

RESUME**SACHIN GOWDA M K****Senior Scientist**

#E189, Pavement Evaluation Division,
Central Road Research Institute (CSIR-CRRI),
Delhi–Mathura Road, New Delhi, 110025.

Mob. No.: +91-9741800461

Email ID: sachin08.crri@csir.res.in, sgmk.crri@gmail.com

Google Scholar: <https://scholar.google.com/citations?hl=en&user=TCw5CKUAAAAJ>

Linkedin: <https://www.linkedin.com/in/sachin-gowda-m-k-855959166/>

**Educational Qualifications**

Degree	Institute	CGPA	Year
Ph.D. (Civil Engineering)	IIT Roorkee	9.07/10	Pursuing
M.Tech.(Highway Technology)	RASTA-Center for Road Technology, Bengaluru.	9.51/10 (<i>Gold Medalist</i>)	2018
B.E. (Civil Engineering)	P.E.S. College of Engineering, Mandya.	9.38/10	2016

Professional Experience

Position	Institute/Organization	Nature of Projects	Year
Scientist - D	Central Road Research Institute (CSIR-CRRI), New Delhi.	Research, Consultancy, and Teaching.	Dec. 2024 - till date
Scientist - C	Central Road Research Institute (CSIR-CRRI), New Delhi.	Research, Consultancy, and Teaching.	Dec .2020 – Dec .2024
Assistant Engineer (Highways)	SAI Consulting Engineers Pvt. Limited. (SYSTRA)	Detailed Design, DPR Preparation.	June 2019 – Nov. 2020
Deputy Engineer	LEA Associates South Asia Pvt. Limited (LASA).	Road Asset Management Systems.	Aug. 2018 - June 2019

Honours & Awards

- ✓ Recipient of the **Bihar PWD Medal for Best Paper on Road Research** at the 84th Annual Session of IRC held at Bhubaneswar (Odisha) from 7th to 10th November 2025.
- ✓ Recipient of the **Anusandhan National Research Foundation (ANRF) International Travel Scheme (ITS) grant** for attending the 105th TRB Annual Meeting 2026, Washington, D.C., USA (11-15 January 2026).
- ✓ Received the **Gold Medal** for securing the highest CGPA in all post-graduation semesters at the university level.

Areas of Interest

- ✓ Pavement Material Characterization, Design and Recycling
- ✓ Self-Healing Pavements and Full Depth Recycling (FDR) Pavements
- ✓ Non-Destructive testings, Artificial Intelligence and Machine Learning for Pavement Engineering
- ✓ Road Asset Management systems (RAMS) and Database Management Systems (DBMS)
- ✓ Airfield Pavements, ACR-PCR Method of Airfield Evaluation

Research Projects (Completed/Ongoing) at CRRI

Sl. No.	Project Title	Sponsoring Agency	Project No. & Budget
1.	Study on Self-healing Performance of Bituminous Mixes using Microcapsule Encapsulated Rejuvenators (Principal Investigator)	CSIR-CRRI	OLP - 0647 (16.10 Lakhs)
2.	Laboratory and Field Assessment of FDR Mixes: Effect of Binder Types and Quality Control Parameters (Principal Investigator)	CSIR-CRRI	OLP - 0672 (30.74 Lakhs)
3.	Assessing the Suitability of Imperial Smelting Furnace Slag (ISFS) as a Construction Material in Flexible and Rigid Pavements. (Co. Principal Investigator)	CSIR-CRRI	OLP - 0648 (10.49 Lakhs)
4.	Performance Evaluation of Road Constructed using Brick Aggregates in Sub-Base and Foam Bitumen in Base Layers (Principal Investigator)	NHIDCL, Govt. of India	GAP-4707 (33.00 Lakhs)
5.	Performance Evaluation of PMGSY Roads Constructed Using New Technology, Full Depth Reclamation (FDR) with Cement and Additive (Principal Investigator)	NRIDA, Govt. of India	GAP - 4762 (46.88 Lakhs)
6.	Development of Performance-Based Warrants for Prevention of Surface Courses under Overloading Conditions. (Co. Principal Investigator)	CSIR	RDSF00007 (11.00 Lakhs)
7.	Development of Pavement Structural Health Index for Network-Level Evaluation of Flexible Pavements (Team Member)	CSIR-CRRI	OLP - 0634 (18.50 Lakhs)
8.	Delhi Cluster-“Delhi Research Implementation and Innovation” (DRIIV), Theme Solid Waste Management, WP-6 Use of construction & demolition wastes, incinerated residues in road construction (Team Member)	Principal Scientific Advisor (PSA), Government of India.	GAP - 4667 (5.77 lakh)
9.	Development of Fatigue Performance Model for the Full-Depth Recycling Pavement Layer (Team Member)	CSIR	FBR – 040301 (76.00 Lakhs)
10.	Development of Performance Prediction Models for Geosynthetic-Reinforced Pavements (Team Member)	Ministry of Textiles	GAP – 4791 (231.0 Lakhs)
11.	Quantitative Assessment of Milling-Induced Structural Changes in Asphalt Pavement for Improved Overlay Design (Team Member)	CSIR	RDS000010 (10.85 Lakhs)
12.	Field Test Section of Asphalt-Rubber Pavement System: Design, Construction and Performance Monitoring (Team Member)	NHAI & IIT Titupati	GAP – 4827 (51.43 Lakhs)
13.	Development of Thin Bituminous Overlay Mixes for Indian Roads	CSIR	FBR – 040404 (71.00 Lakhs)

*OLP = Other lab Projects (Funded by CSIR), *GAP = Grant-in-Aid Projects (Funded by Central Government Organizations), *SSP = Sponsored Research Projects (Funded by Industries/State Agencies), *FBR = Focus Based Research

