

# Suresha S.N.

(SURESHA SUBBARAO NAGABHUSHANARAO)  
Ph.D.(Civil Engineering)

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## Broad Areas of Teaching and Research Interest

### Core Teaching and Research Interest in the area of Civil and Transportation Engineering:

- Transportation Asset Management
- Bonded and unbonded pavement overlays.
- Characterisation of road materials and design of road mixes and structures.
- Rheological aspects of bitumen and bituminous materials.
- Use of locally available materials, industrial wastes in road construction.
- Railway transport analytics and planning and design of permanent way.
- Urban road vehicular traffic congestion characteristics.
- Public transport accessibility in rural areas.

### Research Interest in the area of Academic Quality and Ranking

- Accreditation and Ranking of Engineering Education Institutions
- Growth and Development of Educational Institutions

## Employment and Experience

Employment	Duration	Organisation
Professor	09/10/2023 - till date	National Institute of Technology Karnataka, Surathkal, Mangalore 575025, India.
Associate Professor	16/05/2018 - 09/10/2023	National Institute of Technology Karnataka, Surathkal, Mangalore 575025, India.
Assistant Professor	09/11/2012 - 16/05/2018	National Institute of Technology Karnataka, Surathkal, Mangalore 575025, India.
Assistant Professor	05/01/2009 - 08/11/2012	Dayananda Sagar College of Engineering, Bangalore- 560078, India.
Lecturer (Temporary)	Aug. 2007 - May 2008	National Institute of Technology Karnataka, Surathkal, Mangalore 575025, India.
Teaching Fellow	Aug. 2004 - July 2007	National Institute of Technology Karnataka, Surathkal, Mangalore 575025, India.
Highway Engineer	June-July 2004	M/s Wilbur Smith Associates Pvt. Ltd., Bangalore 560 032, India.
Assistant Lecturer	Sep. 2001 - May 2002	SJC Institute of Technology, Chickballapur 562101, Karnataka, India.

## Education

Degree	Year of Graduation	Institute/University
Ph.D. Civil Engineering	2010	National Institute of Technology Karnataka, Surathkal, India. <b>Thesis Title:</b> Experimental Investigations on the Properties and Development of Guidelines for Porous Friction Course Mixes <b>Research Supervisors:</b> Prof.Varghese George and Prof. A.U.Ravi Shankar
M.E. Highway Engineering	2004	University Visvesvaraya College of Engineering, Bangalore University, Bangalore, India.
B.E. Civil Engineering	2001	Sri Jagadguru Chandrasekaranathaswamiji Institute of Technology, Chikkaballapur, Bangalore University, India.
P.U.C.	1996	Government Pre-University College, Sidlaghatta, 562114, India.
S.S.L.C.	1994	Sri Saraswathi Convent High School, Sidlaghatta, 562114, India.

## Awards and Recognition

"Young Scientist" Research Grant, Science and Engineering Research Board, Department of Science and Technology, Government of India, 2013.

"Teaching Fellowship", National Institute of Technology Karnataka, Surathkal, India, 2004 -2008.

"GATE (Post Graduate Scholarship)", Ministry of Human Resource and Development, Government of India, 2002-2003.

## Teaching and Guidance

### Courses Taught

At Undergraduate Level (B.E/B.Tech)	At Postgraduate Level (M.Tech.)
<ul style="list-style-type: none"> <li>Highway Materials and Concrete Testing Laboratory (CV367)</li> <li><b>Railways, Tunnels, Harbours, and Airports (CV 371)</b></li> <li>Concrete Technology (CV322)</li> <li><b>Transportation Systems Planning (CV374)</b></li> </ul>	<ul style="list-style-type: none"> <li>Transportation Engineering Lab (TS703)</li> <li>Transportation Design Studio (TS705)</li> <li>Traffic Engineering &amp; Management (TS806)</li> <li>Pavement Management System (TS809)</li> <li>Pavement Materials (TS813)</li> <li>Infrastructure Development: Programmes, Planning and Appraisal (TS819)</li> <li><b>Road Materials, Construction Methods and Quality Control (CV743)</b></li> <li><b>Road Materials Testing Laboratory (CV744)</b></li> <li><b>Transportation Asset Management (CV746)</b></li> </ul>

