



## **BRIEF RESUME**

NAME : **RAMASURBRAMIAN, SHANKAR**

NATIONALITY : Indian

Date of Birth : 11-7-1948 (Eleventh July Nineteen Forty Eight)

Present Office Address : Professor  
Department of Architecture and Planning  
Indian Institute of Technology Roorkee  
ROORKEE-247667 (Uttaranchal) India

Mailing Address : Same as above.

Email : shardfap@iitr.ernet.in  
shardfap@yahoo.com

Fax Number : 01332-273560 / 285318

Occupation : Teaching, Research, Professional  
Consultancy and other Admin/Academic work

Field of Interest and Work : Architecture and Planning with  
Special reference to Energy/ Environmental  
/Ecological Aspects and Sustainable Urban Development

Institutional Qualifications : B.Arch., P.G. Diploma in Planning (Hons.)

## **Membership in Professional Institutes/Organisations**

1. Council of Architecture, India.
2. Indian Institute of Architects.
3. Institute of Town Planners, India.
4. Member, OISCA International, H.Q. Japan.

## **Institutional Academic/Professional Involvement (past & present)**

1. Chancellor's nominee on selection committee of Jadavpur University from 2002.
2. Visiting Expert, School of Planning, CEPT, Ahmedabad.
3. Ex-officio member, Board of studies, Department of Architecture, Aligarh Muslim University, Aligarh.
4. Member, Senate , National Institute of Technology, Hamirpur, HP
5. Expert for Intensive Design Programme, Department of Architecture, College of Engineering, Bhubaneswar.
6. Member, PG Board, Academic Council and Senate of Indian Institute of Technology, Roorkee.
7. Member, Departmental Professorial Committee, Departmental Faculty Board, Departmental UG Program Committee and Chairman, Departmental Research Committee of Department of Architecture and Planning, Indian Institute of Technology, Roorkee.

8. Graphic Editor and Member, Editorial Board for SCI-TECH, the R & D Magazine of Indian Institute of Technology Roorkee.
9. Honorary Advisor, Mussorie Dehradun Development Authority
10. Member, PhD Guidelines Committee, Council of Architecture
12. Expert, Selection Committee, UPSC, New Delhi
13. Member, Panel of Experts, NBA, AICTE, New Delhi
14. Advisor and Visiting Expert, School of Architecture and Landscape Design, Sri Mata Vaishno Devi University, Katra, Jammu
15. Advisor, Faculty of Architecture, Himgiri Nabh Vishwavidyalaya, Dehradun
16. Member, Mission Advisory Committee, National Mission for Bamboo Applications (NMBA)
17. Has been an expert in committees of DST, AICTE & MHRD.

### Past Institutional Responsibilities

1. Member, Panel of Advisors, Academy for Mountain Environics, 111/2 Rajpur Road, Dehradun 1(Till 1998).
2. Staff Advisor, Horticulture Section, Indian Institute of Technology, Roorkee.
3. Member-Coordinator, Appropriate Eco-Technology Development Group, University of Roorkee (Till 1997).
4. Additional Coordinator, AVRC, University of Roorkee (Till 1998).

### Professional Work Done as Govt. Planner during 1974-77

Area/ Zonal Development Plan, Jaipur, UIT Rajasthan 1974.  
 The Draft Master Plan for Madras Metropolitan Area – 1975.  
 Site and Services Program for Rehabilitation of Slum Population in Madras – 1975.  
 Socio-Economic Surveys and Analysis of Mon and Phek Towns in Nagaland 1976-77.  
 Preparation of Draft master Plan for Tuensang Town, Nagaland 1976-77.  
 Physiographic and Contour Survey of Phek and Tuensang Towns and Preparation of Maps 1976-77.  
 Workers' Housing for Nagaland Paper and Pulp Factory, Tuli, Nagaland 1977.

### Teaching Experience

- **Thirty years in teaching** of P.G. classes of MURP and M. Arch. and B.Arch. Program. The courses taught have been related to Urban and Rural Planning, Urban Design, Architecture, Landscape Architecture, Energy Conserving buildings and settlements, Ecology for Architecture and Planning, Urban and Rural Infrastructure Planning, U & R Transportation Planning besides Planning and Design Studios and Thesis guidance at UG, PG and Ph.D. levels.

### Overseas Experience

- Was on Foreign assignment to Mosul University, Iraq between December 1996 and February 1998, on deputation from Government of India where I worked out a PG Programme in Urban Planning besides teaching architectural courses for B.Arch.

### Employment/Professional Experience (starting from the most recent)

Sl. No.	Position Held and Office / Institute/ Firm Address	From	To	Nature of Work
1.	PROFESSOR Department of Architecture and Planning, Indian Institute of Technology Roorkee	Feb.26, 1979 ( started as lecturer )	-	Teaching, Research & Admin/ Academic work and Professional Consultancy in the field of Planning and Architecture.
2.	UNIVERSITY ARCHITECT: Construction Division, University of Roorkee	May 18, 1978	Feb.26, 1979	Architectural Work of University Building Projects
3.	JUNIOR PLANNER: Bombay Metropolitan Region Development Authority, Bombay	March 1, 1978	May 15, 1978	Detailing Development Schemes
4.	FACULTY MEMBER: Deptt. of Arch. & Planning, University of Roorkee	Nov.3, 1977	Jan.3, 1978	Teaching and other Academic Work

5.	ASSTT. TOWN PLANNER: Town Planning Organisation. Nagaland, Kohima and Tuensang	Oct.6, 1975	Oct.30, 1977	Physical and Socio Economic Surveys, Town Development Plans.
6.	ASSTT. PLANNER: Madras Metropolitan Dev. Authority, Madras	Jan.4, 1975	Sep. 30, 1975	Preparation of Draft Master Plan Site and Services, Programme, Area Plans.
7.	ASSTT. TOWN PLANNER: Urban Improvement Trust, Jaipur Rajasthan	July 1974	Dec. 1974	Preparation of Area Development Plan, Housing Layouts
8.	ASSTT. ARCHITECT: M/s K.N. Srinivasan, Architects and Engineers Madras 6	Feb. 1971	June 1972	Design and Detailing of Arch. Projects.