Consultancy/Service-Based Projects (Completed/Ongoing) at CRR I

Sl. No.	Project Title	Sponsoring Agency	Project No. & Budget
14.	Evaluation of Pathankot to Amritsar section of NH-15 (KM 6+082 to 108+502) for Strengthening Requirements and Needed Remedial Measures. (Principal Investigator)	NHAI	SSP-4848 (59.00 Lakhs)
15.	Quality Control Supervision and Post Construction Assessment of the wearing course of the Race Track at Buddh International Circuit, Greater Noida. (Co. Principal Investigator)	Solitaire Engineerin Corporation Ltd.	SSP - 4727 (11.80 Lakhs)
16.	Comprehensive Pavement and Geotechnical Assessment to Recommend Rehabilitation Measures for NH-208 and NH-108B in Tripura (Co. Principal Investigator)	NHIDCL	SSP - 4820 (165.20 Lakh)
17.	Performance Evaluation of Epoxy Asphalt Overlay on PQC at Mumbai Pune Expressway (Chainage from km 34+500 to km 38+390). (Co. Principal Investigator)	SSPL-KIBPL (JV)	SSP - 4770 (41.30 Lakhs)
18.	Condition Assessment Using Modern Data Collection Techniques and Preparation of Annual Maintenance Plan using HDM-4 of Odhisa PWD Roads	Odisha Works Department.	SSP - 4704 (1588 Lakhs)
19.	Investigation, design, and technical guidance for rehabilitation of frequently damaged roads (SH and MDR) in 11 districts of Andhra Pradesh (436 KM)	Roads and Building Department, Govt of Andhra Pradesh.	SSP - 4852 (177 Lakhs)
20.	Failure Investigation of Bagrakot-Kafer section and Kafer – Lavamore section of NH-717A in the state of West Bengal and provide remedial measures.	NHIDCL	SSP - 4851 (49.56 Lakhs)
21.	Recycling of Ghazipur Municipal Solid Wastes for Road Embankment and Subgrade Construction	East Delhi Municipal Corporation (EDMC New Delhi.	SSP - 4662 (17.70 Lakhs)
22.	Design, Construction, Supervision, and Pavement Performance Evaluation of Road constructed by using Red Mud.	Hindalco Industries Ltd.	SSP - 4706 (47.20 Lakhs)
23.	External technical/Quality and Safety Audit of the 16-lane carriageway in the stretches of UER-II (NH-344m & NH-344N) and Dwaraka Expressway (NH-248Bb), total 8 construction Packages under PIU, NHAI, Dwaraka, New Delhi	NHAI	SSP - 4731 (224.2 Lakhs)
24.	Technical evaluation of Pavement Classification Number (PCN) and strengthening of HAL Airport (Runway, Taxiway, and Aprons), Bengaluru. (Principal Investigator)	HAL, Bengaluru	SSP - 4760 (41.30 Lakhs)
25.	Development of Airfield Pavement Management System (APMS) for Ten Airports of India	Consultancy Project (Member)	CNP - 2507 (531 lakhs)
26.	Capsule on Airfield Engineering	Consultancy Project (Member)	CNP-2692

Sl. No.	Project Title	Sponsoring Agency	Project No. & Budget
27.	Creation of Research and Development Facilities and a Center of Excellence in Highway Sector for BSRDC, Patna Bihar.	Consultancy Project (Member)	CNP - 2711 (70.80 Lakhs)
28.	Review of DPR's of Karnataka, Maharashtra, Manipur and Sikkim States for NRIDA	Consultancy Project (Member)	CNP - 2742 (10.60 Lakh)
29.	Review of DPR's of Maharashtra, Sikkim, Pondicherry and Uttarakhand States for NRIDA	Consultancy Project (Member)	CNP - 2751 (6.50 Lakh)
30.	Customized Training Programme on "Capsule on Airfield Engineering", for the officers of BRO, December 20-24, 2021.	Consultancy Project (Member)	CNP – 2770 (10.03 Lakhs)
31.	Functional and Structural Evaluation of DND Flyway and Mayur Vihar link road for Maintenance and Rehabilitation Measures	Consultancy Project (Member)	CNP - 2778 (37.76 Lakhs)
32.	Design of Flexible pavement for New Transport Nagar, Aligarh, Uttar Pradesh	Consultancy Project (Project Leader)	CNP - 2820 (14.16 Lakhs)
33.	Evaluation of Delhi PWD Bituminous Roads for Strengthening Requirements	Consultancy Project (Project Leader)	CNP - 2818 (7.08 Lakhs)
34.	Customized online training programme on various topics for the officials of NRIDA (Working under PMGSY projects)	Consultancy Project (Member)	CNP – 2846 (15.57 Lakhs)
35.	Technical Audit of Indore Gujarat Sections of NH-47 in MP State	Consultancy Project (Member)	CNP - 2826 (59.00 Lakhs)
36.	Customized Training on Highway Development and Management Tool (HDM-4) at Road Development Authority, Srilanka	Consultancy Project (Member)	CNP - 2778 (36.86 Lakhs)
37.	Evaluation of Pavement Design for NH-08 in the State of Tripura.	Consultancy Project (Project Leader)	CNP - 2931 (5.90 Lakhs)
38.	Evaluation of NDMC Roads for suggesting recommendations for suitable maintenance and rehabilitation measures and Third party construction quality supervision works under the jurisdiction of SE (Road) North & South	Consultancy Project (Member)	CNP - 2990 (88.50 Lakhs)
39.	Validation of E-NEXCO Eye Network Survey Vehicle System	Consultancy Project (Member)	CNP - 2758 (8.26 Lakhs)
40.	Calibration of Fifth Wheel Bump Integrator (STECO-246)	TSP (Member)	TSP-1207 (1.49 Lakhs)
41.	Calibration of Fifth Wheel Bump Integrator (STECO-342)	TSP (Member)	TSP-1207 (1.49 Lakhs)

Sl. No.	Project Title	Sponsoring Agency	Project No. & Budget
42.	Review of Detailed Project Reports for NRIDA	Consultancy Project (Member)	CNP - 2912

Projects involved in Consulting firms

Sl. No.	Project Title	Organization
1.	Consultancy Services for Preparation of Feasibility Study and Detailed Project Report for Selected Corridors of State Highways in Uttarakhand under Uttarakhand State Highway Improvement Project (USHIP) Package No.:1 (Kumaun Zone); Total Length 345.065 Kms.	SYSTRA
2.	Detail Design and Engineering Consultancy services for Widening and Upgradation to 2 Lane with Paved Shoulder configuration and Geometric Improvements from, KM 166+000 TO KM 208+000 (Package-4) on Aizawl – Tuipang section of NH-54 in the state of Mizoram on Engineering, Procurement, and Construction (EPC) mode with JICA loan assistance	SYSTRA
3.	Preparation of Detailed Engineering Design and drawing for Railway and Tunnel access roads under ETIHAD Railway PKG-2A & 2D with AREMA code	SYSTRA
4.	Assam Roads Asset Management System (A World Bank Project), ARAM Sunder PWRD Assam	LASA
5.	Consultancy Services to Develop and Establish Web GIS Based Road Asset Management System for Mizoram PWD, Mizoram.	LASA
6.	Transport Infrastructure Management System (TIAMS), Addis Ababa, Ethiopia.	LASA
7.	Program Coordination and Management Consultancy for Asom Mala (Task 2 - Road Network Data Collection for SH & MDR Network Including Updation of Data in RAMS and Preparation of Multi-Year Asset Management Plan), Assam.	LASA
8.	Development of Road Management System (RAMS) and Preparation of Road Maintenance Plan for the Andhra Pradesh Road Network	AECOM

Patents Filed

Sl. No.	Title of the Invention	Application No.
1.	Bituminous Mix for Flexible Pavement using Imperial Smelting Furnace Slag (ISFS)	202211063795 A
2.	Concrete Mix for Rigid Pavement Using Imperial Smelting Furnace Slag (ISFS)	202211063794 A

Membership in Professional Organizations (National/International)

1. Life member of the Indian Road Congress (IRC) ELM-103547
2. Life member of the Indian Geotechnical Society (IGS) LM-1275
3. Life member of the Transportation Research Group of India.
4. Associate Member of the Institution of Engineers (INDIA). (Membership No: AM3206508)

Contributions to the National Committees

1. Member of IRC H-5 Committee.

PUBLICATIONS

Journals (SCI/SCOPUS/Peer Reviewed)

