS for Earth Science Studies* in the UGC Sponsored **Special Lecture Programme**, Department of Earth Sciences, Tamil University, Thanjavur, November 16, 2006.
97. Delivered a Guest Lecture on *Geoinformatics and Environmental Education* in the UGC Sponsored **Orientation Course**, Academic Staff College, Bharathidasan University, Tiruchirappalli, November 20, 2006.
98. Delivered an Invited Lecture on *Geoinformatics and Environmental Issues*, in the **National Seminar on Emerging Trends in Geography-Industry and Environmental Issues**, J.S.S College, Nanjangud, February 09, 2007.
99. Delivered Special Lectures on *Remote Sensing: Principles and Applications in Geography*, Geography Association, M.A.M. College for Women, Dindigul, February 15, 2007.
100. Delivered Special Lectures on *Remote Sensing and Its Applications in Geography*, Geography Association, Government College for Women, Kumbakonam, February 20, 2007.
101. Delivered a Guest Lecture on **Remote Sensing for Bioresources**, Department of Botany, Thiagarajar College, Madurai, February 23, 2007.
101. Delivered a lecture on Research funding by State and Central Government Organizations, Academic Staff College, Bharathidasan University, Tiruchirappalli November 6, 2007.
102. Delivered a lecture on Writing research project proposals, Academic Staff College, Bharathidasan University, Tiruchirappalli November 6, 2007.

103. Delivered inaugural address in the national conference on “Sustainable Development: Challenges and Opportunities” Geography Department, Mahavir Mahanidyalaya, Kolhapur, Maharashtra, January 4 – 5, 2008.
104. Delivered an invited lecture on ‘Remote Sensing in Bioresources Conservation in DBT sponsored short Term Training course on conservation Biological Resources using Biotechnology Tools at Rapinat Herbarium and center for molecular systematics, St. Joseph’s college Campus, Tiruchirappalli 15.2.2008.
105. Delivered an invited lecture on ‘Senior characteristics of Resources satellites’ in the National Workshop on Spatial Planning and Geoinformatics Geography Department, Osmania University, Hyderabad 14.03.08 and 15.03.08
106. Delivered a special lecture on ‘Principles and Applications of Satellite Remote Sensing’, Bharathidasan University, Tiruchirappalli, March 26, 2008.
107. Delivered an invited Lecture on ‘Traditional Surveying, Remote Sensing and Geographic Information System’, Tamil Nadu Agricultural Engineering College (TNAU), Kumalur, Lalgudi, September 18-09-2008.
108. Delivered a lecture on ‘Application of GIS in Salt Water Intrusion Study: A Case Study in Vaippar Estuary, Coromandel Coast, India’, Annamalai University, Chidambaram, September 27, 2008
109. Delivered a lecture on ‘Inter-disciplinary nature of Environmental Studies’ and “Remote Sensing and GIS for Natural Resources Management”, Academic Staff College, Madurai Kamaraj University, Madurai, October 19, 2008.
110. Delivered an invited special lecture on ‘Remote Sensing and GIS in Geosciences’, Department of Environmental Remote Sensing, Madurai Kamaraj University, Madurai, October 19, 2008.

