

Curriculum Vitae

1. Name : **Dr. Neelam Jain Gupta**



2. Designation: Principal Scientist
3. Complete address: TES Division,
CSIR-CRRI,
New Delhi 110 025
neelamjn19@gmail.com

4. Areas of Interest: Traffic Engineering and Road Safety, Road Network evaluation using GIS, Socio-Economic Aspects

5. Educational Qualification:

Degree	University/Institution	Year	Division	Specialization
Ph. D.	University of Roorkee	1996	-	Numerical Analysis
M. Phil.	University of Roorkee	1990	First	Computer Applications
M. Sc.	University of Roorkee	1989	First	Applied Mathematics
B. Sc.	Meerut University	1987	First	Physics, Chemistry, Mathematics

6. Professional Experience:

Employer	Period	Position held
Central Road Research Institute, New Delhi	1997 till date	Principal Scientist
Institute of Technology and Management, Gurgaon	1997	Lecturer
University of Roorkee	1996 - 1997	Research Associate
Gurukul Kangri University, Haridwar	1996	Lecturer

7. Membership to Professional Bodies:

Member of Indian Road Congress
Life Member of Institute of Urban Transport

8. Achievements:

a. Honours and Awards

- Received Best Paper Award as certificate and cash prize for publication of paper in Journal of Rock Mechanics and Tunneling Technology in 2000
- Received Honour as a cash prize for publication of Hindi Paper in Monthly Journal of Kurukshetra in 2000
- Received best paper award as certificate and cash prize in Hindi week for publication of Hindi paper in Monthly Journal of Kurukshetra in 2000
- Received award as cash prize in Dr. Homi bhaba Science Article Writing Competition for publication of Hindi paper in "Vaigyanik" Hindi Magazine in 2004.
- Won many prizes for preparing leaflets, posters, poem recitation etc. at CRRI

b. Research Projects

Consultancy projects:

1. 12th Five Year Plan Project “Vulnerability assessment and Development of Adaptation Strategies for climate Change Impact with special reference to coasts and island ecosystems of India (VACCIN)”
2. Road Safety Audit during Development and Construction Phases of 4-laning of National Highways under PPP on DBFO basis, PACKAGE 7, 12..sponsored by NHAI
3. 12th Five year plan project on Indian Highway Capacity Manual (Indo HCM)
4. 12th Five year plan project on Sustainable Transportation System (SUSTRANS)
5. Development of GIS based National Highway Information System sponsored by MoSRTTH
6. Development of Data Center for National Highways using GIS, an Inhouse project.
7. Baseline Road/Traffic Data for Upgradation/Rehabilitation of Identified Uttar Pradesh State Roads under Phase – II sponsored by UP PWD.
8. Traffic counts for Roads of UP State’s Core Road Network sponsored by Word Bank Projects (Roads), UP PWD, Lucknow
9. Development of Critical Infrastructure Information System for Bridges and Roads- Case study of Ghaziabad District(Inter Div. with Bridge Div.) sponsored by DST
10. Feasibility study for the construction of elevated road on New Rohtak Road from Rani Jhansi Road to Zakhira Flyover sponsored by Municipal Corporation, Delhi
11. Road planning approaches for location of urban amenities in rural areas – a case Laksar Block in Uttaranchal state, a DST sponsored project –2005-06. (Co-Principle Investigator)
12. Development of GIS based National Highway Information System sponsored by Ministry of Shipping, Road Transport and Highways
13. Fuel Losses at intersections of Delhi due to Idling of Vehicles, Sponsored by Ministry of Petroleum, 2004
14. National data center for managing data for planning, design and management of roads sponsored by CSIR
15. Maintenance and Rehabilitation of Highway Project, sponsored by PWD, NCT Delhi, 2002
16. Urban Road Traffic and Air Pollution, sponsored by Ministry of Petroleum and Natural Gas, Govt. of India, November, 2001-June 2002
17. Pradhan Mantri Gram Sadak Yojana, sponsored by Ministry of Rural Development (MORD), Govt. of India, 2000
18. Project preparation for Rural Roads in 37 Districts of Bihar, funded by Govt. of Bihar, 2000-Contd.
19. Project preparation for Rural Roads in 18 Districts of Jharkhand, funded by Govt. of Jharkhand, 2000 - Contd.
20. Economic Analysis of Rural Roads Component under ADP Rajasthan, sponsored by PWD Rajasthan, 2000-2001
21. Preparation of Master plan for Rural Roads in 19 Districts of Andhra Pradesh, sponsored by Govt. of Andhra Pradesh (Funded by World Bank), 1999-2000.
22. Project preparation of Master Plan for Rural Roads for 3 pilot Districts in Andhra Pradesh, sponsored by Govt. of Andhra Pradesh (Funded by World Bank), 1997-1999.