1. Chaudhary, Y., Gupta, A., **Gowda, S.**, Badiger, M. H., & Jaiswal, P. (2026). *Sustainable use of imperial smelting furnace slag in cement concrete pavements: Mechanical performance, economic viability and environmental impact*. *Canadian Journal of Civil Engineering*. Advance online publication. <https://doi.org/10.1139/cjce-2025-0410> (SCIE, Impact Factor - 1.5).
2. **Gowda, M. K. S.**, Behl, A., & Shanmuganathan, K. (2026). *Multiscale characterization of microcapsule-encapsulated rejuvenators for self-healing asphalt applications*. In *Airfield and Highway Pavements 2026* (pp. 387–396). American Society of Civil Engineers (ASCE). <https://doi.org/10.1061/9780784487037.035>
3. Gandem, A. K., **Gowda, S.**, Bharath, G., Gopala Raju, S. S. S. V., Behl, A., Bhaskar, T., & Kumar, J. (2026). *A multi-scale rheological and mechanical assessment of biochar-modified asphalt binders and mixtures*. *Construction and Building Materials (CBM)*, 535. <https://doi.org/10.1016/j.conbuildmat.2026.146915> (SCIE, Impact Factor - 8.0).
4. Sai, K. L., **Sachin Gowda**, Bharath, G., Raju, S. S. S. V. G., Radhakrishnan, V., & Kumar, R. A. (2026). *Laboratory and mechanistic evaluation of influence of the degree of compaction on the performance of cement-stabilized full-depth reclamation mixes*. *Transportation Research Record (TRR)*. <https://doi.org/10.1177/03611981261433870> (SCIE, Impact Factor - 2.3).
5. **Gowda, S.**, Pala, G. K., Gopalapurapu, K. S., & Kesana, N. S. (2026). *Predictive modelling of pavement condition index: a machine learning framework for infrastructure management*, *International Journal of Pavement Engineering*, 27:1, 2666864, DOI: <https://doi.org/10.1080/10298436.2026.2666864> (SCIE, Impact Factor - 3.3).
6. **Gowda, S.**, Behl, A., Shanmuganathan, K. et al (2025). *Enhancing Asphalt Pavement Longevity Through Microcapsule-Encapsulated Rejuvenators: Mechanical Performance and Self-Healing Evaluation*. *Int. J. Pavement Res. Technol.* <https://doi.org/10.1007/s42947-025-00651-z> (ESCI, Impact Factor - 3.5).
7. **Gowda, S.**, Kunjar, V., Gupta, A., & Havanagi, V.G. (2025). *Pavements through waste valorization: Municipal solid waste incinerated–bottom ash (MSWI-BA) as viable fine aggregate alternative*. *Environmental Science and Pollution Research*. <https://doi.org/10.1007/s11356-025-36635-6> (Q1 Journal)
8. **Gowda, S.**, Murthy, Y. I., & Gupta, A. (2025). *Explainable AI-based support vector machine models for soaked CBR prediction*. *International Journal of Pavement Research and Technology*, <https://doi.org/10.1007/s42947-025-00558-9> (ESCI, Impact Factor - 3.5).
9. **Gowda, S.**, Nandan, C.S., Jayaram, M.A., Gupta, A., Jaya, R.S. (2025). *Prediction of Deflection Bowl Parameters by Gain Ratio Enabled Feature Selection and Machine Learning Ensembles*. *Journal of Transportation Engineering: Part B, Pavements*, (ASCE). DOI: <https://doi.org/10.1061/JPEODX.PVENG-1630> (SCIE, Impact Factor – 2.7)
10. **Gowda, S.**, Ganesha, K., Vijaykumar, S., Gupta, A., and Jaya, R.S. (2024). *Sensitivity Analysis of HDM-4 Models for Developing Road Asset Management in India: A Case Study on Regional Calibration Approach*. *Indian Highways, Indian Roads Congress*. Volume: 52; Number: 11; Pages: 36 - 52; Month: November - 2024. (**Received the Bihar PWD Medal for Best Paper on Road Research on the 84th Annual Session of IRC held at Bhubaneswar (Odisha) from 7th to 10th November 2025**)
11. **Gowda, S.**, and Gupta, A. *Advancements in Road Asset Management Systems: Leveraging Image Processing and*

Machine Learning for Enhanced Decision Making—A Systematic Review. Indian Highways, Indian Roads Congress. Volume: 52; Number: 06; Pages: 27-41; Month: June-2024.

12. Gupta, A., Gowda, S., Tiwari, A., & Gupta, A. K. (2024). *XGBoost-SHAP framework for asphalt pavement condition evaluation*. Construction and Building Materials, Vol. 426, ISSN 0950-0618. <https://doi.org/10.1016/j.conbuildmat.2024.136182> (SCIE, Impact Factor - 7.4)
13. Kavitha, G., Kunjar, V., Gowda, S. et al. *Evaluation of drainage ability of granular subbase through large-scale model pavement studies and machine learning models*. Innovative Infrastructure Solutions. 9, 82 (2024). <https://doi.org/10.1007/s41062-024-01391-y> (SCIE, Impact Factor - 2.4)
14. Gupta, A., Prajwal M G., Gowda, S., and Jaya R S. (2024). *Development of Correlation Between Indirect Tensile Strength and Resilient Modulus for VG-40 Bituminous Concrete*. Indian Highways, Indian Roads Congress. Volume: 52; Number: 01; Pages: 17-27; Month: January - 2024.
15. Gowda, S.; Kunjar, V.; Gupta, A.; Kavitha, G.; Shukla, B.K.; Sihag, P. *Prediction of the Subgrade Soil California Bearing Ratio Using Machine Learning and Neuro-Fuzzy Inference System Techniques: A Sustainable Approach in Urban Infrastructure Development*. Urban Sci. 2024, 8, 4. <https://doi.org/10.3390/urbansci8010004> (ESCI, Impact Factor - 2.1)
16. Gupta, A., Kumar, P., & Gowda, S. *Advancing Flexible Pavement Structural Health Monitoring: A user-friendly Approach for Network-Scale Assessments*. International Journal of Pavement Research and Technology (2023). <https://doi.org/10.1007/s42947-023-00395-8> (ESCI, Impact Factor - 3.0)
17. Gowda, S., Kunjar, V., & Gupta, A. et al. *Municipal incinerated solid waste bottom ash as sustainable construction material in the construction of flexible pavements*. Journal of Material Cycles and Waste Management (2023). <https://doi.org/10.1007/s10163-023-01809-2> (SCIE, Impact Factor - 3.1)
18. Gowda, S., Kavitha, G. & Gupta, A. *Economic Analysis and Prioritisation of Non-core Roads in India: A Case Study*. International Journal of Pavement Research and Technology (2022). <https://doi.org/10.1007/s42947-022-00250-2> (ESCI, Impact Factor - 3.0).
19. Gowda, S., Niranjana, A. S., Gupta, A., & Kavitha, G. (2024). *Analysis of rutting behaviour of recycled asphalt binder and rejuvenated recycled asphalt binder by multiple stress creep recovery (MSCR) test*. IOP Conference Series: Earth and Environmental Science, 1326, 012065. <https://doi.org/10.1088/1755-1315/1326/1/012065> (Scopus Indexed).
20. Gowda, S., Kumar, P., Niranjana, A. S., Gupta, A., & Kavitha, G. (2024). *Influence of recycled asphalt and rejuvenated recycled asphalt on mechanical performance and chemical makeup of asphalt binder*. IOP Conference Series: Earth and Environmental Science, 1326, 012064. <https://doi.org/10.1088/1755-1315/1326/1/012064> (Scopus Indexed).
21. B.K. Shukla, A. Gupta, S. Gowda, et al., *Constructing a greener future: A comprehensive review on the sustainable use of fly ash in the construction industry and beyond*, Materials Today: Proceedings (2023), <https://doi.org/10.1016/j.matpr.2023.07.179>, (Scopus Indexed).

