Minal Chandra, PhD
Senior Scientist, CSIR- CRRI, New Delhi
Minal.crri@nic.in

EDUCATION

- ➢ **Doctor of Philosophy in Engineering (Ph.D.)** *(Awarded: October, 2020)*
  Academy of Scientific and Industrial Research (AcSIR), CSIR- Central Road Research Institute, India
  Thesis Title: "*Integrated Travel Demand Modelling for Evaluation of Sustainable Transport System*"

- ➢ Master of Technology (M.Tech.)- Transportation Engineering, 2012-2014,
  Academy of Scientific and Industrial Research (AcSIR), CSIR- Central Road Research Institute, India
  Thesis Title: "*Mode Choice Analysis Using Neuro- Fuzzy Model*"

- ➢ Bachelor of Technology (B.Tech)
  Civil Engineering, 2007-2011
  School of Engineering**,** Cochin University of Science & Technology, India.
  Thesis Title: "*Stone Matrix Asphalt Stabilized with Polypropylene Fiber*"

RESEARCH and EMPLOYMENT EXPERIENCE

- ❖ **June, 2020 to present**: Senior Scientist, Transport Planning & Environment Division,
  CSIR-Central Road Research Institute (CSIR-CRRI) New Delhi, India
- ❖ **October, 2022 to September 2024:** Postdoc Researcher, EV Research Center, ITS, UC Davis, CA, USA
- ❖ **2016 to 2020:** Scientist, Transport Planning & Environment Division,
  CSIR-Central Road Research Institute (CSIR-CRRI) New Delhi, India
- ❖ **2012 to 2016:** Trainee Scientist, Transport Planning & Environment Division,
  CSIR-Central Road Research Institute (CSIR-CRRI) New Delhi, India
- ❖ **2011-2012:** Assistant System Engineer, Tata Consultancy Services, India

SELECTED PUBLICATIONS

- ▪ Parés, F; Busch, P.; **Chandra, M**. and Tal, G. (2024), "Shifting manufacturing: Electric Vehicle Supply Strategy using the Model for International EV Trade", Journal of Cleaner Production (Accepted) https://doi.org/10.1016/j.jclepro.2024.144357
- ▪ Busch, P., Parés, F; **Chandra, M**. and Tal, G.(2024), "Future of Global Electric Vehicle Supply Chain: Exploring the Impact of Global Trade on Electric Vehicle Production and Battery Requirements", Transport Research Record, https://doi.org/10.1177/03611981241244797
- ▪ Chandra, M. (2022) "Investigating the impact of policies, socio-demography and national commitments on electric vehicle demand: Cross-country study", Journal of Transport Geography, 103 (2022) https://doi.org/10.1016/j.jtrangeo.2022.103410
- ▪ Vansola, B, **Minal** *, Shukla, R. (2022), "Set cover model-based optimum location of electric vehicle charging stations", Current Science, Vol. 123(12), 10.18520/cs/v123/i12/1448-1454
- ▪ Saiyad, G.*, **Minal**, Rathwa, D, (2022), "Exploring determinants of feeder mode choice behavior using Artificial Neural Network: Evidences from Delhi metro", Physica A: Statistical Mechanics and its Applications, Vol. 598, pp. 127363. https://doi.org/10.1016/j.physa.2022.127363
- ▪ **Minal***; Gajrani, K.K and Ch. Ravi Sekhar, (2018), "Impact of road rationing on modal shift and transport sustainability in Delhi, India", Transport, 175(1):12–21, DOI: 10.1680/jtran.18.00023
- ▪ **Minal***;   Ch., RaviSekhar; Madhu, E. (2022), "Estimation of Value of Travel Time based on Mixed Land Use of Trip Origin and Destination", Case Studies on Transport Policy, Vol. 10(2), pp. 1207-1222. https://doi.org/10.1016/j.cstp.2022.04.009

