

## Dr. VINAY H N

Affiliation	Assistant Professor, Civil Engineering Department, Siddaganga Institute of Technology
Contact	9980709307
Email	vinayhn@sit.ac.in
Vidwan ID	269616
Scopus ID	56703123900
OrcID	0000-0003-3747-8502
Faculty ID	SIT0895

### Education

S. No	Degree	Year	Institute	Specialization
1	B.E	2009	U.B.D.T.C.E, Davangere	Civil Engineering
2	M.Tech	2014	Siddaganga Institute of Technology, Tumkur	Transportation Engineering & Management
3	Ph. D.	2022	Indian Institute of Technology, Tirupati	Civil & Environmental Engineering

### Professional Experience

	Date (from-to)	Designation	Organization
1	21-10-2021 To Till Date	Assistant Professor	Siddaganga Institute of Technology
2	01-08-2017 To 30-11-2017	Assistant Professor	Adichunchanagiri Institute of Technology
3	03-02-2014 To 10.12.2016	Assistant Professor	B.G.S Institute of Technology

### Positions held

(Please give details of any administrative posts, co Ordinator roles/ responsibilities held)

## Affiliations of Professional organizations

- Associate Member, Institution of Engineers, India
- E-Life Member, Indian Roads Congress, New Delhi, India

## Awards and Honors

## Courses Taught

### Undergraduate Courses

- Engineering Mechanics
- Transportation Engineering
- Highway Engineering
- Pavement Design
- Environmental Science
- Universal Human Values
- Transportation Engineering Lab
- Geotechnical Engineering Lab

### Postgraduate Courses

- Pavement Construction Equipment and Technology
- Pavement Management Systems
- Traffic Engineering and Geometric Design
- Urban Transport Planning

## Research Guidance

## Research Areas

- Pavement Materials

## Sponsored Projects

## Publications

### Journals

- Vinay Hosahally Nanjegowda, Krishna Prapoorna Biligiri, "Modified asphalt-rubber green pavement (MARGPave) mixtures: product development and performance

assessment”, Resources, Conservation and Recycling, ([https://doi: 10.1016/j.resconrec.2023.107125](https://doi.org/10.1016/j.resconrec.2023.107125)).

- Vinay Hosahally Nanjegowda, Krishna Prapoorna Biligiri, “Utilization of high contents of recycled tire crumb rubber in developing a modified-asphalt-rubber binder for road applications”, Resources, Conservation and Recycling, ([https://doi: 10.1016/j.resconrec.2023.106909](https://doi.org/10.1016/j.resconrec.2023.106909)).
- Vinay Hosahally Nanjegowda, Krishna Prapoorna Biligiri, Jagadeesh Mahimaluru, and Debasish Mondal, “Development of organoclay suitable for applications in recycled rubber-based asphalt binders: montmorillonite tailored with quaternary ammonium salt”, Journal of Materials in Civil Engineering, American Society of Civil Engineers, USA ([https://doi: 10.1061/\(ASCE\)MT.1943-5533.0004578](https://doi.org/10.1061/(ASCE)MT.1943-5533.0004578)).
- Vinay Hosahally Nanjegowda, Rituraj Patel, Jagadeesh Mahimaluru, and Krishna Prapoorna Biligiri, “Synthesis and characterization of zeolite-like additive: an eco-efficient asphalt mix production strategy”, Journal of Construction and Building Materials, 266, 2020, (<https://doi.org/10.1016/j.conbuildmat.2020.120898>).
- Vinay Hosahally Nanjegowda, Krishna Prapoorna Biligiri, “Recyclability of rubber in asphalt roadway systems: a review of applied research and advancement in technology”, Resources, Conservation, and Recycling, 155, (<https://doi.org/10.1016/j.resconrec.2019.104655>).
- Vinay Hosahally Nanjegowda, Francisco Silva, Jorge B. Sousa, George B. Way, Krishna Prapoorna Biligiri, “Forensic approach to predict film thickness of reacted and activated rubber (RARX) modified asphalt mixtures”. Road Materials and Pavement Design. 2019, pp 1-18, (<https://doi.org/10.1080/14680629.2019.1663754>).