23. Pre-feasibility Study of Delhi-Jaipur Section of NH-8 (Phase II), sponsored by NHAI, 1996-1997.

In-House Projects:

1. Preparation of Master Plan for Rural Roads for Nagaon District of Assam, 2000
2. Database development in GIS for project planning for Allahabad - Aurangabad section of NH-2, 2001
3. Failure Potential Evaluation of Narayanbagar Landslide and Adjoining Areas to Assess the Socio-Economic Problems due to the Landslide – A GIS Approach, 2002
4. Highway Information System, 2002
5. Development of for Rural Road Planning using GIS, 2002
6. Development of Data Center for National Highways using GIS, 2000
7. Effect of Bypass Road on Traffic and Habitants along Highway, July 2011

c. Research Publications

Books

1. P. K. Sikdar, B. K. Durai, P. K. Jain and Neelam Jain, “ Road development planning and policies for north eastern region, article for book "Population, Environment and the Challenge of Development", March 2003, pp. 415-438.
2. B. K. Durai, Neelam Jain, P. K. Jain, I. P. Rao, ”Road Development in North East Region”, Economic Liberalization and Regional Disparities in India, Special focus on the North Eastern Region, Shillong, June 2003, pp 199-207.
3. A chapter entitled “Fundamentals of Geographical Information System (GIS), Map Sources and Digital Map Preparation in book Geospatial Technologies for Climate Change, Springer publications, 2013.
4. Neelam J Gupta and S. Velmurugan, " Study shows way on odd-even", Times of India, 9th February, 2016.

Journals

5. Pankaj Gupta, Neelam Jain, R. Anabalagan and P. K. Sikdar, “Landslide Hazard Evaluation and Geo-Statistical Studies in Garhwal Himalaya, India”, Journal of Rock Mechanics and Tunneling Technology, Vol. 6, No. 1, May, 2000 (**AWARDED**) pp 41-60.
6. P. K. Jain, P. K. Sikdar and Neelam Jain, “Gramin Shetro Me Sarkoe Ki Sampurna Sambadhta, Monthly Journal of Kurukshetra (Hindi), Nirman Bhawan, New Delhi, October, 2000 (**AWARDED**) pp 37-42.
7. P. K. Jain and Neelam Jain, “Fuel Economy on Rigid Vs Flexible Pavement”, Indian Highways, Indian Roads Congress Vol. 31, No. 9, September 2003, pp. 5-23.