- Bhatt, D., **Minal***, (2022), "GIS and Gravity Model-Based Accessibility Measure for Delhi Metro", Iranian Journal of Science and Technology, Transactions of Civil Engineering. https://doi.org/10.1007/s40996-021-00795-5
- **Minal***; Ch. Ravi Sekhar and Errampalli Madhu (2021), "Multimodal Travel Choice Determinants in Context of Travel Time Reliability", ICE Proceedings Transport . DOI:https://doi.org/10.1680/jtran.20.00091
- Saiyad, G., **Minal**, Kumar, R., Rathwa, D, (2021), "Assessment of Transit Accessibility Through Feeder Modes and Its Influence on Feeder Mode-Choice Behaviour", AJSE, https://doi.org/10.1007/s13369-021- 06082-9
- Chandra, S. and **Minal***, (2019), "Challenges of Electric Vehicle Adoption in India", Indian Highways, Vol.47(8),pp.42-45
- **Minal***; Ch. Ravi Sekhar and Errampalli Madhu, (2018), "Development of Neuro-Fuzzy based Multimodal Mode Choice Model for Commuter in Delhi", IET Intelligent Transport Systems, Vol.13(2), pp. 243-251, DOI: 10.1049/iet-its.2018.5112
- **Minal*** and RaviSekhar, Ch., (2018), "Web Survey Data And Commuter Mode Choice Analysis Using Artificial Neural Network", International Journal for Traffic And Transport Engineering, Vol. 8(3): Pp. 359-371, DOI:http://dx.doi.org/10.7708/ijtte.2018.8(3).08
- **Minal*** and Ch. Ravi Sekhar, (2016), "Commuter's Sensitivity in Mode Choice: an Empirical Study of New Delhi", Journal of Transport Geography, Elsevier, Vol 57C, 2016, Pp. 207-217 https://doi.org/10.1016/j.jtrangeo.2016.11.001
- Ch. Ravi Sekhar, **Minal*** and Errampalli Madhu, (2016), "Multimodal Choice Modeling Using Random Forest Decision Trees", International Journal for Traffic And Transport Engineering, Vol 6(3), Pg.356-367, *DOI: 10.7708/ijtte.2016.6(3).10*
- **Minal*** and Ch. Ravi Sekhar, (2014), "Mode Choice Analysis: The Data, The Models and Future Ahead", International Journal for Traffic and Transport Engineering, Vol 4(3), Pg.269-285. DOI:*http://dx.doi.org/10.7708/ijtte.2014.4(3).03.*

Corresponding Author

AWARDS AND HONOURS

- ✓ **Government of India-Department of Science & Technology, AWSAR Award 2018**: The Ph.D. popular science story was chosen for AWSAR award 2018
- ✓ The Fellow is a CSIR-CRRI nominated member in the **Bureau of Indian Standards (BIS)** committee on "Transport & Logistics Services" - SSD-II-1

SPONSORED RESEARCH PROJECTS and MAJOR COLLABORATIONS

- Optimum Location of Charging Infrastructure for Electric Vehicles, Sponsor: CSIR-CRRI (2020-2022)
- Development of Sustainable Integration Index (SII) for Public Transport Modes, Sponsor: Delhi ResearchImplementation and Innovation (DRIIV) of Delhi Science & Technology Cluster (2021-2022)
- Development of Trip generation manual for Indian Cities, Sponsor: Council of Scientific and IndustrialResearch, India (2020-2022)
- Development and Application of the Technologies for Sustainable Transportation (SUSTRANS), 12th Five Year Plan Network Project (2016-2017)
- MEGACITY LOGISTICS: Metric Tools & Measures for Sustainability (MEGALOG), Sponsor: WorldBank; TU Delft, Netherlands and TNO Netherlands (2018-2019)
- Multimodal Travel Demand Model for Evaluation of Sustainable Transport System, Sponsor: CSIR-CRRI (2017-2019)
- Traffic Studies for Identified Intersections Improvements at Vadodara city, Sponsor: Vadodara MunicipalCorporation (2018)

- Quantification of the Reduction of Air Pollution Due to Vehicular Traffic on Eastern Peripheral Road,Sponsor: Department of Environment, Government of NCT Delhi (2018-2019)
- Comprehensive Mobility Plan for Ahmedabad City, Sponsor: Ahmedabad City Police (Traffic) (2019-2020)
- Traffic Study for Feasibility of Mineral Transportation due to Expansion of Guali Iron Ore Mine, Odisha, Sponsor: The Odisha Mainlining Corporation Ltd, Government of Odisha (2021)