### Significant Contributions/Innovations made in Teaching/ Research/ Design/ Creative Pursuits

- With a view to enrich and diversify the teaching aids available to Faculty-Members in the field of Architecture and Planning, I have made seventeen educational T.V. Films during 1990-97. These and other educational films I use as supplement to my classroom lectures, tutorials besides slides, transparencies etc. .
- A number of critical habitat, development and environmental problems have been tackled as MURP thesis projects under my guidance, issues like (a) alternative approaches to sustainable development (b) sustainability of viable settlements like Roorkee (c) problems of development along highways, (d) role of informal Sector in city planning (e) sustainable infrastructure management (f) rain water harvesting in cities (g) planning for earth quake preparedness etc.
- Theme – oriented arch. design problems and field-oriented landscape design assignments have been introduced to students since 1993-94. Ecology course has been oriented to include discussion of case studies and development planning issues, besides field visits.
- The opportunity of conducting “Measured Drawing Camp” was used to study and record in detail, the Traditional Architecture and Town Planning of Jaisalmer (1992) and Temple Architecture of Orissa in Bhubaneswar (1993).
- An exhaustive research and documentation of low cost technologies, innovative structural systems and space-saving techniques were done in Architecture Design Course in 1993-94, 1998-99 and 2002-03.
- Involvement in Resettlement Operations of victims of Uttarkashi Earthquake and field studies in the Himalayas gave very valuable inputs to knowledge base, research and teaching (1992-93).
- New Methodology, analytical techniques and ideas were tested in the consultancy/ Research projects on market towns of Garhwal which were highly commended by International Experts and recommended for use by other agencies (1994).
- My trek in the Thar desert for a week in 1988 and “*Padayatra*” from Gomukh to Rishikesh along the Ganges and through the villages for 17 days in 1990 enabled me to have a very close look at people living in extreme environment and understand their lives and problems. These and other treks in the Himalayas including the one to Kailash and Manasarovar in 2001 have given unmatched inputs to my research and teaching.
- On the more creative side, for the Consultancy Project on Paonta Weir (1989-91) an abstract version of traditional temple design was worked out to the great satisfaction of everyone, and my guidance in arch design based on renewable resource use saw the competing students of B.Arch. IVth year win second prize in a National Design Competition held by SPA, New Delhi in November 1994.
- Organized the first-ever held induction training program of 3 weeks' duration (Faculty Development Program) for teachers of Architecture in June 1996 at Department of Architecture and Planning, University of Roorkee.
- Have been actively involved in the preparatory work for starting the proposed postgraduate program of M.Des. (Industrial Design) in University of Roorkee, as a member of the Inter Departmental Coordination Committee as well as for the newly framed curricula for P.G. and U.G. Programs at UOR.
- Have been a paper setter and examiner for the aptitude test for admission to B.Arch programme of University of Roorkee, for a number of times.

## Production of Educational T.V. Programmes made for AVRC, University Of Roorkee, Roorkee

Sl. No.	TITLE OF PROGRAMME	YEAR	INVOLVEMENT LEVEL
1.	Forest in Peril-I (26 min.)	1989	Idea, research, resource person, script, visualization, graphics, coordinator
2.	Forests in Peril-II (18 min.)	1989	
3.	Forests in Peril-III (24 min.)	1990	
4.	Impression of Learning Architecture (18 min.)	1990	Concept, visualization, stills, script and presentation
5.	Ghat Ki Guni (22 min.)	1990	Visualization, script & production Coordination, Presentation
6.	The Hauzkhas Phenomenon	1990	
7.	Architecture at Cross-Roads (20 min.)	1990	Interview, presentation, Visualization, production Coordination, still, script
8.	Venturing with Photography (20 min.)	1990	- do -
9.	Sustainable Development-I (22 min.)	1991	Research, script, presentation, Interview, visualization, Production, Coordination
10.	Sustainable Development-II (22 min.)	1991	- do -
11.	Imbibing Himalayan Ecology (20 min)	1991	- do -
12.	Women in Engineering Education (5 min.)	1992	Research, script, interview, Presentation, production, Coordination
13.	Towards Modern Indian Architecture (24 min.)	1993	Script, visualization, research, graphics, coordination
14.	In Search on Architectural Roots (19 min.)	1993	- do -
15.	Perspectives on Himalayan Tourism-I & II (35 min.)	1996	Research, script, visualization, camera, coordination
16.	Women and Environment (Hindi and English) (16 min.)	1997	Research, script, interview, Presentation, coordination
17.	Perspectives on Sustainable Development (18 min.)	1997	Script editing, interview, Presentation, coordination