8. Neelam Jain, P. K. Jain, B. Kanagadurai and P. K. Nanda, "Gavo main sadako ki samporna sambadhta", Journal of Scientific and Industrial Research (Hindi), Vol. 11, No.2, December 2003, pp. 149-155. (AWARDED)
9. Neelam Jain, B. K. Durai, P. K. Nanda, "Sadak Suchana Tantra Ke Vikas Hetu Gyan Prabandhan Sidhant", Vigyan Garima Sindhu, Govt. of India, New Delhi, 2005.
10. Neelam Jain, Pankaj Gupta, P. K. Jain, P. K. Nanda and Anang Pal, "Socio-Economic Impact of PMGSY on Rural Roads", Sadak Darpan, CRRI, New Delhi, 2005
11. Neelam Jain, P. K. Jain, B. K. Durai, A. Pal and P. K. Nanda, "Apangta-Sharirik roop se viklang vayakti ke liye ak bagha", Quarterly Rajbhasa Bharti Patrika, Govt. of India, New Delhi, 2005.
12. Neelam Jain and P. K. Kanchan, "Axle Loading Pattern on UP State Roads", IRC, Highway Research Journal, Vol.2, No.1, Jan-June 2009, pp 83-92.
13. P. K. Kanchan, Neelam J Gupta and M. N. Nagbhushana, "Vehicle/Axle Overloading is a Devil – Not Taming it would be Perilous", SAARC Journal of Transport, Vol. XI, No. 5, May 2010, pp 18-21.
14. Dr. Neelam Jain, Dr. B. K. Durai, P. K. Jain and Dr. P. K. Nanda, "Sadak Suchna Tantr ke Vikas Hetu Gyan Prabandhan Sidhant", Sadak Darpan, No. 7, 2010pp 18-23, 2010
15. Neelam J Gupta, Mukti Advani, B. Kanagadurai and S Velmurugan, "Bypass Impact Analysis-A Case Study", International Research Journal of Sustainable Science and Engineering, ISSN 2347-6176, Monthly Peered Reviewed Online Journal, Vol 2, Issue 2, February 2014
16. Neelam J Gupta, Mukti Advani, B. Kanagadurai and S Velmurugan, "Safety Impacts on Traffic and Habitants – A Case Study of Khatauli Bypass", Indian Journal of Transport Management- IJTM, ISSN 0970-4736, quarterly Journal, Central Institute of Road Transport (CIRT), Pune, India and Association of State Road Transport Undertakings (ASRTU), New Delhi, Jan-Mar 2014
17. Neelam J Gupta, Subhash Chand, E Madhu, "Review of Feeder system for public transport towards Sustainability", Indian Journal of Transport Management- IJTM, ISSN 0970-4736, quarterly Journal, Central Institute of Road Transport (CIRT), Pune, India and Association of State Road Transport Undertakings (ASRTU), New Delhi, volume 38, number 2, April – June 2014, pp 113-123
18. Neelam J Gupta, B. Kanagadurai and S. Velmurugan, " Parivahan Avsanrachana mae bhu-sthanik prodyogiki ki badhati bhumika", Sadak Darpan, vol 12, September 2015, pp 6-10.
19. Subhash Chand, Neelam J Gupta and S. Velmurugan, "Development of Saturation Flow Model at Signalized Intersection for Heterogeneous Traffic", 14th World Conference on Transport Research, Transportation Research Procedia by Elsevier, 2016.(Accepted)

20. Neelam J Gupta, S. Velmurugan and Subhash Chand, "Capacity Estimation of Signalized Intersection for Heterogeneous Traffic", Transportation Research Procedia by Elsevier, 2016.(Accepted)
21. Mukti Advani, Neelam J. Gupta, Purnima Parida and B.K.Durai, "Analysis of Interrelationship between Transport System, Safety and City Sizes Distribution – A case study of India", Journal of Institute of Town Planners, ITPI India Journal 12x4, October-December 2015.
22. Mukti Advani, Neelam J Gupta, Purnima Parida and B. Kanagadurai, " Bharat ki parivahan vyavastha, suraksha aur sheriakar ka seh sambandh", Journal of Scientific and Industrial Research (Hindi), JSIR, NISCAIR, New Delhi, April-June 2016. (accepted)
23. Neelam J Gupta, Subhash Chand, E Madhu and Mukti Advani, " Feeder Connectivity for Sustainable Public Transportation Systems", ", Indian Journal of Transport Management- IJTM, ISSN- 0970-4736, quarterly Journal, Central Institute of Road Transport (CIRT), Pune, India and Association of State Road Transport Undertakings (ASRTU), New Delhi, April-June 2016. (Accepted)
24. Mukti Advani, S. Velmurugan, P. V. Pradeep Kumar, E. Madhu and Neelam J Gupta, "Defining and Analyzing Forceful Gap Behavior at Unsignalised Intersections - A case study", KSCE Journal of Civil Engineering (SCI), ISSN: 1226-7988 (print version), ISSN: 1976-3808 (electronic version), March 2016 (sent for publication)