Courses Taught as per the curriculum of NITK, Surathkal, India (From Nov., 2012 to till date) **Bold:** Recently offered

At Undergraduate Level (B.E/B.Tech)	At Postgraduate Level (M.Tech.)
<ul style="list-style-type: none"> <li>Concrete and Highway Materials Lab.</li> </ul>	<ul style="list-style-type: none"> <li>Highway Materials</li> <li>Traffic Engineering and Design</li> <li>Road Projects</li> <li>Highway Planning and Economic Analysis</li> <li>Road Construction Planning and Management</li> <li>Pavement Management System</li> <li>Advanced Traffic Engineering</li> <li>Airport Planning and Design Structures</li> </ul>

Courses Taught as per the curriculum of Visvesvaraya Technological University, Belgaum, India. (From Jan., 2009 to Nov., 2012)

### Guidance of Projects, Theses and Dissertations

Level	Ongoing	Completed
Ph.D.	04	05
M.Tech. (Research)	--	02
M.Tech. (Regular)-Major Project	06	58
B.Tech.-Major Project	00	02
B.Tech.-Minor/Mini Project	00	05

[Details in Annexure- A]

### Workshop/Training Programmes/Conferences Organised or Coordinated

Type of Event	Name of the Event	Dates	Sponsored by
Workshop	"Professional Skill Development Programme" for the Post Graduate Students of the Department of Civil Engineering, NITK.	26-28 Aug., 13-15 Sep., 08-10 Oct., 2013	TEQIP-II, NITK, Surathkal
International Workshop	"Civil Infrastructure and Structural Materials" jointly organised by the DCE, NITK, Surathkal and the DCEE, Michigan State University.	28-29 July, 2014	TEQIP-II, NITK, Surathkal
Workshop	"Mitigation of Road Disasters" jointly organised by the Centre for Disaster Risk Reduction and the DCE, NITK, Surathkal.	15-17 Sep., 2014	TEQIP-II, NITK, Surathkal
Seminar	"Rheo-Tribology" jointly organised by the DCE, NITK and M/s Anton Paar India Pvt. Ltd.,	10 Feb., 2015	M/s Anton Paar
Seminar-cum-workshop	"Rheo-Tribology" jointly organised by the DCE, NITK and M/s Anton Paar India Pvt. Ltd.,	10 Feb., 2016	M/s Anton Paar
5-Day Course	GIAN(MHRD, GoI) course on "Engineering Analysis and Design of Rigid Pavements"	25-29 Jul., 2016	MHRD, GoI
5-Day CEP	"Recent Trends in Highway Pavements Design and Highway Geometrics"	11-15 Sep., 2017	Engineering Staff College, Krishnarajasagara, Mysore.
5-Day Online FDP	Infrastructure Engineering - Transport Infrastructure Asset Management	21-25, Sep., 2020	ATAL Academy, AICTE
5-Day Online FDP	India's Strategic Transport Infrastructure Development Projects and Programs	16-20, Aug., 2021	ATAL Academy, AICTE