111. Chaired the 8<sup>th</sup> session of the seminar on 'Spatial Information Population', conducted by Centre for Population Studies, University of Madras, Chennai, October 22, 2008.
112. Delivered an invited lecture on 'Spatial Aspects of Population Growth in Tamil Nadu', in the National Seminar on Population Growth and Human Development, Department of Econometrics, University of Madras, Chennai Tiruchirappalli, November 21-22, 2008.
113. Delivered an invited lecture on 'Application Remote Sensing Biological Resources Management', in the Training Programme, St. Josephs College, Tiruchirappalli, November 25, 2008.
114. Delivered an invited lecture on 'Geoinformatics for Disaster Management', in the State Level Seminar at H.H. The Raja's College, Pudukkottai, January 6, 2009.
115. Delivered an invited lecture on 'Geoinformatics for Disaster Management Studies', in the Workshop at JSS College, Chamrajnagar, Karnataka, February 6, 2009.
116. Delivered an invited lecture on 'Geoinformatics for Disaster Management Studies', in the Department of Geotechnology, M.S. University, Tirunelveli, July 17, 2009.
117. Delivered an invited lecture on 'Geoinformatics for Geosciences', in the Refresher Course at University, Chennai, July 31, 2009.
118. Delivered a Keynote Address on "Geoinformatics – A Modern Approach to Geographical Study", in the 26<sup>th</sup> National Geography Conference on Recent Trends in Geography and Environmental Study at Shri Shivaji Arts & Commerce College, Amaravathi Maharashtra between 12<sup>th</sup> and 14<sup>th</sup> November, 2009.
119. Delivered an Invited Lecture on "Geoinformatics for Urban Sustainability in Cauvery Basin, Tamil Nadu", in the National Seminar on Urban Sustainability and Issues in the Department of Geography, University of Madras on 05 & 06 February, 2010.
120. Delivered a special lecture on "Natural Resources Analysis using Remote Sensing and GIS" in the DBT, GOI sponsored Short-Term Training Course (STTC) on Conservation of Bioresources at

Rabinat Herbarium and Centre for Molecular Systematics, St. Josephs College, Tiruchirappalli on 23 February, 2010.

121. Delivered a special lecture on “Principles and Applications of Remote Sensing” in the National Workshop on Frontier Areas of Research and Teaching in Geosciences organised by the Department of Geography, Bharathidasan University, Tiruchirappalli, 26 & 28 February, 2010.
122. Delivered an inaugural address on “Geospatial Information Technology and its Application in Natural Resources”, in the National Seminar on Geo Spatial Information Technology and its Application in Natural Resources at Periyar E.V.R. College (Autonomous), Tiruchirappalli, March 17, 2010.
123. Presented a paper on “An Assessment of Agro-climatic Conditions in Pambar Basin, Semi-arid region of Tamil Nadu, India – A GIS Approach”, in the National Seminar on Application of Geomatics in Climatology organised by the Department of Geography, Bharathidasan University, Tiruchirappalli, March 25, 2010.
124. Delivered a special lecture on “GIS in Environmental Protection and Management”, in AICTE sponsored Staff Development Programme on Environmental Protection through Recycling and Treatment at Kalaignar Karunanidhi Institute of Technology, Coimbatore, June 4, 2010.

#### **b) Conferences Conducted**

1. Secretary of the **National Seminar** on *Thrust Areas in the Application of Remote Sensing*, School of Earth Sciences, Bharathidasan University, Tiruchirappalli, 1990
2. Co-ordinator (with Dr. SM. Ramasamy) of the Third *UGC Refresher Course on Remote Sensing Applications in Mineral and Water Resources Evaluation*, School of Earth Sciences, Bharathidasan University, Tiruchirappalli (1990 - **National Level Course**)

3. Organising Secretary of the Second **National Conference** on *Natural Resources, Environment and Sustainable Development*, School of Earth Sciences, Bharathidasan University, Tiruchirappalli, September 20 - 22, 1995
4. Co-ordinator of the **One Week Workshop** on Environmental Studies, Council for College and Curriculum Development, Bharathidasan University, Tiruchirappalli, 5- 10th January 2004
5. Organising Secretary of the **Two Week National Workshop** on Resources Mapping Using Remote Sensing, GIS and GPS, Department of Geography, School of Earth Sciences, Bharathidasan University, Tiruchirappalli, February 9 - 20, 2004
6. Co-ordinator (with Dr. R. Karpaga Kumaravel) *UGC Refresher Course on Curriculum Development and Evaluation Techniques*, Bharathidasan University, Tiruchirappalli, March 6-25, 2004
7. Co-ordinator for Orientation Course for NET Examination Aspirants (All Science Branches), Bharathidasan University, Tiruchirappalli (October – November, 2005).
8. Co-ordinator of the **One-day Workshops on Choice Based Credit System**, Council for College and Curriculum Development, Bharathidasan University, Tiruchirappalli and Government College (Autonomous), Kumbakonam 22 – 29 January 2005
9. Organising Secretary of the **One-Week National Workshop** on Remote Sensing for Environmental Studies, Department of Geography, School of Geosciences, Bharathidasan University, Tiruchirappalli, February 21 - 25, 2005
10. Organising Secretary of the **One-Week National Workshop** on GIS for Natural Resources and Disaster Management, Department of Geography, School of Geosciences, Bharathidasan University, Tiruchirappalli, March 03 - 07, 2008.
11. Coordinator of the **Three-day Workshop** on Exploring Statistical Analysis for Research Reporting, Department of Geography, School of Geosciences, Bharathidasan University, Tiruchirappalli, March 02 - 04, 2008.

