

## Curriculum Vitae (CV)

1. Name: Dr. Ramesh Chandra Majhi  
2. Designation: Principal Scientist  
3. Address: Room No. N106, Traffic Engineering & Safety  
Division, CSIR-Central Road Research Institute  
(C.R.R.I.), Mathura Road New Delhi - 110025, INDIA  
110025  
Contact: +91-9337290688 (Mob)



4. Areas of Interest: Traffic Modelling; Alternative Fuel Vehicles; Traffic Safety; Transport Planning

5. Educational Qualification:

| Degree | Year | Subject                            | University/Institution                  | % of marks |
|--------|------|------------------------------------|---|------------|
| PhD    | 2024 | Transportation Engineering         | The University of Auckland, New Zealand | NA         |
| M.Tech | 2014 | Transportation Systems Engineering | Indian Institute of Technology, Mumbai  | 88.7       |
| B.Tech | 2012 | Civil Engineering                  | V.S.S.U.T., Burla                       | 80         |

6. Professional Experience – in reverse chronological order

| From      | To        | Name of the Institute/Lab  | Position Held       |
|-----------|-----------|--|---------------------|
| Jul' 2025 | Till Now  | CSIR-Central Road Research Institute, New Delhi                    | Principal Scientist |
| Oct' 2022 | Jun' 2023 | The University of Auckland, New Zealand                            | Project Associate   |
| Jul' 2021 | Jul' 2025 | CSIR-Central Road Research Institute, New Delhi                    | Senior Scientist    |
| Jul' 2016 | Jul' 2021 | CSIR-Central Road Research Institute, New Delhi                    | Scientist           |
| 2014      | 2016      | Mukesh Patel School of Technology Management & Engineering, Mumbai | Assistant Professor |

7. Membership to Professional Bodies

- i. Life Member of Indian Roads Congress (IRC)
- ii. Life Member of Transport Research Group (TRG), India

8. Achievements

a. Professional Recognition/ Award/ Prize/ Certificate, Fellowship

| Name of Award                                   | Awarding Agency  | Year |
|---|--|------|
| CIDC Vishwakarma Award under Scientist Category | CIDC (Construction Industry Development Council),<br>India | 2026 |
| PhD Doctoral Scholarship                        | Ministry of Business, Innovation & Employment, New Zealand | 2019 |

|                                     |                            |           |
|-------------------------------------|----------------------------|-----------|
| Research and Teaching Assistantship | The University of Auckland | 2019-2023 |
| All India Rank of 846               | GATE - 2012                | 2012      |

**b. Research Projects:**

| S. No | Title   | Cost in Lakh | Duration | Role (PL/Co-PL) | Agency   |
|-------|---|--------------|----------|-----------------|--|
| 1.    | Exploring the Impact of Emergency Evacuation caused by Flooding on an Established Transportation Network in a Level landscape                       | Rs. 15.8     | 2years   | PL              | Council of Scientific and Industrial Research, India |
| 2.    | Investigation of strategic placements of WPT systems for battery electric buses on selected corridors.  | Rs. 16.52    | 1.5years | PL              | Central Road Research Institute, New Delhi           |
| 3.    | Effectiveness Evaluation of the Speed Calming Measures using Thermal Sensor Technology through Artificial Intelligence                              | Rs. 9.77     | 1year    | PL              | Pixuate (Cocolabs), Karnataka                        |
| 4.    | Road Safety Assessment of 6668 Kms of State Highways and Major District Roads in the State of Odisha  | Rs. 116.0    | 2years   | Co-PL           | PWD, Odisha, India                                   |
| 5.    | Comprehensive traffic management plan for Bharatpur City, Rajasthan   | Rs. 82.6     | 6months  | Co-PL           | Urban Improvement Trust, Bharatpur, Rajasthan        |
| 6.    | Pre-Opening Stage Road Safety Audit of Dwarka Expressway (Package IV) (Km 19/700 to Km 28/360)  | Rs. 110.55   | 1Year    | Team Member     | National Highway Authority of India (NHAI), India    |
| 7.    | Driver Decision Modelling for safety Evaluation at the onset of Yellow light Transition   | Rs. 16       | 1year    | PL              | Central Road Research Institute, New Delhi           |
| 8.    | Safety Assessment of Speeding Vehicles on J.P. Ganga Path near A1-P1 Span of J.P. Setu (Rail-cum-Road Bridge) at Digha, Patna in the State of Bihar | Rs. 6.37     | 6months  | PL              | BSRDCL, Bihar  |
| 9.    | Proof checking of Traffic Survey and Impact Assessment of Development of East Delhi Hub, Karkardooma, New Delhi                                     | Rs. 15.0     | 1year    | Co-PL           | National Building Construction Corporation, India    |
| 10.   | Development of Comprehensive Mobility (Traffic and Transportation Systems) Plan   | Rs. 80.0     | 2years   | Co-PL           | District Development Authority, Ghaziabad, India     |