Conferences/ Seminar

25. Neelam Jain and R. C. Mittal, "An iterative conformal mapping for simply connected domains", 2nd annual conference of Indian Society of Industrial & Applied maths, Department of Mathematics, Anna University, Madras, 23-25 February 1994.
26. Neelam Jain and R. C. Mittal, "Design of Symmetric & asymmetric joukowski airfoil specified chord and maximum thickness, conference on Mathematics & its Applications in Engineering & Industry, Department of Mathematics, University of Roorkee, Roorkee, 16-18 December 1996.
27. P. K. Jain, Purnima Pareda and Neelam Jain, "Audhyogiki ka paryavaran par dushprabhav", Hindi Seminar on Prakarti, Paryavaran aivam Vikas, 29 August 2000.
28. Neelam Jain, Ashok Kumar and P. K. Jain, "Scientific Planning for Rural Roads of Andhra Pradesh", International Seminar on Accessibility and Rural Development Planning, Pilani, 25-26 November 2000.
29. Neelam Jain, B. K. Durai and P. K. Jain, "Rural Connectivity Vision through Master Planning Approach", National Seminar on National Connectivity Vision: Surface Transportation & Communication, Hyderabad, 19-20 January 2001.

30. P. K. Sikdar, B. K. Durai, P. K. Jain and Neelam Jain, Towards the Development of Road Policy for Uttaranchal, All India Seminar on Infrastructural Development in Uttaranchal – Problems & Prospects, IN-D-U-2001, Institution of Engineers, Roorkee, 11-13 October 2001, pp III-21 to III-33.
31. B. K. Durai, Neelam Jain, P. K. Jain, I. P. Rao, "Road Development in North East Region", 33rd Regional Science Conference, Annual Conference of Regional Science Association-India, NEHU, Shillong, October 19-20, 2001
32. I. P. Rao, B. K. Durai, Neelam Jain and P. K. Jain, "GIS based Village Information Management System for Rural Road Planning – A case study of Rupouli block", International Conference on Information Technology Built Environment, Dept. of Architecture and Regional Planning, IIT Kharagpur, January 15-18, 2002.
33. B. K. Durai, Neelam Jain, P. K. Jain and I. P. Rao, "Level of Road Development Variation – A Factor Analysis Approach, International Conference on Environment, Locational Decisions and Regional Planning, North-Eastern Hill University, Shillong, 5-9, March, 2002.
34. P. K. Jain, B. K. Durai, Neelam Jain, "Planning And Prioritisation Methods for Rural Road in Jharkhand", Seminar on Development of Road Infrastructure in Jharkhand, Institution of Engineers, Dhanbad local center, Dhanbad, 29-30, June, 2002
35. P. K. Sikdar, P. K. Jain, Neelam Jain, "Trends of Road Transport in India", National Seminar on "Road Transportation in India-Emerging Trends and Technologies, ROTRAN 2002, IIT Kharagpur, September 12-13, 2002.
36. Pankaj Gupta, Neelam Jain and Sudhir Mathur, "GPS Technology and its Applications", The Asian GPS Conference, Indian International Center, New Delhi, 23-24, October, 2002, pp. 17-20.
37. Pankaj Gupta, Neelam Jain and Sudhir Mathur, "Application of GIS in the study of Narayanbagar Landslide-A Case Study", Map India 2003, 28-31 January, 2003
38. I. P. Rao, B. K. Durai, P. K. Jain and Neelam Jain, "Information System for Rural Road Network Planning- A Case Study", Map India 2003, 28-31 January, 2003
39. Neelam Jain, P. K. Jain, B. K. Durai and I. P. Rao, "Social Impact of Information Technology in India", National seminar on Role of IT in present scenario of globalization, RIT 2003, Central Mining Research Institute, Dhanbad, Jharkhand, 1-2, February, 2003.
40. P. K. Nanda, Neelam Jain, Arpana, P. K. Jain and B. K. Durai, "Environmental Impact Assessment of Urban Transport" in Hindi Seminar on "Urban Road and Pollution", CRRI, New Delhi, 19-20 September, 2003, pp 62-67.
41. Neelam Jain, P. K. Nanda, B. K. Durai and I. Prasada Rao, "Geographical Information System for Pavement Management System", Map Asia, Malaysia, 2003