12. Coordinator of the **Three-day National Seminar / Workshop** on Frontier Areas of Research and Teaching in Geosciences, Department of Geography, School of Geosciences, Bharathidasan University, Tiruchirappalli, February 26 - 28, 2009.

## **8. Teaching and Curriculum Development**

a) Teaching Experiences: 23 Years to M.Sc., M.Phil., & M.Tech., Remote Sensing & GIS

1. Tropical Geomorphology (1982 - 83), Aerial Photo Interpretation (1987-88), Thematic Cartography (1987 - 88), for **M.Sc. Applied Geography University of Madras, Chennai**
2. Applied Remote Sensing, Thematic Cartography, Geographical Information System and Water Resources for **M.Tech. Remote Sensing (1989 -1997), Bharathidasan University, Tiruchirappalli**
3. Applied Geomorphology, Geographical Remote Sensing, Regional Planning and Thematic Cartography for **M.Sc. Applied Geography (1996 - 2001), Department of Geography, Bharathidasan University, Tiruchirappalli**
4. Quantitative Methods in Geography to **M.Phil. Geography (2001 - 2003), Department of Geography, Bharathidasan University, Tiruchirappalli**
5. Satellite Remote Sensing, Remote Sensing Applications and GIS for Disaster Management for **M.Tech. GIS Applications (2003 onwards), Department of Geography, School of Geosciences, Bharathidasan University, Tiruchirappalli**

### ***b) Curriculum Development***

- a). Director, Council for College and Curriculum Development, Bharathidasan University, Tiruchirappalli from November 2003 to May 2006 (Looks after the Correspondence of the Colleges to University Grants Commission, Framing and modification of syllabi of various subjects of Arts, Science and Languages and M.Phil. and Ph.D. admissions and other related matters)
- b). Designed the Curriculum for M.Tech. Remote Sensing (1990) and M.Sc. Applied Geography Courses and In-charge for M.Sc., Course

(1996 - 98), School of Earth Sciences, Bharathidasan University, Tiruchirappalli.

## 9. Other Academic, Extension and Outreach Activities

1. Conducted Classes on *Remote Sensing for Water Resources and Hydrometeorology* for Agricultural Engineers, Department of Agricultural Engineering, Government of Tamil Nadu, Tiruchirappalli (1991-1992)
2. Conducted classes to M.E. Water Resources Engineering on *Remote Sensing in Water Resources Engineering*, Regional Engineering College, Tiruchirappalli. (1992-1993)
3. Assist the *Departments of Plant Sciences and Adult & Continuing Education* of Bharathidasan University in teaching *remote sensing and cartography to M.A., and M.Sc., Programmes.*
4. Delivered a series of lectures through Visiting Professors' Programme Guest Lecture on *Recent Trends in Remote Sensing and Remote Sensing in Water Resources Management* at Department of Geography, Shivaji University, Kolhapur, Maharashtra, 8, 29 September 1999).
5. Participated in *Science Festival* organised by Junior Red Cross Training Camp and Delivered *Lecture-cum Face-to-Face Programme on Earthquakes*, St. Antony's High School, Koranad, Mayiladuthurai, February 11, 2001.
6. *Invited lecture – cum – Discussion on 'Seismic Safety to Buildings'* at OLSTOM Power India Ltd, Neyveli, February 24, 2001.
7. Assist in *teaching geography to entrants of Civil Services Examination*, Employment Offices at Pudukkottai and Tiruchirappalli.
8. Assist *NGOs* to demarcate watersheds for *water resources management* programmes
9. Participate in *Geography Associations* in various colleges of Tamil Nadu and disseminate *the latest developments of geography*
10. *Deputy Warden (Independent Charge)* for Bharathidasan University Hostel for Men, Khajamalai Campus, Tiruchirappalli, 1995 - 1998.