Book Chapters

22. Niranjana, A.S., Gowda, S., Gupta, A., Kavitha, G. (2026). *Characterizing the Chemical Composition and Rutting Performance of RAP and RAP-Rejuvenated Bitumen*. In: Venkataramana, K., Sharma, A., Prashanth, S., Pandit, P. (eds) Recent advances in Construction Materials. NHCE-ICEMS 2024. Lecture Notes in Civil Engineering, vol 751. Springer, Singapore. https://doi.org/10.1007/978-981-95-2026-8_11
23. Gupta, A., Gowda, S. (2026); *Prediction of Modified Structural Number for Asphalt Pavements Using Machine Learning Algorithms*. In: Van den Bergh, W., Yaragal, S.C., Prashanth, S., Pandit, P. (eds) Innovative Building

- Technologies. NHCE-ICEMS 2024. Lecture Notes in Civil Engineering, vol 752. Springer, Singapore. https://doi.org/10.1007/978-981-95-2030-5_14
24. Sachin Gowda, Ambika Behl, & Kadiravan Shanmuganathan; *Next-Generation Self-Healing Pavements: Performance Enhancement and Self-Healing Behaviour of Asphalt Mixtures Using Microcapsule Encapsulated Rejuvenators*. Vision Zero India: Integrating Safety, Sustainability, and Technology in Infrastructure – Souvenir (Technical Papers), Global Road Infratech Summit & Expo, Hotel The Ashok, New Delhi, India, February 05 - 06, 2026.
 25. Gowda M K, S., Saboo, N., Bharath, G., & Gupta, A. (2025). *Experimental Study on the Influence of Out-of-Band Gradations and Ageing on Fracture Properties of Asphalt Concrete using IDEAL-CT Test*. In L. Eberhardsteiner, B. Hofko, & R. Blab (Eds.), *Advances in Materials and Pavement Performance Prediction IV : Contributions to the 4th International Conference on Advances in Materials and Pavement Performance Prediction (AM3P 2025)*, 7-9 May 2025, Vienna, Austria (pp. 177–180). TU Wien, E230-03 Road Engineering. <https://doi.org/10.34726/10625>
 26. Sachin Gowda, M. K., Gupta, A., & Havanagi, V. G. (2025). *Pavements through waste valorization: MSWI Bottom ash as viable fine aggregate alternative*. In L. Eberhardsteiner, B. Hofko, & R. Blab (Eds.), *Advances in Materials and Pavement Performance Prediction IV : Contributions to the 4th International Conference on Advances in Materials and Pavement Performance Prediction (AM3P 2025)*, 7-9 May 2025, Vienna, Austria (pp. 442–445). TU Wien, E230-03 Road Engineering. <https://doi.org/10.34726/10639>
 27. Sachin Gowda, M. K., Behl, A., Gupta, A., & Shanmuganathan, K. (2025). *Microcapsules-Encapsulated Rejuvenators for Asphalt Self-Healing: Effects on Pavement Performance*. In L. Eberhardsteiner, B. Hofko, & R. Blab (Eds.), *Advances in Materials and Pavement Performance Prediction IV : Contributions to the 4th International Conference on Advances in Materials and Pavement Performance Prediction (AM3P 2025)*, 7-9 May 2025, Vienna, Austria (pp. 275–278). TU Wien, E230-03 Road Engineering. <https://doi.org/10.34726/10637>
 28. Sharma, A., Gupta, A., & Gowda, S. (2025). *Optimizing pavement performance prediction with stacking regressor models*. In L. Eberhardsteiner, B. Hofko, & R. Blab (Eds.), *Advances in Materials and Pavement Performance Prediction IV : Contributions to the 4th International Conference on Advances in Materials and Pavement Performance Prediction (AM3P 2025)*, 7-9 May 2025, Vienna, Austria (pp. 571–574). TU Wien, E230-03 Road Engineering. <https://doi.org/10.34726/10636>
 29. Sharma, A., Gupta, A., Gowda, S. (2025). *A Comparative Study of Machine Learning Approaches for Pavement Assessment*. In: Kumar, R., Verma, A.K., Verma, O.P., Rajpurohit, J. (eds) *Soft Computing: Theories and Applications. SoCTA 2024. Lecture Notes in Networks and Systems*, vol 1344. Springer, Singapore. https://doi.org/10.1007/978-981-96-5958-6_32 (Scopus Indexed).
 30. Gowda, S., Kumar, P.G., Suneetha, K.N., Kavya Sri, G., Gupta, A., Shukla, B.K. (2025). *Optimizing Pavement Condition Index Prediction Using PSO-LSTM Hybrid Algorithm: A Data-Driven Approach for Road Maintenance Strategies*. In: Pathak, S., Shukla, A.K., Sharma, S., Singh, V.P. (eds) *Intelligent Infrastructure and Smart Materials*. Springer, Cham. https://doi.org/10.1007/978-3-031-92421-7_3 (Scopus Indexed).
 31. Gowda, S., Nandan, C.S., Jayaram, M.A., Gupta, A., Kavitha, G. (2025). *Unsupervised Clustering of Asphalt Pavement Conditions with Principal Component Analysis-aided Dimensionality Reduction*. In: Sahu, P.K., Saboo, N., Majumdar, B.B., Pani, A. (eds) *Proceedings of the 7th International Conference of Transportation Research Group of India (CTRG 2023)*, Volume 1. CTRG 2023. Lecture Notes in Civil Engineering, vol 417. Springer, Singapore. https://doi.org/10.1007/978-981-97-9654-0_7 (Scopus Indexed).
 32. Gupta, A., Gowda, S., Nandan, C.S., Kavitha, G. (2025). *Machine Learning Approach for Deflection Bowl Parameter Prediction in Flexible Pavements: A Random Forest Algorithm-Based Study*. In: Sahu, P.K., Saboo, N., Majumdar, B.B., Pani, A. (eds) *Proceedings of the 7th International Conference of Transportation Research Group of India (CTRG*