## Invited Lectures

Title of the Lecture	Date & Venue	Occasion & Organisers
ICTs and Improving Road Safety	May 21, 2013 Hotel Woodlands, Mangalore.	World Telecommunication & Information Society Day-2013. The Institution of Engineers (India), Mangalore Local Centre
Quality Control and Maintenance	September 05, 2014 & January 22, 2015 Department of Civil Engineering, NITK	Continuing Education Programme on 'Design, Construction & Maintenance of All Weather Roads' for Karnataka Public Works & Irrigation Department Engineers, Centre for Continuing Education, NITK
Highlights of Standards and Specifications for Highway Pavement Construction	April 11, 2015 KVG College of Engineering, Sullia	National Technical Fest VISION-15 of KVG College of Engineering, Sullia.
Advances in Pavement Materials and State of the Practice in India	October 20, 2015 NMAM Institute of Technology, Nitte.	Three-day short term technical training Programme for Engineers of Udupi Nirmithi Kendra, District Urban Development Cell and Endowment Department organised by the Department of Civil Engineering, NMAM Institute of Technology, Nitte.
Advances in Pavement Materials: Bituminous Binders	February 20, 2016 Hotel Madhuvan Serai, Manipal	Two-day short term technical and administration training programme for all Nirmithi Kendra's Project Directors/Engineers, organised by the Udupi Nirmithi Kendra, Udupi.
Aggregate and Bitumen Characterization	October 25, 2016 Department of Civil Engineering, NITK	CEP on 'Design of Highway and Construction of Flexible and Rigid Pavements' for Karnataka Public Works & Irrigation Department Engineers, Centre for Continuing Education, NITK
Indian Standard Paving Bitumen - Specification: Journey till now	December 12, 2016 Department of Civil Engineering, NIT Tiruchirappalli	Short Term Training Programme on "Recent Trends in Pavement Engineering" Organized by Centre of Excellence in Transportation Engineering, Department of Civil Engineering, NIT Tiruchirappalli - 620015.
Asphalt Mix Design		
Road Safety Audit for PMGSY roads	May 22, 2017 Department of Civil Engineering, NITK	Training Programme on PMGSY Pavements, jointly organised by the Department of Civil Engineering and Center for Continuing Education, NITK, Surathkal (May 22-24, 2017)
Rigid Pavement Design - IRC:58 (2015)	July 11, 2019 Department of Civil Engineering, NIT Tiruchirappalli	Workshop on Geotextile Reinforced Pavements, Organized by Centre of Excellence in Transportation Engineering, Department of Civil Engineering, NIT Tiruchirappalli - 620015. (July 8 -12, 2019)
Construction of Rigid Pavements		
Sub-base and Bases (Non-Bituminous): Materials, Construction Methods, and Quality Control	September 24, 2019	Continuing Education Programme on 'Quality Management System in Civil Engineering' for Karnataka Public Works & Irrigation Department Engineers, Centre for Continuing Education, NITK
Aggregate and Bitumen Characterization	October 15, 2019 Department of Civil Engineering, NITK	CEP on 'Design Construction and Maintenance of All-Weather Roads' for Karnataka Public Works & Irrigation Department Engineers, Centre for Continuing Education, NITK
Innovation by Faculty in Teaching Learning Process	January 02, 2020 Department of Civil Engineering,	Outcome-Based Education and NBA Accreditation Training Program, Sponsored by VTU-TEQIP 1.3 Cell Organised by: Department of Civil Engineering, Mangalore Institute of Technology and Engineering (MITE), Moodabidri, Mangalore, Karnataka.
National Institutional Ranking Framework (NIRF) - Its Importance and Relevance	February 04, 2020 BGS Auditorium, SJC Institute of Technology	30th Dr. L.S. Chandrakanth Memorial Lecture during 22nd ISTE State Level Faculty Convention, SJC Institute of Technology, Chickballapur - 562 101.

Title of the Lecture	Date & Venue	Occasion & Organisers
India Transport: What was planned for the next decade?	September 16, 2020 (Virtual Mode: Webex)	Research Conclave - 2020 organised by the Department of Civil Engineering. St. Joseph Engineering College, Mangaluru.
Performance of Engineering Institutions of Karnataka in the NIRF 2020 and Overview of Ranking Methodology	December 26, 2020	Shri Madhwa Vadiraja Institute of Technology & Management, Udupi District
Components of Transport Asset Management	July 09, 2021	AICTE Sponsored FDP organised by the Department of Civil Engineering, New Horizon College of Engineering, Bengaluru.
Professional ethics to ensure safe, sustainable, and resilient civil infrastructure	February 16, 2023	National Seminar on "Advanced Technologies for Sustainable Construction" Organized by IES College of Technology, IES University, Bhopal, on 15 - 17 February 2023.
Performance of Engineering Educational Institutions in India - A Reflection on Economic Development	June 30, 2023	Technical Talk organised by ACCE (I) Mangalore Centre on the occasion of Annual General Body Meeting, held at Lions Seva Mandir, Mangalore.
	August 01, 2023	Technical Talk organised by The Institution of Engineers (India)-Mangalore Local Centre, Mangalore.