11. *Deputy Warden* (Independent Charge) for Bharathidasan University Cauvery Hostel, Tiruchirappalli, 2003 – 2008.
12. Participated as *UGC Expert (Geography)* in the UGC Minor Research Projects / Seminar / Conference / Symposium Evaluation, UGC (SERO) Hyderabad, November 14, 2005.
13. Attended the *SET Workshop for Geography* Kuvempu University, Shimoga, and March 13 – 17, 2006.
14. *Co-ordinator of University Hostels (2004 -2006)*, Bharathidasan University, Tiruchirappalli.
15. Member Secretary CBCS Committee, Wastepaper Weighing Committee etc., Bharathidasan University, Tiruchirappalli.
16. Nodal Officer in the Permanent Cell in Bharathidasan University to Combat Violence Including Sexual Harassment Against Women in Work Places, Bharathidasan University, Tiruchirappalli
17. Member of the Government of Tamil Nadu Commission for extension of Autonomous status to Colleges of Bharathidasan University, Tiruchirappalli (February 2005)
18. Member of the Committee to Grant Extension to Six Autonomous Colleges in Bharathidasan University Jurisdiction, February 12 and 26, 2005.
19. Writing Geographical, Remote Sensing, GIS and disaster related issues in *Daily Thanthi* (Sunday), Tamil Daily, Tiruchirappalli
20. **Doordharshan Pothigai, Chennai Live Programme** (Do You Know?) on 16.08.2004 between 12.30 and 1.30 p.m. on Curriculum in Higher Education, Doordharshan Kendra, Chennai.
21. **All India Radio ( State Wide ) Programme on Higher Education in Bharathidasan University and It's Affiliated Colleges** – May-June 2004, 2005, 2006.
- 22.

## **10. Editorial Experience**

1. Secretary and Editor of the Research Unit Publications of 'Geographical Research Bulletin' (No. 1 - 10), Department of Geography, University of Madras, Chennai (1983 - 1986)

2. Member of the Lesson Writing and Editing Group of Geography (Graduate and Diploma Courses), Institute of Correspondence Education, University of Madras, Chennai (1986 - 1988)
3. Editor of Tamil Nadu Science Congress Volume (Earth and Atmospheric Sciences), Bharathidasan University, Tiruchirappalli, (1992)
4. Member of the Editorial Board of the 'Deccan Geographer,' Pune (1994 - 1997)
5. Reviewer / Evaluation / Translation Committee Member of XIth & XIIth Standard Geography Text Books of the Tamil Nadu Text Book Society, Madras (1994 - 1996)

## **11. Distinction/Honours**

### **Graduate Level**

Madras University First Rank in Geography, 1977

The Queen Mary's College Golden Jubilee Jawaharlal Nehru

Memorial Prize for Geography (Arts), 1977

Jawaharlal Nehru Memorial Fund Award, 1977

### **Post-Graduate Level**

Madras University First Rank in Geography (6.00/6.00 OGPA), 1979

### **Remote Sensing Course**

Obtained Distinction in the three months certificate course on Photogrammetry and Remote Sensing, Indian Institute of Remote Sensing, Dehra Dun, 1987

### **Award of Fellowships / Associateship**

CSIR Research Fellowship, 1982-1987

CSIR Research Associateship, 1988

### **International Post-Graduate Course**

Obtained Distinction in the UNESCO Sponsored six months International Post-Graduate Course on Hydrology, Water Resources Research Centre, Budapest, 1993

### **Indian Geographical Society Award**

Awarded Prof. B.M.Thirunaranan Award by the Indian Geographical Society, University of Madras, Chennai for the consistent work and appreciable contribution in Physical Geography with field work on 25.1.1997.