|     |   |           |        |       |   |
|-----|---|-----------|--------|-------|---|
|     | for Ghaziabad City  |           |        |       |   |
| 11. | Improvement of Traffic Management Plan and Geometric Design of Six Entry and Exit of Noida-Greater Noida Expressway | Rs. 15.0  | 2years | Co-PL | New Okhla Industrial Development Authority, New Delhi |
| 12. | Road safety audit of selected stretches in the state of Chhattisgarh under Ambikapur Circle                         | Rs. 9.0   | 1year  | PL    | State Public Works Department, Chhattisgarh, India    |
| 13. | Road safety audit of State Highways in the State of Bihar- Package 3  | Rs. 38.76 | 1year  | Co-PL | State Public Works Department, Bihar, India           |

### c. Research Publications (Journals):

- i. Majhi, R. C., Ranjitkar, P., Sheng, M., Wen, L., Covic, G., Wilson, D., & Gkritza, K. (2026). Socioeconomic and spatial determinants of dynamic inductive power transfer energy system for charging electric vehicles: Evidence from New Zealand. *Cities*, 175, 107176.
- ii. Simunic, M., Sheng, M. S., Wen, L., Majhi, R. C., Ranjitkar, P., Du, B., Kieu, M., Sharp, B., & Wilson, D. (2026). Driving adoption: Discrete choice modeling of consumer valuation for wireless electric vehicles charging in Aotearoa, New Zealand. *Travel Behaviour and Society*, 43, 101220.
- iii. Reid, G., Wen, L., Sharp, B., Sheng, M. S., Qi, L., Talwar, S., Kennedy, J., & Majhi, R. C. (2025). Modelling future pathways for industrial process heat decarbonisation in New Zealand: The role of green hydrogen. *Sustainability*, 17(23), 10812.
- iv. Majhi, R. C., Ranjitkar, P., & Sheng, M. S. (2024). Analyzing electric vehicle users' intention to use dynamic wireless charging facilities: A study from New Zealand. *Transportation Research Part F: Traffic Psychology and Behaviour*, 102, 125–141.
- v. Majhi, R. C., Ranjitkar, P., & Sheng, M. S. (2022). Optimal allocation of dynamic wireless charging facility for electric vehicles. *Transportation Research Part D: Transport and Environment*, 111, 103461.
- vi. Majhi, R. C., Ranjitkar, P., & Sheng, M. S. (2022). Assessment of dynamic wireless charging based electric road system: A case study of Auckland motorway. *Sustainable Cities and Society*, 84, 104039.
- vii. Majhi, R. C., Ranjitkar, P., Sheng, M., Covic, G. A., & Wilson, D. J. (2021). A systematic review of charging infrastructure location problem for electric vehicles. *Transport Reviews*, 41, 432–455.

- viii. Majhi, R. C., & Senathipathi, V. (2021). Analyzing driver's response to yellow indication subjected to dilemma incursion under mixed traffic condition. *Journal of Traffic and Transportation Engineering (English Edition)*, 8, 107–116.
- ix. Majhi, R. C. (2017). Field saturation flow measurement using dynamic passenger car unit under mixed traffic condition. *International Journal for Traffic and Transport Engineering*, 7(4), 475–486.