42. Pankaj Gupta, Neelam Jain, Kishor Kumar and P. K. Sikdar, "Geographical Information System for Transportation Planning", Map Asia, Malaysia, 2003
43. P. K. Jain, Neelam Jain, A. M. Rao, Arpana and P. K. Nanda, "Core Network Planning – A Case Study", National Seminar on Integrated Development of Rural and Arterial Road Network for Socio-Economic Growth", IRC, 15-16 December, 2003, pp. I 35-42.
44. A. M. Rao, P. K. Jain, Neelam Jain and P. K. Nanda, "Software Development for Database Preparation for Rural Roads – A Case Study", National Seminar on Integrated Development of Rural and Arterial Road Network for Socio-Economic Growth", IRC, 1-2 November, 2003.
45. Neelam Jain, B. K. Durai, P. K. Jain and P. K. Sikdar, "Policies for Integrated Road and Ropeways in Hilly Regions – A Case Study on Uttaranchal State", Structural and Road Transportation Engineering (START), IIT Kharagpur, 3rd to 5th January, 2005
46. Neelam Jain, P.K. Jain, B. K. Durai, Arpana and P. K. Nanda, "Highway Patrol System – A Case Study of Haryana", International Workshop on ICT Applications for Sustainable Mobility, India Habitat Centre, Lodhi Road, New Delhi, India, January 24, 2005
47. Neelam Jain, P. K. Jain, B. K. Durai, P. K. Nanda, "GIS based database for National Highway Network in India", GISPLANET 2005, Estoril, Portugal, 30th May-2nd June, 2005
48. Neelam Jain, P. K. Jain, B. K. Durai, P. K. Nanda, "Accessibility based Approach for Planning of Rural Roads– A Case Study of Godda District", 15th International Road Federation Conference, Bangkok, 16-20 June, 2005
49. P. K. Jain and Neelam Jain, "Fuel Losses at Signalized Intersection", Kuwait first Remote Sensing Conference, Kuwait, 26-28 September, 2005.
50. Neelam Jain, P. K. Jain, B. K. Durai and P. K. Nanda, "GIS Based Data center for National Highways in India", Map Asia, 22-25 August, 2005, Indonesia.
51. B. K. Durai, Neelam Jain, P. K. Kanchan and P. K. Nanda, "Knowledge Management Principles for Development of Road Information System", Map Asia, 30th – 1st Feb. 2006.
52. Neelam Jain and P. K. Kanchan, "Need for Establishment of Data Center for National Highways", 9th International ESRI User Conference, 22-23 January, 2008.
53. P. K. Kanchan, Neelam J Gupta and M. N. Nagbhushana, "State of Art report on Commercial Vehicles Axle Loading on Indian Roads", National Get Together, 5-6 March, 2010.
54. Pankaj Gupta, Neelam J Gupta and Sudhir Mathur, "Narayanbagar Landslide – Its Impact on Society", IRF2010, Portugal, 25-28 May 2010