#### **Visiting Professors' Programme Guest Lecture**

Delivered guest lectures on (a) Recent Trends in Remote Sensing and (b) Remote Sensing in Water Resources Management at Department of Geography, Shivaji University, Kolhapur, Maharashtra, 27 – 28 September, 1999.

#### **Indo-Hungarian Educational Exchange Programme**

Visited Environmental Protection and Water Management Research Institute (VITUKI), Budapest under **Long – Term Indo-Hungarian Educational Exchange Programme – UGC**, New Delhi during June-July, 2006.

#### **UGC Special Assistance Programme – DRS-I**

Coordinator of UGC-SAP Departmental Research Support – I Phase Programme, Department of Geography, Bharathidasan University, Tiruchirappalli, 2009-2014.

### **12). Membership in Academic / Professional Bodies**

Life Member of the Indian Geographical Society, Chennai

Life Member of the Indian Society of Remote Sensing, Dehra Dun

Life Member of the Deccan Geographical Society, Pune

Life member of the Institute of Indian Geographers, Pune

Life Member of the Association of Hydrologists of India, Waltair

Life Member of the Association of Geography Teachers of India, Chennai

Life Member of the National Association of Geographers, India, New Delhi

Life Member of the Indian Society of Social Sciences & Medicine, Kumbakonam

Joint Secretary of the Indian Society of Social Sciences & Medicine, Kumbakonam (1995-1996)

Executive Council Member of the Indian Geographical Society, Chennai (1993-1994)

Executive Council Member of the Deccan Geographical Society, Pune (1994-1997)

Member of the Board of Studies in Remote Sensing (M.Tech.), Bharathidasan University, Tiruchirappalli (1994-1997)

Member of the Board of Studies in Applied Geography (M.Sc.), Government Arts College (Autonomous), Kumbakonam (1994-1997 and 2004-2006)

Member of the Board of Studies in Geography, University of Madras, Chennai (1997 - 2000)

Member of the Commission of Geographic Education (Institute of Indian Geographers), University of Poona, Pune (1997)

Elected as a Co-opted Member of the Executive Council of the Deccan Geographical Society, Pune (from 1996)

Member of the Board of Studies in Geography in Bharathiyar University, Coimbatore (1998 – 2001 and 2004 - 2006)

Member of Earth Science Encyclopedia, Periyar University, Salem (2001)

Member of the Board of Studies in Geography in Calicut University, Calicut (1999 - 2002)

Member of the Board of Studies in Geography (as Bharathiyar University Nominee) to Government Arts College, Coimbatore (1999 - 2002)

Member of the Board of Examinations to Geography of Kerala University, Tiruvanthapuram (2001 - 2002)

Elected as the Vice-President of the Deccan Geographical Society, Pune (from 2006)

Member of the Board of Examinations to Geography of Mysore University, Mysore (2001 – 2003 and 2004 - 2007)

University Nominee to Academic Council, St. Joseph's College (Autonomous), Tiruchirappalli (2004-2007)

Member of the Board of Examinations to Geography of Calicut University, Calicut (2007 – 2009)

Member of the Board of Studies in Applied Geography (M.Sc.), Government Arts College for Women (Autonomous), Kumbakonam (2008-2010)

Member of the Academic Council, Government College for Women (Autonomous), Pudukottai (2008-2010)

Member of the Board of Studies in Geography of Kannur University,  
Kannur, Kerala (2008 – 2010)

Life Member and Editorial Board Member of **The Goa Geographer**,  
Research Journal of Geographers' Association, Goa (2008)

*(K.Kumaraswamy)*