d. **Research Publications National & International Conferences):**

- i. Majhi, R. C., & Velmurugan, S. (2019). Analyzing driver's response to yellow indication subjected to dilemma incursion: An econometric approach. In *World Conference on Transport Research* (pp. 1111–1124). IIT Bombay. Elsevier Procedia.
- ii. Majhi, R. C., Shukl, A., Rao, M., Gupta, K., (2025). Optimal allocation of stationary wireless charging facilities for battery electric buses. In *8<sup>th</sup> Conference on Transportation Research Group of India (CTRG 2025)*. IIT Guwahati.
- iii. Sharma, H., Majhi, R.C., Ravinder, K., (2025). Road Safety Audit of Bhadrak Chandabali road (Bhadrak Bypass- Chandabali) (SH-09) from Ch. 00+000 to 51+358 in the State of Odisha at O&M stage. In *8<sup>th</sup> Conference on Transportation Research Group of India (CTRG 2025)*. IIT Guwahati.
- iv. Prajapati, M., Majhi, R. C., Karar, V., Gupta, K., Senathipathi, V., (2025). Investigating driver behavior under distracted driving conditions using a Vienna test system. In *International Conference on Data Analytics and Management (ICDAM 2025)*. London, UK.
- v. Majhi, R. C., Ranjitkar, P., & Sheng, M. (2024). Assessing the impact of glare on the visibility of signboards under varying lighting conditions. In *International Conference on Data Analytics and Management (ICDAM 2025)*.
- vi. Majhi, C.R., and Mathew, V.T., (2014). "Saturation flow Estimation using Dynamic Passenger Car Unit at Signalized Intersection". Colloquium on Transportation Systems Engineering and Management (CTSEM), NIT Calicut, India, May 12-13
- vii. *Sharma, H., Majhi, R.C., Ravinder, K., (2025). Road Safety Audit of Seragarh Nilagiri Kaptipada Udala Baripada Medinapur border road (SH-19) from Ch. 00+000 to 67+787 in the State of Odisha at O&M stage. 3<sup>rd</sup> International Conference Transportation Infrastructure Projects: Conception to Execution.*
- viii. Misna, Majhi, R.C., Jangral, A., (2025). Econometric and Descriptive Analysis of Charging Infrastructure Requirements and Operational Performance of Battery Electric Buses at Selected Depot in Delhi. *Transportation Research Efforts for Ecological Sustainability Conference (TREES)*.

- ix. Choudhary, H., Niazuddin, Sharmila, RB., Majhi, R.C., (2026). Analysis of Operational Environment and Economics Comparative Feasibility Study of CNG vs. EV Bus Services in Delhi City. *17<sup>th</sup> World Conference on Transport Research - WCTR 2026 Toulouse 6-10 July 2026.*

e. National / International training programs organized

| Sl. No. | Training Program  | Place of Training    | Duration                           | Role                        |
|---------|---|----------------------|------------------------------------|-----------------------------|
| 1.      | Training program on “Road Safety Audit and other Road Safety Engineering Related Activities”  | Raipur, Chhattisgarh | February 27th – 29th, 2024         | Faculty Member              |
| 2.      | Workshop on “Naturalistic Driving Studies (NDS): Progress and Prospects”  | IIT Jammu            | 30th-31st August, 2024             | Organizing Committee Member |
| 3.      | Workshop on Application of AI and data Science in Transportation Engineering  | IIT Patna            | 20th September, 2024               | Organizing Committee Member |
| 4.      | Certification Course on “Road Safety Audit and Other Road Safety Related Aspects”   | CRRI, New Delhi      | November 15th -30th, 2023          | Faculty Member              |
| 5.      | 15day Skill Development Certificate Course on "Road Safety Audit and other Road Safety Engineering related aspects" for the Highway Engineers/Transportation Consultants-13 <sup>th</sup> Batch | CRRI, New Delhi      | April 15th – April 30th, 2024      | Faculty Member              |
| 6.      | 15day Skill Development Certificate Course on Road Safety Audit and other Road Safety Engineering related aspects for the Highway Engineers Transportation Consultants 14th Batch               | CRRI, New Delhi      | November 18th - December 3rd, 2024 | Faculty Member              |
| 7.      | Planning for Sustainable Transport System for Smart Cities  | CRRI, New Delhi      | 19th to 21st March 2024            | Faculty Member              |
| 8.      | Electrical Mobility: Optimizing EV Charging Infrastructure  | CRRI, New Delhi      | 1st September 2023                 | Faculty Member              |
| 9.      | Training Programme on “Traffic Engineering and Road Safety Audit”   | CRRI, New Delhi      | 29th April – 13th May 2019         | Faculty Member              |
| 10.     | Customized Training Program on Road Safety Audit for the Engineers of Public Works Department, Tripura  | Agartala, Tripura    | Feb’ 26th – March 2nd, 2019        | Faculty Member              |
| 11.     | Training program on Road safety Audit and other aspects of Road Safety and Traffic Engineering for officers of U.P.P.W.D.   | Lucknow, U.P         | Jan’ 28th – Feb’ 1st , 2019        | Faculty Member              |