- 2023), Volume 1. CTRG 2023. Lecture Notes in Civil Engineering, vol 417. Springer, Singapore. https://doi.org/10.1007/978-981-97-9654-0_2 (Scopus Indexed).
33. Gowda, S., Prakash, R., Kavitha, G., Gupta, A. (2024). *Comparison Study on Various Backcalculation Techniques for Estimating the Resilient Modulus of Asphalt Pavement Layers*. In: Ravi Shankar, K., Prasad, C., Mallikarjuna, C., Suresha, S. (eds) Recent Advances in Transportation Systems Engineering and Management—Volume 2. CTSEM 2023. Lecture Notes in Civil Engineering, vol 545. Springer, Singapore. https://doi.org/10.1007/978-981-97-6071-8_3 (Scopus Indexed).
34. Kavitha, G., Savanur, J., Gowda, S., Gupta, A. (2025). *Alternative Proposal to Intersection Design Connecting National Highway-48 Belgaum*. In: Ravi Shankar, K.V.R., Prasad, C.S.R.K., Mallikarjuna, C., Suresha, S.N. (eds) Recent Advances in Transportation Systems Engineering and Management—Volume 1. CTSEM 2023. Lecture Notes in Civil Engineering, vol 544. Springer, Singapore. https://doi.org/10.1007/978-981-97-6075-6_14 (Scopus Indexed).
35. Shukla, B.K. et al. (2025). Extensive Evaluation of Eco-Friendly Green Concrete Construction Procedures Utilizing Recycled Waste Materials. In: Agnihotri, A.K., Reddy, K.R., Bansal, A. (eds) Waste Management. EGRWSE 2023. Lecture Notes in Civil Engineering, vol 419. Springer, Singapore. https://doi.org/10.1007/978-981-97-9777-6_3
36. Gowda, S., Nandan, C.S., Jayaram, M.A., Gupta, A., Jaya, R.S. (2024). *Unsupervised Clustering of Asphalt Pavement Conditions Using Fuzzy C-Means Algorithm with Principal Component Analysis Aided Dimensionality Reduction*. In: Verma, O.P., Wang, L., Kumar, R., Yadav, A. (eds) Machine Intelligence for Research and Innovations. MAiTRI 2023. Lecture Notes in Networks and Systems, vol 831. Springer, Singapore. https://doi.org/10.1007/978-981-99-8135-9_4 (Scopus Indexed).
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40. Sachin Gowda, *Road Management in India – From Reactive to Data Driven*, New Building Materials and Construction World (NBM&CW), Pages: 108-110 Month: May 2026. https://www.nbmcw.com/online_edition/index.php?issue=nbmcw/may-2026
41. Ambika Behl and Sachin Gowda, *Self-Healing Pavements: The Future of Road Infrastructure*, India's Top Construction, Infrastructure & Civil Engineering Magazine, Pages: 30-35; Month: June 2024. <https://www.cecr.in/june-2024-issue>

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42. Sekhar, G. S., Venudharan, V., & Gowda, S. (2026). *A Multi-Parameter Clustering Analysis for Pavement*

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43. **Sachin Gowda**, Ambika Behl, & Kadhiraavan Shanmuganathan; *Improving the Service Life of Asphalt Pavements Using Rejuvenator-Filled Microcapsules: Mechanical Behaviour and Self-Healing Assessment*. 2nd RILEM International Symposium on Bituminous Materials (ISBM), Padova, Italy, June 16-18, 2026. (Accepted)
44. **Sachin Gowda**, Ambika Behl and Kadhiraavan Shanmuganathan; *Multiscale Characterization of Microcapsule-Encapsulated Rejuvenators for Self-Healing Asphalt Applications*. International Airfield and Highway Pavements Conference (Pavements 2026) (ASCE), Detroit, Michigan, 28th June - 01st July, 2026.
45. Shreyas M. C., **Sachin Gowda**, Ashish Walia, & Gottumukkala Bharath; *Influence of Aggregate Gradation Variations on Rutting Resistance Asphalt Mixtures under Various Temperatures and Stress Levels*. NanoPave 2026: Nanotechnology Applications in Pavement Engineering, CSIR-Central Road Research Institute (CRRI), New Delhi, India, March 09-10, 2026.
46. **Sachin Gowda**, Ambika Behl, & Kadhiraavan Shanmuganathan; *Next-Generation Self-Healing Pavements: Performance Enhancement and Self-Healing Behaviour of Asphalt Mixtures Using Microcapsule Encapsulated Rejuvenators*. Global Road Infratech Summit & Expo, Hotel The Ashok, New Delhi, India, February 05-06, 2026.
47. Kalava Lakshman Sai, Ramavath Anil Kumar, **Sachin Gowda**, & Gottumukkala Bharath; *Influence of Degree of Compaction on Strength and Fatigue Performance of Cement-Stabilized Full-Depth Reclamation Mixes*. Global Road Infratech Summit & Expo, Hotel The Ashok, New Delhi, India, February 05-06, 2026.
48. Shreyas M. C., **Sachin Gowda**, Ashish Walia, Bharath G., & Vinay H. N.; *Influence of Aggregate Gradation on Rutting Resistance of Asphalt Mixtures under Various Temperatures and Stress Levels*. 2nd International Conference on Recent Advances in Infrastructure Development 2.0, National Institute of Technology Calicut, February 11-13, 2026.
49. Sarath R., Ashish Walia, **Sachin Gowda**, Bharath G., & Sivakumar M.; *Laboratory Characterization of Rutting Potential of CRMB Mixes*. 2nd International Conference on Recent Advances in Infrastructure Development 2.0, National Institute of Technology Calicut, February 11-13, 2026.
50. Kuldeep Rathod., **Sachin Gowda**., & Ankita Sharma.; *Sustainable Pavement Rehabilitation Using Emulsion-Treated Base in FDR: A Review*. International Conference on Sustainable Planning, Architecture and Civil Engineering (SPACE 2026), National Institute of Technology Kurukshetra, India, January 23-25, 2026.
51. Mukesh Kumar, Aakash Gupta, **Sachin Gowda**, Prabhakar A. K., & Shashi Bhushan Girimath.; *Study on Mechanical Performance and Curing Mechanism of Epoxy-Cement Concrete With and Without Curing Agents: A Review*. International Conference on Sustainable Planning Architecture and Civil Engineering (SPACE 2026), January 23-25, 2026.
52. Lakshman Sai, **Sachin Gowda**, Bharath G, Gopala Raju, S. S. S. V, Vishnu Radhakrishnan., & Anil Kumar, ; *Laboratory and mechanistic evaluation of influence of the degree of compaction on the performance of cement-stabilized full-depth reclamation mixes*. Transportation Research Board, 105th Transportation Research Board (TRB) Annual Meeting, Washington, DC, January 11–15, 2025. (Recommended for TRR Journal)
53. Gandem, A. K., **Gowda, M. K. S.**, Bharath, G., Behl, A., Bhaskar, T., & Gopala Raju, S. S. S. V.; *Laboratory performance evaluation of asphalt mixes with biochar-modified bitumen*. Transportation Research Board, 105th Transportation Research Board (TRB) Annual Meeting, Washington, DC, January 11–15, 2025.