## Sponsored Consultancy, Research Projects Handled as Principal Investigator/Co-Investigator

Sl. No.	TITLE	Name of Sponsor/ Funding Agency	Amount (Rs. In Lacs)	Duration
1.	"Study of Energy Consumption Patterns in Urban Settlements"	DRIL, UOR	0.07	1982-83
2.	"Environmental Assessment of Ranipur (B.H.E.L.) Township"	Ministry of Environment and Forests	0.46	1983-84
3.	"Environmental Assessment of Ranikhet Cantonment"	- do -	0.46	1984-85
4.	Development of Bathing Ghats, Temple Complex and Landscaping at Paonta Weir, Paontasahib"	Deptt. of Irrigation/ IRI, UP	0.60	1988-91
5.	Study for an Action Oriented Assessment of Market Towns Garhwal"	Usaid, New Delhi & ICIMOD, Kathmandu	1.72	1994-95
6.	Institutionalization of Market Town Oriented Regional Planning in Tehri Garhwal District"	Planning Commission New Delhi	5.00	1995-96
7.	Eco-development in Roorkee Town	OISCA India	Honorary	1996-97
8.	Landscaping of Cantonment	BEG Centre, Roorkee	-	1997-99
9.	Planning for Rainwater Resource Harvesting in Uttaranchal	MHRD, Govt. of India	4.00	2003-05
10.	Preparation of Piran Kaliyar Master Plan 2005-2025	Civil Administration Roorkee, Hardwar Distt.	0.25	Aug. 04 to Dec. 04
11.	Design of Proposed Corporate Building for PTCUL at Dehradun (Phase 1 & 2)	PTCUL, Dehradun	5.5 + 6.0	Aug. 04 contd.
12.	Proposed SLDC for PTUCL at Dehradun	PTCUL Dehradun	6.5	June 06 Contd.
13.	Preparation of Master Plan for Gangotri Dham	D.M., Uttarkashi District	0.85 lac	May 06 to July 07
14.	Preparation of Master Plan for Greater	Greater Noida Development	28.0 lac	July 06

	Noida, Phase 2	Authority, Noida		July08
15.	Landscaping of 400kv S/s Kashipur	Ex. Engineer, Electricity Civil Division, Haldwani	90,000	Nov 06 Contd
16.	Landscaping of the site at Deoband Branch feeder channel	Ex. Engineer, Upper Ganges Canal Modernization, Block 6, Roorkee	60,000	Nov 06 Contd
17.	Landscaping of Head Regulator site near Roorkee	Ex. Engineer, Upper Ganges Canal Modernization, Block 1, Roorkee	60,000	Nov 06 Contd
18.	Proposed Office Complex for UPCL at Srinagar, Garhwal	DGM (Civil), UPCL, Dehradun	6.5 lac	Jan 2008 Contd
19.	Preparation of Building Regulations, Development Controls and Planning Guidelines 2009 – Applicable to Uttar Pradesh Expressway Industrial Development Area for Application in the Proposed New Townships	U.P Expressway Industrial Development Authority (UPEIDA) Govt. of U.P, lucknow	9 lac	July 2009- June2010

### Research/Consultancy Projects Handled by Others With My Input of Expertise

Sl. No.	Title/ Particulars	Nature of Sponsor/ Funding Agency	Amount	Duration/ Year
1.	All Projects done by AEDG, UOR	Diverse	Not known	1988-93
2.	“Reconstruction & Rehabilitation of Aungi Village, Uttarkashi District, UP” by Taru, Dehradun	CASA, New Delhi	48.00	1992-93
3.	“Mountain Tourism for Local Community Development : Overview and Case Studies in H.P. & Hill District of U.P.” by Academy of Mountain Enviurionics, Dehradun	NORAD, Norway & ICIMOD, Kathmandu	7.5	1994-95
4.	Design & Development of Tourist Complexes in Dak Bungalow Sites of Mussorie-Chakrata Region”	Deptt. of Hill Development, U.P., Govt.	20.00	1996-97
5.	DPR for conservation and management Plan for Nanital and other lakes of Kumaon	Ministry of Environment and Forest, Government of India.	Not known	2002-04

### Architectural Consultancy (Honorary)

Of varied nature ranging from cost-effective residences to hospitals and landscape projects.

### Research Publications:

#### Publications in Professional/Technical Journals

1. “The Energy Crisis: Time to Build with Blinkers off”, Design, Oct.-Dec.1982.
2. “Towards Humane, Settlements”, Urban India, Sept. 1982.
3. “Imperatives in Environment Planning”, The Indian Architect, Sept. 1982.
4. “Environmental Impact Analysis – A New Decision Making Tool for Planners”, Journal of the Institute of Town Planners India, Vol.3, 1982.
5. “An Approach to Small and Medium Town Development”, The Economic Times, May 11, 1983.
6. “Energy Conscious Settlement Planning in Developing Countries, A Preview”, Journal of the Institute of Town Planners India, Vol.2, Nov.3-4, 1983.
7. “Ecopolies – the Human Settlements of Tomorrow”, Architects Trade Journal, March/April, 1986.
8. “Urban Development Today”, The Indian Architect, May 1986.
9. “Study of Environmental Problems and Benefits of Settlements - A Basic Step in Environmental Planning”, ITPI Journal, Vol.4, No.4 (126), June 1986.
10. Assessment of Potentials of Market Towns in Garhwal” published in the ICIMOD Occasional PaperNo.25, entitled “ASSESSING THE POTENTIALS OF MARKET TOWNS IN THE MOUNTAINS” Kathmandu, Nepal, 1996.
11. “An Anatomy of Indigenous Church Architecture of Kerela State”, co-authored with Sunil Edward and Dr. V. Devadas, The Journal of the Indian Institute of Architects, Vol. 69-5, May 2004.