|     |   |                     |                          |                |
|-----|---|---------------------|--------------------------|----------------|
| 12. | Certification Course on "Road Safety Audit and Other Road Safety Related Aspects  | CRRI, New Delhi     | Dec' 10th – 24th , 2018  | Faculty Member |
| 13. | Skill development on Road Safety Audit and other Road Safety Engineering related activities for Odisha Works Department (OWD) Engineers | Bhubaneswar, Odisha | Oct' 27th – 31st, 2018   | Faculty Member |
| 14. | Certification Course for Road Safety Auditors for Odisha Work Department (OWD) Engineers  | Bhubaneswar, Odisha | August 25th – 29th, 2018 | Faculty Member |
| 15. | Training Program on "Traffic Engineering and Road Safety Audit",  | CRRI, New Delhi     | July 16th – 20th, 2018)  | Faculty Member |

#### f. Invited Lectures and Faculty Roles

- 2024 - Delivered research insights and outlined collaborative future research plans under MoU between CSIR-CRRI and IIT Hyderabad.
- 2024 - Delivered talk on Data-Driven Solutions for Road Safety in Assam during TRG Foundation Day Workshop at IIT Guwahati.
- 2024 - Panelist at Zero Emission Urban Freight Workshop, organized by IIT Madras / India Habitat Centre, New Delhi, in the.
- 2024 - Organizer & Presenter, Naturalistic Driving Study Workshop, IIT Jammu.
- 2025 - Delivered talk on Leveraging Optimization Models for Smarter Mobility and Green Energy Systems, at Gurobi Days, Delhi.
- 2025 – panelist for “Emerging ITS Technologies for Highway Design” at 1<sup>st</sup> ITS India Congress, organized by IIT Hyderabad
- 2025 – Panellist for “Urja Path – Electric Mobility & the Future of Highways” at MargShakti 2025 Industry Conclave on Data-driven Mobility and Infrastructure Innovation, organized by IIT BHU.
- 2025 - Delivered Lecture on “Investigating the feasibility of wireless charging facilities for BEB operation in New Delhi” at Workshop on “Electrification of Heavy Vehicles”, organized by IIT Tirupati
- 2025 – Invited lecture on “Smart Mobility”, at **KINETIX** “*Change in Motion, Change in Innovation, organized by KIIT, Bhubaneswar*

#### g. Any Other information

Involved in several research and consulting projects related to traffic safety and transportation planning, serving as PI or Co-PI for both state governments and private industries. These projects focused on road safety across state and national highways in India, where I conducted in-depth investigations and produced comprehensive reports. Previously, I contributed to a multidisciplinary project in New

Zealand, where we developed, tested, and investigated inductive power transfer pads for electric vehicles. At present, I am also involved in a multi-institutional project aimed at understanding the logistics of electric vehicles in the light commercial vehicle (LCV) sector. This project explores both the charging facility requirements and users' perceptions of owning an electric LCV. Notable appointments and contributions include:

- Selection as a panel member for the Transit Cooperative Research Program (TCRP) H-62: *Innovations for Equitable Rural Transit Economic Benefit Analyses* under the TRB Project Review Committee.
- Appointment as a sub-group committee member for developing the IRC manual on “Electrical Mobility, Charging, and Infrastructure.”
- A faculty member for the Road Safety Certification Program, approved by the NHAI and IRC.

#### 9. Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience. I understand that any wilful misstatement described herein may lead to my disqualification or dismissal, if engaged.



(Dr. Ramesh Chandra Majhi)