55. Neelam J Gupta, Mukti Advani, B. K. Durai and P. K. Kanchan, "Gramin Sadak Ka Nirman-Bho Adharit Takneek", Nirman Surabhi, National Workshop on Construction Materials-Vision 2030, Part 1, 12th -13th May 2010, pp g 1-5.
56. Neelam Jain, B. K. Durai, P. K. Kanchan, " GIS based National Highway Information System in India" , 15th HKSTS International Conference on Transportation and Urban sustainability, 11-14 December, 2010, Hong Kong.
57. Mukti Advani, B. K. Durai, Neelam J Gupta, "Role of pedestrian crossing facilities on the accessibility of villagers at two junctions of NH-8", International Seminar cum Exhibition on National Road Development Strategies & Road Safety, India Habitat Center, New Delhi, 14th -19th March, 2011
58. Neelam J Gupta, Mukti Advani, B. K. Durai and P. K. Kanchan, "National Highway Information System-Use of Automatic Traffic Counter cum Classifier", 1st Conference of Transportation Research Group India, Bangalore, December, 2011
59. Neelam J Gupta, Mukti Advani, B. K. Durai and Nishi Mittal, "Influence of Bypass Road on Road Safety – a case study of Khatauli City", Urban Mobility – Challenges, Solutions and Prospects, IIT Madras, July 13-14, 2012
60. Neelam J Gupta, Mukti Advani, Nishi Mittal, "Effect of bypass road on Traffic and Habitants – A case Study", Road Safety and Simulation – International Conference, Rome, Italy, October, 2013.
61. Neelam J Gupta and Nishi Mittal, "Effect of Bypass Road on Safety– A Case Study", 17th IRF World Meeting & Exhibition Riyadh, Saudi Arabia, November, 2013
62. Pankaj Gupta, Neelam J. Gupta and J. Sundaresan, "Landslide and its impact on society - A case study of Narayanbagar landslide", International Conference on Climate Change and the Himalayas: Current Status and Future Perspective (ICCCH-2013), CSIR-NISCAIR, New Delhi, India, 28-31 October 2013
63. Subhash Chand and Neelam J Gupta, "Analysis of Saturation Flow at Signalized Intersection in Urban Area, International Conference on Transportation Planning and Implementation Methodologies for Developing Countries 11th TPMDC, IIT Mumbai, 10th -12th December 2014.
64. Neelam J Gupta, Mukti Advani, B. K. Durai and S. Velmurugan, "Khatauli Bypass Road – Crash Analysis and Prevention", Road Safety and Simulation International Conference, Orlando, Florida, USA , October 6-8 , 2015 (Sent for Publication)
65. Neelam J Gupta, Mukti Advani, Nishi Mittal, "Effect of bypass road on Traffic and Habitants – A case Study", Road Safety and Simulation – International Conference, Rome, Italy, October, 2013.
66. Neelam J Gupta and Nishi Mittal, "Effect of Bypass Road on Safety– A Case Study", 17th IRF World Meeting & Exhibition Riyadh, Saudi Arabia, November, 2013

67. Subhash Chand and Neelam J Gupta, Analysis of Saturation Flow at Signalized Intersection in Urban Area, International Conference on Transportation Planning and Implementation Methodologies for Developing Countries 11th TPMDC, IIT Mumbai, 10th -12th December 2014.
68. Simran Kaur, Neelam J Gupta, Subhash Chand and E. Madhu, "Evaluation of Parking Facilities at Public Transport Terminal", Recent Advances in Traffic Engineering, RATE2015, 3-4 July 2015, SVNIT, Surat.
69. Shubham Sehgal, Neelam J. Gupta, Subhash Chand and S. Velmurugan, "Saturation flow of heterogeneous traffic at signalized intersection", 3rd Conference of the Transportation Research Group of India, Kolkata, CTRG2015, 17-20 December 2015.
70. Jasmeet Kaur, Neelam J.Gupta, Subhash Chand and Dr. E.Madhu, "Feeder Transport System Facilities at Public Transport Terminals – A Case Study of Delhi" , 3rd Conference of the Transportation Research Group of India, Kolkata, CTRG2015, 17-20 December 2015.
71. Subhash Chand, Neelam J Gupta and S. Velmurugan, "Development of Saturation Flow Model at Signalized Intersection for Heterogeneous Traffic", 14th World Conference on Transport Research, WCTRS2016, 10-15 July 2016, Shanghai, China (Accepted).
72. Neelam J Gupta, S. Velmurugan and Subhash Chand, "Estimation of Critical gap of Roundabout under Mixed Traffic Condition", 14th World Conference on Transport Research, WCTRS2016, 10-15 July 2016, Shanghai, China.(Accepted)
73. Neelam J Gupta, S. Velmurugan and Subhash Chand, "Capacity Estimation of Signalized Intersection for Heterogeneous Traffic", International Symposium on Enhancing Highway Performance (ISEHP16), 14-16 June 2016, Berlin, Germany(Accepted).