12. "An Analytical Framework for Earthquake Preparedness Plan: activities, vulnerability and Resource Potential Assessment", co-authored with Ila Gupta, Spatio-economic Development Record, Vol.12-No.1, Jan-Feb 2005.
13. "Indigenous Church Architecture Kerala Context", co-authored with Sunil Edward, V.Devadas, *Journal of Architecture + Design*, Vol. XXII No 5 May 2005.
14. "Participatory Models in Urban Development", co-authored with Kavita Poptani & Mahua Mukherjee, *ITPI Journal* Vol. 2 No. 3 July- September 2005.
15. "Himalayan Population at Earthquake Risk: Strategies for Preparedness", Co-authored with Ila Gupta and Amita Sinval. *International Journal of Disaster Prevention and Mitigation*, Vol. 15, No. 4. 2006 pp.608-620.
16. "An Appraisal of Performance of Planning and Development Efforts at Gwalior", Co-authored with Ashutosh Joshi and A.K.Vinodia, Spatio-Economic Development Record, Vol. 13 No. 3 May-June 2006.
17. "Waste Water Management in Green Buildings" Co-authored with Deepak Khare and R. Biswas. *Journal of Indian Buildings Congress*, Vol. XIII. No. 3, p99-108, Dec. 2006.
18. 'Water Management in Delhi: Issues, Challenges and Options', Co-authored with Deepak Khare and R. Biswas. *Journal of Indian Water Works Association*, Vol.XXXIX, No.2, p 89-96, April-June, 2007.
19. "Water Supply in New Regional Growth Centre – Case Study Greater Noida" Co-authored with Deepak Khare and R. Biswas, *Journal of Indian Building Congress*, Vol.XIV, No. 1, p180 -186, May 2007.
20. "Industrialization of Himachal Pradesh" co-authored with Aniket Sharma, *Journal of the Indian Institute of Architects*, Vol.72, Issue II, Nov. 2007, pp.26-28.
21. 'Alternative Approaches to Urban Water Management', Co-authored with Deepak Khare and R. Biswas. In *SPACE*, the SPA Journal of Planning and Architecture, Vol. 13, No. 2, April-June 2008, p 65-97.
22. "*Consumer Housing Preference Study – A case of Pune City*", Co-authored with Chadchan,J. *Journal of Indian Institute of Architects*, Vol. 74, Issue 01, January 2009, pp. 34-36.
23. "*Concept of Smart Growth Development*", Co-authored with Chadchan,J. *Journal of Indian Institute of Architects*, Vol. 74, Issue 02, 2009, pp. 7-8.
24. "*Urban Development Scenario in the Post-Economic Reforms Era in India – A Review*", Co-authored with Chadchan,J. *SPACE Journal of the School of Planning and Architecture*, New Delhi (to be published).
25. "*Historical Trends of Housing Development – A case of Pune,*" Co-authored with Chadchan,J. *Journal of Indian Institute of Architects*, Vol.74, Issue 09, 2009, pp. 13-16.
26. "*Emerging Urban Development Issues in the context of Globalisation*", Co-authored with Chadchan,J. *Journal of ITPI (Institute of Town Planners India) New Delhi – India*, Vol. 6, No.2, April-June, 2009, pp.78-85.
26. "Designing Pedestrian Environment for Indian Cities" Co-authored with P.Sangeetha, *Architecture, Time, Space and People: The Magazine of the Council of Architecture, India*, Vol.9, Issue 6, June 2009, pp. 20-28.
27. "A Rationale for Incorporating Green Roof in GRIHA Rating", Co-authored with Arpita Singh and Mahua Mukherjee, *Architecture, Time, Space and People: The Magazine of the Council of Architecture, India*, Vol.9, Issue 6, June 2009, pp. 30-34.
28. "*In Search of Alternative Urban Development Pattern*, Co-authored with Chadchan,J. and P.Sangeetha , *Journal of ITPI (Institute of Town Planners India) New Delhi*. Vol. 7, No. 1. January-March 2010. pp. 70-81
29. "Water demand management for an urban area: the case study of Dwarka, a sub-city of Delhi", Co-authored with Rabidyuti Biswas and Deepak Khare. *Water utility management International*, Vol.4, Issue 2, June 2009, pp.10-17.
30. '*Importance of High Density Development*' Co-authored with Chadchan,J. *Journal of Indian Institute of Architects*, Vol.74, Issue 11, November 2009, pp. 08-10.
31. '*Rental Housing Scenario in Urban India*' Co- authored with Sunita Redhu. *Architecture, Time, Space and People: The Magazine of the Council of Architecture, India*, Vol.10, Issue 10, October 2010, pp. 18-23.
32. "*Planning for Sustainable Urban Extensions and New Towns in India*" Co-authored with Chadchan,J. *Journal of Indian Building Congress*, Vol.17, No. 2, June 17-19, 2010, p 47 - 53.
33. "*Significance of Geo-Space Architecture in Sustainability of Urban Built Environment*" Co-authored with Pushpalata and A.M.Yogeshwaran. *Journal of Indian Building Congress*, Vol.17, No. 2, June 17-19, 2010, p 54-61

#### **Presentation/ Publications in Proceedings of Seminars and Conferences**

34. "Towards Humanization of Urban Growth, Issues in Small and Medium Town Development", Paper presented in the Technical Seminar on Small and Medium Size Town Development in the 6<sup>th</sup> Plan: ITP (India), held at New Delhi in August 1980.
35. "Forestalling Early Obituary of Modern Indian Architecture", Article Published in *NASA, Journal* 23<sup>rd</sup> Annual in Jan.1981.
36. "Introspective Analysis of Settlement Planning and Development in India" and "Human Urban Growth", Papers presented in the 29<sup>th</sup> Annual Town and Country Planning Seminar held at Gandhi Nagar in Jan. 1981.
37. "Environmental Impact Considerations in Dam Projects – A Rational for Decision-Making : Case Study – Tehri Dam Project", paper presented in the National Seminar on "Status of Environmental Studies in India", held at Trivandrum in March 1981 and published in the seminar proceedings.
38. "Eco-developmental Approach to Environmental planning, paper presented at the Technical Session of ITP (India) held at New Delhi on 1.8.1981.
39. "Environmental Impact Analysis – A New Decision-making Tool for Planners. "Environmental issues in River Valley Development Project", Papers presented in the National Conference on Environmental Guidelines for Development Projects held at Lucknow on Oct.17-18, 1981.