54. Sneha D. M., **Sachin Gowda**, G. Bharath, Deepa S., and G. Suresha; *Effect of Asphalt Reinforcement Grids on Tensile, Rutting, and Fracture Properties of Bituminous Overlays*. Young Professional Conference – CTRG 2025 (YPC–CTRG 2025), 17-20 December, IIT Guwahati.
55. Sneha D M, **Sachin Gowda**, G Bharath, Deeps S, and G Suresh; *Influence of GlassGrid Reinforcement on Cracking and Rutting Performance of Asphalt Overlays*. Transportation Research Efforts for Ecological Sustainability - 2025" (TREES - 2025), 24–25 October 2025, at the Department of Civil Engineering - VNR VJIET, Hyderabad. (**Received Best Paper Award Under Pavements Category**)
56. Shreyas M C, **Sachin Gowda**, Ashish Walia, G Bharath, and Vinay H N; *Laboratory Comparative Study on the Rutting Performance of VG and PMB Binders under Varying Temperature and Loading Conditions*. Transportation Research Efforts for Ecological Sustainability - 2025" (TREES - 2025), 24–25 October 2025, at the Department of Civil Engineering - VNR VJIET, Hyderabad.
57. Kalava Lakshman Sai, **Sachin Gowda**, G Bharath, and SSSV Gopala Raju; *Effect of Cement Slurry and Dry Mixing Methods on the Mechanical Performance of Full Depth Reclamation Bases*. Transportation Research Efforts for Ecological Sustainability - 2025" (TREES - 2025), 24–25 October 2025, at the Department of Civil Engineering - VNR VJIET, Hyderabad.
58. Sarath R, Ashish Walia, **Sachin Gowda**, G Bharath, and Sivakumar M; *Influence of Temperature Variation on the Rutting Performance of CRMB Mixes: A Laboratory Perspective*. Transportation Research Efforts for Ecological Sustainability - 2025" (TREES - 2025), 24-25 October 2025, at the Department of Civil Engineering - VNR VJIET, Hyderabad.
59. **Sachin Gowda**, Nikhil Saboo, Gottumukkala Bharath and Aakash Gupta; *Experimental Study on the Influence of Out-of-Band Gradations and Ageing on Fracture Properties of Asphalt Concrete using IDEAL-CT Test*, Advances in Materials and Pavement Performance Prediction (AM3P), 7 - 9 May 2025, Vienna @ TU Wien, Austria.
60. **Sachin Gowda**, Aakash Gupta, and Vasant G Havanagi; *Pavements through waste valorization: MSWI Bottom ash as a viable fine aggregate alternative*, Advances in Materials and Pavement Performance Prediction (AM3P), 7 - 9 May 2025, Vienna @ TU Wien, Austria.
61. **Sachin Gowda**, Ambika Behl, Kadiravan Shanmuganathan, and Aakash Gupta; *Microcapsules-Encapsulated Rejuvenators for Asphalt Self-Healing: Effects on Pavement Performance*, Advances in Materials and Pavement Performance Prediction (AM3P), 7 - 9 May 2025, Vienna @ TU Wien, Austria.
62. Ayush Sharma, Aakash Gupta, **Sachin Gowda**; *Optimizing pavement performance prediction with stacking regressor models*, Advances in Materials and Pavement Performance Prediction (AM3P), 7 - 9 May 2025, Vienna @ TU Wien, Austria.
63. **Sachin Gowda**, Aakash Gupta; *Performance and Environmental Evaluation of Incinerated Bottom Ash as Fine Aggregate in Asphalt Mix*, International Airfield and Highway Pavements Conference (Pavements 2025) (ASCE), Glendale, Arizona, June 8-11, 2025. (**Accepted**)
64. Aakash Gupta, **Sachin Gowda**; *Enhanced Pavement Condition Assessment through Stacking Regressor Techniques*, International Airfield and Highway Pavements Conference (Pavements 2025) (ASCE), Glendale, Arizona, June 8-11, 2025. (**Accepted**)
65. **Sachin Gowda**, Ambika Bhel, Kadiravan Shanmuganathan and Aakash Gupta, *Study on the Influence of Microcapsule-Encapsulated Rejuvenators on Performance of Asphalt Mixes*, 11th European Asphalt Technology Association (EATA) Conference, Mole Vanvitelliana in Ancona (Italy) from 10 to 12 June 2025. (**Accepted**)
66. Ayush Sharma, Aakash Gupta and **Sachin Gowda**; *An Advanced Methodology for Pavement Condition Assessment*

Using a Stacking Regressor Model, 9th International Conference on Soft Computing: Theory and Applications, SoCTA-2024 held at Malaviya National Institute of Technology (MNIT) Jaipur Rajasthan, India, 27-29th December 2024.

67. Vandana Sharma, **Sachin Gowda**, and Aakash Gupta; *Prediction of Deflection bowl Parameters of Asphalt Pavement Using Machine Learning Techniques*, 15th International Conference on Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC), IIT Bombay, December 18-20, 2024.
68. Niranjana A S, **Sachin Gowda**, Aakash Gupta, G Kavitha; *Characterizing the chemical composition and rutting performance of RAP and RAP-rejuvenated bitumen*, New Horizons in Civil Engineering with a theme of Innovative Civil Engineering Materials and Systems, Organised by the Department of Civil Engineering, MIT MANIPAL 12-14th December 2024.
69. Aakash Gupta, **Sachin Gowda**; *Prediction of modified structural number for asphalt pavements using machine learning algorithms*, New Horizons in Civil Engineering with a theme of Innovative Civil Engineering Materials and Systems, Organised by the Department of Civil Engineering, MIT MANIPAL 12-14th December 2024.
70. **Sachin Gowda**, Nandan C S, M A Jayaram, Aakash Gupta, Sampath Kumar Pasupunuri and Jays R S; *Machine Learning-Based Ensemble Techniques for Optimal Prediction of Pavement Condition*, Transportation Research Board, 103rd Transportation Research Board (TRB) Annual Meeting, Washington, DC, January 7–11, 2024.
71. Aakash Gupta, **Sachin Gowda**, Sampath Kumar Pasupunuri; *Prediction of Modified Structural Number for Asphalt Pavements Using Machine Learning Algorithms*, Transportation Research Board, 103rd Transportation Research Board (TRB) Annual Meeting, Washington, DC, January 7–11, 2024.
72. Aakash Gupta, **Sachin Gowda**, Nandan C S, G Kavitha; *Machine Learning Approach for Deflection Bowl Parameter Prediction in Flexible Pavements: A Random Forest Algorithm-Based Study*, 7th Conference of the Transportation Research Group of India (CTRG-2023) between 17th to 20th December, Surat, India.
73. **Sachin Gowda**, Nandan C S, M A Jayaram, Aakash Gupta, G Kavitha; *Unsupervised Clustering of Asphalt Pavement Conditions with Principal Component Analysis Aided Dimensionality Reduction*, 7th Conference of the Transportation Research Group of India (CTRG-2023) between 17th to 20th December, Surat, India.
74. **Sachin Gowda**, Prakash R, G Kavitha, and Aakash Gupta; *Comparison Study on Various Backcalculation Techniques for Estimating the Resilient Modulus of Asphalt Pavement Layers*, 9th Conference on Transportation Systems Engineering and Management (CTSEM 2023) between October 12-14, 2023 Organised by National Institute of Technology Warangal, India.
75. G Kavitha, Junaid Savanur, **Sachin Gowda** and Aakash Gupta; *Alternative Proposal to Intersection Design connecting National Highway-48 Belgaum: A case study*, 9th Conference on Transportation Systems Engineering and Management (CTSEM 2023) between October 12-14, 2023 Organised by National Institute of Technology Warangal, India.
76. G Kavitha, Nandini N, **Sachin Gowda**, and Aakash Gupta; *Experimental Studies on Bitumen Modified with Crumb Rubber in the Laboratory*, 9th Conference on Transportation Systems Engineering and Management (CTSEM 2023) between October 12-14, 2023 Organised by National Institute of Technology Warangal, India.
77. G Kavitha, Varun T M, Kiran M, **Sachin Gowda**, and Aakash Gupta; *Exploring Cement-Treated Base Layers: Laboratory Performance and Economic Viability in Road Pavements*, 9th Conference on Transportation Systems Engineering and Management (CTSEM 2023) between October 12-14, 2023 Organised by National Institute of Technology Warangal, India.
78. G Kavitha, Prathap S, Abhishek G Malji, Sachin Gowda and Aakash Gupta; *Geometric Design and Cloverleaf Intersection Planning for a 14.8 Km 6-Lane Greenfield Highway in Bhandara, Maharashtra*, 9th Conference on