#### Conference Proceedings

- Amith C A, Vinay Hosahally Nanjegowda, and Vijay V Nair, “Road Dust of Urban Landscape: A Case Study Insight”, International Conference on New Horizons in Civil Engineering: Innovative Civil Engineering Materials and Systems (NHCE-ICEMS 2024), Manipal, Karnataka, 12-14 December 2024.
- Vinay Hosahally Nanjegowda, Rathan Kumar M N, and Anirudh N, “Fillers Influence on Hot-Mix Asphalt Mixture Design and Performance Assessment”, Novel Sustainable Concepts and Technologies in Civil Engineering (NSCTCE-2022), Mangaluru, Karnataka, Vol.1149 (<https://doi.org/10.1088/1755-1315/1149/1/012013>).
- Vinay Hosahally Nanjegowda, Akhil Charak, Avishreshth Singh, and Krishna Prapoorna Biligiri, “Investigations on Plastic Rubber Modified Bitumen for Pavement Applications in India”, Annual Session of the Indian Roads Congress-2022, Vol.51(2), 29-34, ISSN 0376-7256.
- Rituraj Patel, Vinay Hosahally Nanjegowda, Jagadeesh Mahimaluru, and Krishna Prapoorna Biligiri, “Characterization of Aluminosilicate-based Warm-Mix Asphalt Additive Using Experimental Techniques”, RILEM International Symposium on Bituminous Materials, Lyon, France, 14-16 December 2020. ([https://doi.org/10.1007/978-3-030-46455-4\\_43](https://doi.org/10.1007/978-3-030-46455-4_43)).
- Gourab Saha, Veena Venudharan, Vinay Hosahally Nanjegowda, Krishna Prapoorna

Biligiri, and Kamil Elias Kaloush, “Mechanistic Performance Prediction of Flexible Pavements at Varying Vehicular Speeds: An approach to Address Frequency Singularity”, International Road Federation Global R2T Expo & Conference, Las Vegas, USA, 7-9 November 2018.

- Vinay Hosahally Nanjegowda, Francisco Silva, Jorge B. Sousa, George B. Way, and Krishna Prapoorna Biligiri, “Assessment of Threshold Film Thickness Using Surface Area for RAR Modified Asphalt Mixtures”, Rubberized Asphalt-Asphalt Rubber 2018 Conference, Kruger Park, South Africa, 25-28 September 2018.
- Naveen Malipatil, Soumya Iswar Avati, Vinay Hosahally Nanjegowda, S. Sunil, “Application of Queuing Theory to a Toll Plaza-A Case Study”, 4th Conference of Transportation Research Group of India-2017, Bombay, Vol.45, 343-354, ([https://doi.org/10.1007/978-981-32-90426-6\\_27](https://doi.org/10.1007/978-981-32-90426-6_27)).
- N.R. Avinash, Vinay Hosahally Nanjegowda, D. Prasad, S.V. Dinesh, J.K. Dattatreya, “Performance Evaluation of Low Volume Flexible Pavement – A Case Study”, Conference in Transportation & Development Institute Congress (T&DI) of American Society of Civil Engineers, 8-11 June 2014, Orlando, Florida, pp 69-78. (<https://doi.org/10.1061/9780784413586.007>).

#### Books

- NIL

#### Editor/ Reviewer of Journal

#### Patents

#### Invited Lectures, talks and workshops

#### Students Advising / Mentoring

##### Master’s Program

1. Nikitha D (Completed:2025) – PI

Specialization: Transportation Engineering & Management

Project title: Urban road network visualization and data integration: case study

2. Amith C A (Completed:2025) – PI

Specialization: Transportation Engineering & Management

Project title: Road dust of urban landscape: a case study insight

3. Prerana H M (Completed:2024) – PI

Specialization: Transportation Engineering & Management

Project title: Decarbonized rice husk ash application in hot-mix asphalt: an experimental validation

4. Rathan Kumar M N (Completed:2022) – PI  
Specialization: Transportation Engineering &Management  
Project title: Fillers influence on hot-mix asphalt mixture design and performance assessment
5. Shruthi G T (Completed:2023) – PI  
Specialization: Transportation Engineering &Management  
Project title: Experimental investigation of hot-mix asphalt containing recycled asphalt pavement

#### Bachelor's Program

6. Bhuvana H V and Co (Completed: February 2025) – PI  
Specialization: Civil Engineering  
Project title: Digitization of roadmap on web platform: a case study insight
7. Hemanth C B and Co (Completed: February 2025) – PI  
Specialization: Civil Engineering  
Project title: Urban road dust: issues, collection, and characterization
8. Amogh S and Co (Completed: February 2025) – PI  
Specialization: Civil Engineering  
Project title: An experimental study on concrete by partial replacement of cement with ground granulated blast furnace slag and alccofine
9. Mohamed Fazil Pasha and Co (Completed: July 2024) - PI  
Specialization: Civil Engineering  
Project title: Compatibility study on usage of LDPE in hot-mix asphalt
10. Bhumika and Co (Completed: July 2023) - PI      Specialization: Civil Engineering  
Project title: Pavement management system: data collection, analysis and development of user-friendly platform
11. Danish Yattoo and Co (Completed: July 2023) - PI      Specialization: Civil Engineering  
Project title: Comparative film thickness assessment of different filler based hot-mix asphalt mixtures