40. "Energy Conscious Settlement Planning in Development Countries : A Preview", Paper published in the proceedings of All India Conference on Human Settlements held during March 3 to 6, 1982, Jadavpur University, Calcutta.
41. "Ecocity – A Concept of Resource Conserving Settlement" and "An Eco-developmental Approach to Regional Planning In India", papers resented in the National Seminar on Environment held at Bhopal in Feb. – March, 1984.
42. "Random Thoughts on Architecture", Article in NASA Souvenir. "India's Environmental Status and Imperatives for Future" A commentary and "Energy Conservation in Urban Settlement: Key Issues for Planner", paper presented in the proceedings of the International Conference on Planning for 21<sup>st</sup> Century held during Oct.2-4, 1997.
43. "Urban Planning Prospects in the Context of Economic Liberalization Trends", published in the proceedings of National Town and Country Planners Congress, 29-31, December 1997, Mysore.
44. "Ecological Impacts of Development Projects in the Himalayas" Paper presented in the seminar on 'Energy Ecological Challenges for Technologists' (WECT-98) held in University of Roorkee, January 9-11, 1998.
45. "People's Participation in Infrastructure Planning, Development and Management" Paper presented in workshop on 'Preparation of Master Plan for Dehradun 2001-2020' on 27<sup>th</sup> September 2001.
46. "Relevance of traditional row housing", Paper presented in National Conference on Traditional Knowledge Systems of India, Indian institute of Technology, Kharagpur, Jan 9-11, 2004
47. "Traditional Church Architecture of Kerela" co-authored with Dr. V. Devadas and Mr. Sunil Edward, Paper published in "National Conference on Traditional Knowledge Systems of India", Indian institute of Technology, Kharagpur, Jan 9-11, 2004.
48. "Towards Sustainable Tourism Development in the Wetland Region of Kuttanad, Kerela State", co-authored with Mr. Tony Xavier, presented in International Conference Prithvi 2005, Thiruvananthapuram, Kerela, Feb. 19-28, 2005.
49. "Planning of activities for Earthquake Emergency Management", co-authored with Ms Ila Gupta, published in the proceedings of International Conference Prithvi 2005, Thiruvananthapuram, Kerela, Feb. 19-28, 2005.
50. "Urban Dynamics and Solid Waste Management in India" co-authored with Ms Hina Zia, Dr. V. Devadas, published in the proceedings of International Conference Prithvi 2005, Thiruvananthapuram, Kerela, Feb. 19-28, 2005.
51. "Issues and Practices in Municipal Solid Waste Management: an overview", co-authored with Ms Hina Zia, Dr. V. Devadas, published in the proceedings of International Conference Prithvi 2005, Thiruvananthapuram, Kerela, Feb. 19-28, 2005.
52. "Role of Informal sectors in Waste Recycling in India", co-authored with Ms Hina Zia, Dr. V. Devadas, published in the proceedings of International Conference Prithvi 2005, Thiruvananthapuram, Kerela, Feb. 19-28, 2005.
53. "Incorporating Energy Conservation in Architectural Curriculum: The Experience of IIT Roorkee" published in the proceeding of Seminar on Architectural Practices for Energy Efficiency, organized by Petroleum Conservation Research Association on 19<sup>th</sup> May, 2005, New Delhi.
54. "Potential for Energy Conservation in Indian Cities" published in the proceeding of Seminar on Architectural Practices for Energy Efficiency, organized by Petroleum Conservation Research Association on 19<sup>th</sup> May, 2005, New Delhi.
55. "Assessment of Seismotectonic Vulnerability of Narendranagar block in Tehri Garhwal District", co-authored with Dr. Amita Sinval and Ila Gupta. Symposium of Seismic Hazard Analysis and Microzonation, Department of Earthquake Engineering, Indian Institute of Technology, Roorkee, September 23-24 2005.
56. "Earthquake Risk Assessment of Population in Narendranagar Block due to Construction Technology" co-authored with Ila Gupta, published in the proceeding of the World Conference on Disaster Reduction-Focus on the Role and Responsibility of Corporate Sector, 16-18 Nov. 2005, Mumbai.
57. "Assessment of Health Facility in Narendranagar Block of Uttaranchal State and Strategies for Emergency Management", co-authored with Ila Gupta, published in the proceeding of the World Conference on Disaster Reduction-Focus on the Role and Responsibility of Corporate Sector, 16-18 Nov. 2005, Mumbai.
58. "The Need for Value Education in Institutions of Higher Learning" Published in the Proceedings of National Conference On Integrating Humanistic Values and Social Concerns with Technical Education (NCIHST-06) held on 24-25, February 2006, Department of Humanities PSG College of Technology Coimbatore.
59. "*Strategies for Sustainable Urban Housing Development – A case of Pune City, India*", Co-authored with Chadchan, J. An abstract paper published in the International Conference proceedings for the session of Sustainable Urban Areas, held by ENHR at Rotterdam, during 25-28 June 2007.
60. 'Alternative water provisions in Delhi: Present status and sustainability,' Co-authored with Deepak Khare and R. Biswas. Report of 40th Annual Convention, Indian Water Works Association, on Wise Water Management, Feb, 2008.
61. 'Residential Water Management for Urban Area', Co-authored with Deepak Khare and R. Biswas in Sinha P. and Rana S. (ed) ,2008, 'Global Climate Change and Water Resources, Current Practices and Planning for Future,' the proceedings of 2nd World Aqua Congress, Volume I, p102-114.
62. "Alternative Approaches for Urban Water Management", Co-authored with R.Biswas and Deepak Khare, ICWRDM-2008, BITS-Pilani, held between 23-26 October 2008, pp.12.