Transportation Systems Engineering and Management (CTSEM 2023) between October 12-14, 2023 Organised by National Institute of Technology Warangal, India.

79. **Sachin Gowda**, Nandan C S, M A Jayaram, Aakash Gupta, and Jays R S; *Unsupervised Clustering of Asphalt Pavement Conditions using Fuzzy C-Means Algorithm with Principal Component Analysis Aided Dimensionality Reduction*, International Conference on MACHine inTElligence for Research & Innovations (MAiTRI-2023 Summit) 01 – 03 September 2023 (Hybrid Mode), organized by NIT Jalandhar.
80. **Sachin Gowda**, Pramod Kumar, Niranjana A S, Aakash Gupta, and G Kavitha; *Influence of Recycled Asphalt and Rejuvenated Recycled Asphalt on Mechanical Performance and Chemical Makeup of Asphalt Binder*, International Conference on Creative and Innovative Solutions in Civil Engineering (CISCE-2023) August 11-12th, 2023 (Hybrid Mode), organized by MNIT Jaipur.
81. **Sachin Gowda**, Niranjana A S, Aakash Gupta, and G Kavitha; *Analysis of Rutting Behaviour of Recycled Asphalt Binder and Rejuvenated Recycled Asphalt Binder by Multiple Stress Creep Recovery (MSCR) Test*, International Conference on Creative and Innovative Solutions in Civil Engineering (CISCE-2023) August 11-12th, 2023 (Hybrid Mode), organized by MNIT Jaipur.
82. Aakash Gupta, Prajwal M G, **Sachin Gowda**; *Evaluating the Performance of Gradient Boosted Trees in Predicting Flexible Pavement Deflection Parameters*, International Conference on Creative and Innovative Solutions in Civil Engineering (CISCE-2023) August 11-12th, 2023 (Hybrid Mode), organized by MNIT Jaipur.
83. Pramod Kumar, **Sachin Gowda**, Saraswati Setia, Aakash Gupta, Sunil Jain; *Rejuvenated RAP Binder Blends' Fatigue and Healing Characteristics*, International Conference on Recent Trends in Engineering and Science (RTES-2023), 2nd – 3rd May 2023 conducted by, Sardar Vallabhbhai National Institute of Technology, Surat.
84. Pramod Kumar, **Sachin Gowda**, Saraswati Setia, Aakash Gupta, and Sunil Jain; *Review of Self-Healing Asphalt Materials and their Evaluation Indices*, National Conference on Sustainable Development of Smart Cities Infrastructure' (SDSCI-2023) during May 27–28, 2023 conducted by, National Institute of Technology Kurukshetra.
85. Bishnu Kant Shukla, Aakash Gupta, **Sachin Gowda**, Yuvraj Srivastav; *Recycling fly ash as a construction material: An environmentally sustainable approach* [UCC-2023-136], Proceedings of the International UKIERI Concrete Congress held at Dr B R Ambedkar National Institute of Technology Jalandhar, Punjab, India, on 14 - 17 March 2023 (Virtual Mode).
86. Bishnu Kant Shukla, Aakash Gupta, **Sachin Gowda**, Sumit Rawat; *Incorporation of non-conventional aggregates in concrete-a comprehensive review* [UCC-2023-137], Proceedings of the International UKIERI Concrete Congress held at Dr B R Ambedkar National Institute of Technology Jalandhar, Punjab, India, on 14 - 17 March 2023 (Virtual Mode).
87. **Sachin Gowda**, Aakash Gupta, Vaishakh K, G Kavitha; *Modeling asphalt pavement condition using artificial neural networks and adaptive neural fuzzy inference system approaches*, Advances in Materials and Pavement Performance Prediction (AM3P) 22-24 May 2023, Hong Kong. (Accepted)
88. Aakash Gupta, Pradeep Kumar, **Sachin Gowda**; *A Simplified Tool for Flexible Pavement Structural Health Assessment at Network Level*, Advances in Materials and Pavement Performance Prediction (AM3P) 22-24 May 2023, Hong Kong. (Accepted)
89. **Sachin Gowda**, Vaishakh K, Aakash Gupta, G Kavitha; *Assessing the suitability of Municipal Solid Waste Incineration-Bottom Ash as a construction material in flexible pavements*, International Airfield & Highway Pavements Conference (ASCE), Austin, Texas. 14-17 June 2023. (Accepted)
90. **Sachin Gowda**, Vaishakh K, Aakash Gupta, Pradeep Kumar, G Kavitha; *Effectiveness of Adaptive Neuro-fuzzy Inference Systems in modeling the deflection bowl parameters of asphalt pavements*, International Airfield &

Highway Pavements Conference (ASCE), Austin, Texas. 14-17 June 2023. (Accepted).