63. 'Challenges for Engineering Education in the 21<sup>st</sup> Century' in the Proceedings of International Conference on Global Challenges in Engineering Education and Research' PSG College of Technology, Coimbatore, 4-5 Dec. 2008
64. "Ecological Perspectives on Energy Efficiency in Buildings", Invited Lecture delivered in a seminar on Energy Efficient Buildings, November 07, 2009, organized by IIA Chapter Bareilly.

#### Publication in Books

64. "Towards Designing Sustainable Cities for India", Co-authored with J. Chadchan, Designing Sustainable Products, Services and Manufacturing Systems, Indian Institute of Science, Bangalore, held between 18-20 August, 2009. Book edited by Amaresh Chakrabarti, Sudarshan Rachuri, Prabir Sarkar, Srinivas Kota. Research Publishing Services, Chennai. 2011, pp 67-84
65. "Unsustainable Alternative Water Provisions in Delhi" Co-authored with R. Biswas and Deepak Khare. BioDiversity and Sustainable Development, 2010. Edited by Dr. R.N. Pati, Dr. Atul.K.Jain. Published by Sarup Book Publishers Pvt. Ltd., New Delhi;.2010 , pp 487-504

#### Presentation in International Conference/Seminar, chairing session, keynote address

1. "A Perspective on Indian Experience of Sustainable Development and Lifestyle" presented in the 11<sup>th</sup> Annual International Sustainable Development Research Conference, held in Helsinki Finland on 6-8 June, 2005.
2. Keynote address on "Ecological Approach to Planning of Cities" for the technical session 'Ecosystems and Built Environment' in International Conference Prithvi 2005, Thiruvananthapuram, Kerala, Feb. 19-28, 2005.
3. Chairperson and invited speaker for sub-session "Sustainable Land use and Waste Management" in International Conference Prithvi 2005, Thiruvananthapuram, Kerala, Feb. 19-28, 2005.
4. International Workshop on "Urban and City Design Curriculum Development" at Centre for Environmental Planning & Technology, Ahmedabad, 12-15 Jan, 2005
5. Keynote address on "Approach to Designing of New Cities", held on World Habitat Day Oct. 3, 2005, organized by Institute of Engineers, Roorkee Chapter.
6. Chairperson and lead talker for the third technical session on "Professional Ethics and Values" National Conference On Integrating Humanistic Values and Social Concerns with Technical Education (NCIHST-06) held on 24-25, February 2006, Department of Humanities PSG College of Technology Coimbatore.
7. "City of Hope" Key Note Address given on Sept.26, 2006 on World Habitat Day celebrations organized by Institute of Engineers, Roorkee Chapter.
8. "Stakeholder Participation in Urban Housing Development: a case of Pune City, India", Co-authored with Chadchan, J. Paper presented in the Sixth International Ecocity Conference, Bangalore during 4<sup>th</sup> – 6<sup>th</sup> December 2006.
9. "Trends of Housing Development in Pune city: a historical perspective", Co-authored with Chadchan, J. Paper presented in the Sixth International Ecocity Conference, Bangalore during 4<sup>th</sup> – 6<sup>th</sup> December 2006.
10. "Need for an Alternative Sustainable Urban Development Pattern – A Case of India" presented in the 5<sup>th</sup> Great Asian Streets Symposium held in Singapore, 5-7 Dec. 2008 Co-author.
11. "Towards Designing Sustainable Cities for India" - Technical Paper presented in the *Indo-US Workshop on Designing Sustainable Products, Services and Manufacturing Systems*, held during 18-20 Aug. 2009 at IISc Bangalore.
12. "Sustainable Urban Development Model for India" – Invited Technical Paper presented in the APSA Congress 2009 held between 24<sup>th</sup> and 26<sup>th</sup> Nov. 2009 at CEPT university , Ahmedabad
13. "Integrating Urban Land Use and Infrastructure for Sustainable Development" presented in the *International Conference on Developing 21<sup>st</sup> Cent. Infrastructure Networks*, held between Dec.9 and Dec.11,2009 at SSN College of Engineering , Chennai.
14. "Approach to Disaster Preparedness plan for a Himalaya Micro Region" presented in National Seminar on Research Activities in Disaster Mitigation for Housing in India (HDMR-09), held between 22-23 August, 2009 at Indian Institute of Technology, Roorkee.
15. 'Challenges for Engineering Education in the 21<sup>st</sup> Century' paper presented in the International Conference on Global Challenges in Engineering Education and Research' PSG College of Technology, Coimbatore, 4-5 Dec. 2008

#### Review/ Research/ Feasibility Reports

Sl. No.	TITLE	NO. OF PAGES	NAME OF AGENCY	CO-AUTHOR
1.	Report on "Environmental Assessment of Ranipur (B.H.E.L) Township", 1984	148	Ministry of Environment & Forest	Rattan Kumar, Sanjay Basu
2.	Report on "Environmental Assessment of Ranikhet Cantonment" 1985	158	-do-	-do-
3.	Report on "Spatial and Socio-economic Structure of Tehri Garhwal District",	30	USAID, New Delhi and ICIMOD,	



	An Interim Report on Study for an Action Oriented Assessment of Market Towns in Garhwal Himalayas, 1994		Katmandu	--
4.	Report on "Study for an Action Oriented Assessment of Market Towns in Garhwal Himalayas", 1994	130	-do-	--
5.	Report on "Case Studies in Kinnaur District, H.P. & Badrinath Tourist Zone of Mountain Tourism for Local Community Development" by AME, Dehradun, 1995	82	NORAD NORWAY & ICIMOD Katmandu	Main Author AME, Dehradun
6.	Document on Chamma Block for District Planning Process in Tehri Garhwal	57	Planning Commission Govt. of India	-do-
7.	Report on Eco-Development of major roads of Roorkee, 1996	28	OISCA, Japan Local self government	Pushpalata
8.	DPR on Lakeshore development of Nainital and other Lakes of Kumaon, 2002	44	Ministry of Environment & Forest	--
9	Assessment of journal publications and technical reports of faculty of KN University of Science and Technology, Kumasi, Ghana, 2006	5	Vice Chancellor KN University of Science and Technology, Ghana	--
10	Formulation of Guidelines for Ph. D in Architecture 2006	7	Council of Architecture, India	Dr. P.S. Shinde Prof.V.P.Raori
11	Compilation of Technical Notes and Guidelines for " Earthquake Resistant Structure for Architecture" NPEEE Training Program, 8-12 Aug. 2005, IIT Roorkee		Dept. of Arch. & Planning, IITRoorkee	M Mukherjee
12	"Lecture Notes for Training of Practicing Architects" NPCBAERM, Dept. of Arch. & Plng IIT Roorkee Nov. 2006	250	NDMD, MHA, Govt. of India	M. Mukherjee P.S.Chani Ila Gupta

#### Visit to Institutions/Organizations and work as architectural/ planning expert

1. Uttaranchal Govt., Dehradun, Architectural and Planning Expert in the Technical Committee to evaluate and select the Architectural Design Schemes submitted by the professional architects. Jan.- July 2004
2. H.N.Bahuguna Garhwal University, Srinagar, As an Expert to attend Technical Committee Meetings in connection with planning and design of their new campus, Dec. 2004 – Feb 2005
3. Haritha Eco trust Khammam, A.P., As a Technical Expert to inspect the bamboo mission project in progress and attend the AMC meeting, 11-12 Oct., 2004.
4. Awas Bandhu, U.P. Lucknow, City Planning Expert of the Technical Committee to evaluate the Plan Proposals of the Proposed High-tech Townships for U.P., Aug. 2004- Jan., 2005.
5. Uttaranchal Govt., Dehradun, Architectural and Planning Expert in the Technical Committee to evaluate and select the plan proposals submitted by the competing professional designers.
6. Institutions visited in 2007-08: Biju Patnaik University of Technology, Bhubaneshwar, CEPT University, Ahmedabad, Himgiri Nabh Vishwavidyalaya, Dehradun, Jodhpur University of Technology, UC at Berkley, Stanford University, University of Utah, Salt Lake City.
7. Institutions visited in 2008-09: School of Architecture and Landscape Design, SMVD University, Jammu, (Kakrial), College of Engineering, Department of Architecture, Trivandrum, IIT Kharagpur, Department of Architecture and Planning, CEPT University, Ahmedabad.
8. Institutions visited in 2009-10: Integral University, Lucknow, School of Architecture and Landscape Design, SMVD University, Jammu, (Kakrial), College of Engineering, Department of Architecture, Trivandrum, CEPT University, Ahmedabad

#### Expert Lecture in Seminars, Short –term Courses/ Participation in Panel Discussion etc.

1. "Landscaping for Environment Control of Buildings" Expert lecture for Short-term course on Environment-friendly Civil Engineering Design for Officers of ONGC, conducted by Deptt. Of Architecture & Planning, IITRoorkee, 28<sup>th</sup> March 2006.
2. "Elements of Architectural Design" Expert lecture given in the School of Architecture and Landscape Design, SMVU, Jammu 24<sup>th</sup> Jan. 2009
3. "Ecological Perspectives on Energy Conservation in Architecture" Expert lecture for short-term course on "Sustainability and Energy Issues in Built Environment" conducted by Dept. of Architecture, College of Engineering, Trivandrum 11<sup>th</sup> March 2009

4. "Towards an Approach to Design of Sustainable Cities" Expert lecture given in Department of Architecture, College of Engineering, Trivandrum 13<sup>th</sup> March 2009
5. "Nature, Architecture and Design" Expert Lecture given in Department of Architecture, Integral University, Lucknow, Feb. 22, 2010.
6. "Lessons from Nature for Architectural Design" given at Zonal NASA Convention 2010, held in Sri Mata Vaishno Devi University, Jammu and Kashmir on 13 March, 2010

#### **Workshop/ Seminar/ Short –Term Courses etc. Organized/ coordinated**

1. Short Term Course sponsored by AICTE/COA on "Application of Traditional Architectural Knowledge in Contemporary Indian Architecture" 12-16 July 2004, Deptt. of Architecture and Planning, IIT Roorkee
2. Training Programme "**Trainers of the Trainee (TOT)**" of National Programme for Capacity Building of Architects in Earthquake Risk Management (NPCBAERM), 7-12 Feb. 2005, Deptt. Of Architecture and Planning, IIT Roorkee, Programme Coordinator
3. NPEEE Short Term Course for architectural and planning faculty and professionals on "Earthquake Resistant Structures for Architecture" 8th to 12<sup>th</sup> Aug. 2005, Deptt. Of Architecture and Planning, IIT Roorkee, coordinators: Prof. R. Shankar and Dr. M Mukherjee
4. Symposium on "Seismic Hazard Analysis and Microzonation" Sept. 23-24, 2005, Deptt. Of Earthquake Engineering, IIT Roorkee, Member of the Organizing Committee
5. NPEEE Short Term Course for architectural and planning faculty and professionals on "Earthquake Resistant Structures for Architecture" 28th Aug. 2006-Sept 1, 2006 Deptt. Of Architecture and Planning IIT Roorkee, coordinators: Prof. R. Shankar and Dr. M Mukherjee
6. Workshop on "Ecological Aspects of Site Development" for B. Arch 4<sup>th</sup> semester, March 11-13 2009, Department of Architecture, College of Engineering, Trivandrum.
7. National Seminar on "*Housing and Disaster Mitigation Efforts in India: Case Studies,*" April 18, 2009 Center for Disaster Mitigation & Management, IIT Roorkee, Convener
8. . National Seminar on "*Research Activities in Disaster Mitigation for Housing in India:*" Aug. 22-23, 2009 Center for Disaster Mitigation & Management, IIT Roorkee, Convener.
9. National Research Conference on, "*Disater Mitigation in Housing in India: An Agenda for Future*", March 19-20, 2010, Center for Disaster Mitigation & Management, IIT Roorkee, Convener.
10. QIP Short Term Course on Planning and Design of Sustainable Urban Settlements, , QIP Center, IIT Roorkee March 7-11, 2011 Coordinator and Subject Expert