91. Pradeep Kumar, Manoranjan Parida, Aakash Gupta, and **Sachin Gowda**; *Pavement Management System for Maintenance of Airfield Pavement Network in India*, International Airfield & Highway Pavements Conference (ASCE), Austin, Texas. 14-17 June 2023. (Accepted)
92. **Sachin Gowda**, Vaishakh K, Aakash Gupta, Prakash R and G Kavitha; *Modeling of deflection basin parameters of asphalt pavements using Artificial Neural Networks and Adaptive Neuro-fuzzy Inference Systems*, 14th International Conference on Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC), IIT Bombay, 19-21 December 2022.
93. Saurabh SinghYadav, Aakash Gupta, **Sachin Gowda**, Yogesh Agarwal; *Development of Maintenance Priority Index for Urban Road Network*, 14th International Conference on Transportation Planning and Implementation Methodologies for Developing Countries (TPMDC), IIT Bombay, 19-21 December 2022.
94. **Sachin Gowda**, Vaishakh K, Aakash Gupta, G Kavitha; *Application of Artificial Neural Networks and Adaptive Neural Inference System approaches in Modeling of Asphalt Pavement Condition*, 7th International Conference on Soft Computing: Theory and Applications, SoCTA, Himachal Pradesh University, Shimla, India. 16-18 December 2022.
95. **Sachin Gowda**, Prakash R, Aakash Gupta and G Kavitha; *Study on Analysis of Co-Relation between Various Algorithms used for Back-Calculating the Elastic Modulus of Asphalt Pavement*, 2nd International Conference on Construction materials and Structures (Virtual Mode) ICCMS-2022, Department of Civil Engineering, National Institute of Technology Calicut (Kerala, India), 14-18 December 2022.
96. Pradeep Kumar, **Sachin Gowda**, Aakash Gupta; *Implementation of Airfield Pavement Management System in India*, Fourth National Conference on Recent Advances in Traffic Engineering (RATE-2022), SVNIT Surat, Gujarat, India. 11-12th November 2022.
97. Prakash R, **Sachin Gowda**, Aakash Gupta, G Kavitha, and Pradeep Kumar; *Comparative study on backcalculated and laboratory-measured modulus of asphalt pavement layer using various algorithms*, ICIET 2022 (International Conference on Innovations in Engineering and Technology), Hyderabad. 15-17th September 2022.
98. **Sachin Gowda**, Vaishakh K, Aakash Gupta, Pradeep Kumar, G Kavitha, Bishnu Kant Shukla; *Modeling of Subgrade soil CBR using Artificial Neural Networks and Adaptive Neuro-Fuzzy Inference System-* ICFMMP-2022 (3rd International Conference on Functional Materials, Manufacturing, and Performances), 29-30 July 2022 (Virtual event).
99. Saurabh Singh Yadav, Dr Aakash Gupta, **Sachin Gowda**, Dr. Yogesh Agarwal, Dr. Pratibha Aggarwal, *Development of Pavement Maintenance Priority Index (Poster Presentation)*, 10th NATIONAL CONFERENCE ON NANOSCIENCE AND INSTRUMENTATION TECHNOLOGY, July 09-10, 2022, National Institute of Technology Kurukshetra.
100. Singh Y, S., Gupta, A., Agarwal, Y., Kumar, P., **Gowda MK, S.**, *A comparative study on overall priority indices for Flexible Pavement network*", Smart and Sustainable Development of Urban Green Infrastructure in India and Canada, 25 – 26th March 2022, at NIT Trichy.
101. **Sachin Gowda**, & Vidhi Vyas; *Road asset management system for low-volume roads: A case study of India*, International Airfield & Highway Pavements Conference (ASCE), 8-10 June 2021 (Virtual event).
102. G Kavitha, Ranjana Sarjapur, Meenakshi K.S, and **Sachin Gowda**; *Laboratory Performance Studies on Different Pothole Mixes*; 2nd ASCE India Conference on " Challenges of Resilient and Sustainable Infrastructure Development in Emerging economies (CRSIDE2020) during March 2- 4th, 2020.

103. **Sachin Gowda**, G Kavitha, Vijay Kumar, *Road Asset Management Systems and Application for Pavement Maintenance for Non-Core Road Networks of Krishna district in Andhra Pradesh State – A case study*, 5th Conference of the Transportation Research Group of India (CTRG-2019) between 18 to 21 December, Bhopal.

104. **Sachin Gowda**, Arun Kumar, G Kavitha; *Enhancement of Engineering Properties of Black-Cotton Soil using Lime, Cement and Flyash*, INFRA ROAD TECH-2019, 4-5th April 2019, Bengaluru.

Students Guided for Dissertation/Internships (M.Tech/B.Tech)

Sl. No.	Name of the Student	Academic Institute	Dissertation/Internship Title
1.	Prakash R _(M.Tech)	RASTA, Bangalore.	Comparative study on back-calculated and actual resilient modulus of asphalt pavement layers using soft computing techniques
2.	Vaishakh K _(M.Tech)	RASTA, Bangalore.	Performance Evaluation of Bituminous Mixes by Partially Replacing Fine Aggregates with Bottom Ash
3.	Pramod Kumar _(M.Tech)	NIT Kurukshetra	Study on Self-Healing Behaviour of Asphalt Pavements
4.	Nandan C S _(M.Tech)	RASTA, Bangalore.	Data-driven Approaches for Predicting Pavement Condition and Deflection Bowl Parameters
5.	Niranjan A S _(M.Tech)	RASTA, Bangalore.	Chemical and Rheological Characterization of RAP and RAP-Rejuvenated Bitumen Binder
6.	Prajwal M G _(M.Tech)	RASTA, Bangalore.	Development of Correlation between Indirect Tensile Strength (ITS) and Resilient Modulus (M_R) for Bituminous Concrete.
7.	K. Naga Suneetha _(B.Tech)	Shri Vishnu Engineering College for Women(A), Bhimavaram, Andhra Pradesh.	Optimizing Pavement Condition Index Prediction using PSO- LSTM Hybrid Algorithm: A Data-Driven Approach for Road Maintenance Strategies
8.	G. Kavya Sri _(B.Tech)		Application of Machine Learning for Developing Pavement Condition Index: Introducing the M5 Prime Model Tree Algorithm
9.	Veekshith K T _(M.Tech)	RASTA, Bangalore.	Influence of Aggregate Gradation and Ageing factors on performance of Dense graded Asphalt mixes.
10.	Vandana Sharma _(B.Tech)	NIT Warangal	Prediction of Deflection Bowl Parameters of Asphalt Pavements Using Machine Learning Techniques
11.	Shreyas M C _(M.Tech)	SIT, Tumkur	Evaluating Rutting Susceptibility of Asphalt Mixtures: Impact of Aggregate Gradation, Binder Selection, Temperature, and Stress Levels

Sl. No.	Name of the Student	Academic Institute	Dissertation/Internship Title
12	Kalava Lakshman Sai (M.Tech)	IIIT Nuzvid	Performance Characteristics of Cement-Stabilized FDR: A Comparative Study of Dry and Wet Forms
13	Dharavath Vamshi Naik (M.Tech)	IIT Bhubaneswar	Development and Validation of Structural Index Parameter using Network Level Data for Flexible Pavement
14	Sarath R _(M.Tech)	NIT Calicut	Laboratory evaluation of Bituminous coarse under adverse loading conditions.
15	Sneha D M	UVCE, Bengaluru	Effect of Reinforcement on cracking and rutting performance of bituminous mixes
16	D Divya	NIT Warrangal	Development of Weighted Deduct Value Curves for Pavement Condition Index Using Expert Panel Aggregation and Confidence-Based Weighting.
17	Kuldeep Rathod	Parul University	A Study on Strength, Durability, and Interlayer Bonding Performance of Full-Depth Reclaimed (FDR) Pavements
18	Chethan Singh Rathore	IIT Roorkee	Backcalculation of Pavement Layer Moduli using KGPBACK and BACKFAA