#### **B. Arch Thesis Guidance**

- The forty odd B.Arch Thesis projects guided so far have been of diverse categories, ranging from Solar Architecture and Sustainable Eco-communities on one side and high rise Multiplex complex and Metro stations on the other.

#### **MURP Thesis Guidance.**

1. Unintended Growth of Faridabad: Analysis & Strategy for Control — Trilochan Singh (1980)
2. Environmental Impact of Tehri Dam Project on Settlement Planning in the Region –Sanjay Basu (1981)
3. Land use Planning & Development of Ranikhet Cantonment with Special reference to Civil Areas – Nawab Ahmed (1986)
4. Impact of Floating Population on the Development of Haridwar – R.K. Garg(1989)
5. Planning Imperatives for Core Area (Inner city – Hyderabad) – K. Srinivas Rao(1990)
6. Role of Informal Sector urban Planning: Case Study, Sambalpur – R.P.Padhee (1990)
7. Computer Aided Urban Planning. Case Study: BHEL Ranipur – Pradeep Gaur (1991)
8. Problems of Central Area of Warangal City: Study and Proposals – K. Vidhyadhar (1992)
9. Potential for Sustainable Eco-Development of Roorkee Town – S.K.Bhagabathi (1993)
10. Assessment of Environmental Impact of Traffic on Gandhi Road, Dehradun – R.K.Mittal (1994)
11. Development along Highways: Planning Studies and Proposals – Maj. R.V.Rao (1998)
12. Impact of Tourism on Rishikesh Urban Agglomeration – Vinod Gupta (2000)
13. A Blueprint for Sustainable Solid Waste Management in Urban Areas: Case Study Hardwar – Maj. Rana Banerjee (2001)
14. Integrating Rain Water Harvesting in Urban Planning and Development – Ashutosh Kumar Sahu (2001)
15. Planning for Earthquake Preparedness in Tehri Garhwal District – Ila Joshi(2002)
16. GIS Applications to Rural Planning in Tehri Garhwal District – Hitesh Kumar(2003)
17. Planning and Design of Urban Roads for User Needs – Kirti Gupta (2003)
18. Planning for Sustainable Water Supply for Bhopal– Manish Verma (2004)
19. Peoples' participation in Urban Development: Case study-Traffic Management at Daryaganj, Delhi- Ms Kavita Poptani.(2005)

20. Performance Evaluation of Master Plans: Case of Gwalior city- Ajay Vinodia (2005)
21. Sustainable Tourism Development in Ramanathapuram Coastal Region - Nachiketha B.Phathanjali. (2006)
22. Planning for e-Governance in Local and Regional Administration of Uttaranchal State – Surya Prakash Vasarashetla (2006)
23. Planning of a Sustainable Military Station at Jaipur – Virendra Singh Jeji (2007)
24. Industrial Development Planning for Himachal Pradesh - Aniket Sharma (2007)
25. Development Planning of Puri City under Ecocity Project - Bibhu P. Tripathi (2008)
26. Evolving Planning Guidelines for Smart Growth in Indian Context : A Case of Chennai City - Sangeetha P (2009)
27. Application Potential for Green Roof in India - Arpita Singh 2009, (M. Arch)
28. Planning Guidelines for Compact, Transport-oriented Urban Development – Gaurav Singh, ( 2010)
29. Integrating Rental Housing in Urban Planning: Case of Delhi – Sunita Redu , ( 2010)
30. Urban Land Management for Sustainable Development of Jaipur – Puja Nigam, ( 2010)
31. Application Potential of Vernacular Residential Buildings of Kerala - Dibini Bulhar, M.Arch (2010)

#### **M.E. (Building Science) Dissertation Seminars Guided**

1. Ecology for Civil Engineers – Ajay Kumar (1993)
2. Eco-Community, Eco-City and Arcology – Ashutosh Gupta (1993)

#### **Ph. D. Thesis Guidance**

1. A Study of Indigenous Church Architecture of Kerala State – Sunil Edward (2006).
2. Earthquake Disaster Preparedness for Emergency Management in a Himalayan Region – Ila Gupta (2007)
3. Planning for Sustainable Urban Development Pattern – Jayprakash S. Chadchan (2009)
4. Water Supply Management in Urban Residential Development – R. Biswas ( 2010 )
5. Evaluation of Urban Renewal Projects under JNNURM – Doreshor (in progress)

#### **Foreign Countries Visited**

Finland, Iraq, Nepal, Tibet, Turkey, USA

#### **Other Related Pursuits**

- Travel, Trekking, Field Studies in Architecture and Nature, Photography, Traditional Knowledge Systems, Sustainable Development Alternatives, Spiritual Studies.