## Research and External Fundings and Outcomes

### Research and Funded Projects

Project Title	Funding Agency	Amount	Duration	Role
Experimental Investigation on Rutting and Flexural Behaviour of Structural Asphalt Mixes with Warm Mix Asphalt Additives	SERB-DST, Government of India	INR 18,58,000/-	3 Years (23/09/2013 -22/09/2016)	Principal Investigator
Fund for the Improvement of S&T Infrastructure - 2013	DST, Government of India	INR 1,10,80,000/-	5 Years (2014-2019)	Coordinator

### Research Publications

Articles Published in	International	National
Journals	23 (SCOPUS Indexed)	9 (Non-SCOPUS Indexed)
Procd. of Seminars/Conferences/Workshops	11	15

[Details in Annexure- B]

### Patents

Application No. and Title	Status
No.: 202041006193/DIRECT COMPACTION MOULD FOR PREPARATION OF BITUMEN BOUNDED FINE AGGREGATE MATRIX SPECIMEN	FER Reply Filed 21/07/2022
No.: 202241010501/SEPARATION TUBE FOR INVESTIGATING STORAGE STABILITY OF MODIFIED ASPHALT BINDER	Published 01/09/2023

### Testing and Consultancy Projects

Typical testing & consultancy projects undertaken:

- Design of Granular Sub-base mixes, using locally available materials, in compliance with the specifications of the Ministry of Rural Development.
- Design of Wet Mix Macadam (WMM), Bituminous Macadam (BM), Dense Bituminous Concrete (DBC), Semi-Dense Bituminous Concrete (SDBC), and Bituminous Concrete (BC) mixtures as per the Specifications of Road and Bridge Works, Ministry of Transport & Highways.
- Design of Pavement Quality Concrete (PQC), use of Ground Granulated Blast-Furnace Slag in the PQC.

- Design of Airfield Pavement Component Layers in compliance with the specifications of Airport Authority of India.

## Reviewer of Research Articles for Journals

International Journal of Pavement Engineering, Taylor and Francis.  
 Journal of Advances in Civil Engineering Materials, ASTM International.  
 Journal of Construction and Building Materials, Elsevier Publications.  
 Journal of Materials in Civil Engineering, American Society of Civil Engineers.  
 Journal of Road Materials and Pavement Design, Taylor and Francis.  
 Journal of Testing and Evaluation, ASTM International.  
 Journal of The Institution of Engineers (India) - Series A, Springer Publications.  
 Journal of Traffic and Transportation Engineering (English Edition), Elsevier Publications.  
 Journal of Transportation in Developing Countries, Springer Publications.  
 Publications of Indian Roads Congress.  
 Sadhana, Academy Proceedings in Engineering Sciences, Springer Publications.  
 Journal of Innovative Infrastructure Solutions, Springer Publications.  
 International Journal of Fatigue, Elsevier Publications.

## Association with Professional Bodies and Outreach Activities

### Association with Professional Bodies

Organisation	Country	Membership Grade (No.)
The Institution of Engineers (India)	India	Fellow [F-1282575]
Association of Consulting Civil Engineers (India)	India	Fellow [FM-3416]
Indian Society for Technical Education – ISTE	India	Life Member [LM 33134]
Indian Roads Congress – IRC	India	Life Member [LM28288]
Indian Geotechnical Society	India	Life Member [LM-3691]
Institute of Urban Transport (India)	India	Life Member [M-1387]
American Society of Civil Engineers	USA	Member [9512797]
American Society for Testing and Materials (ASTM) International	USA	Participating Member
World Road Association	France	Member
Association of Asphalt Pavement Technologists	USA	Member
International Society for Concrete Pavements	USA	Member
The Institution of Engineers (India)	India	Member [M-146541-0]

### Awareness talks on ethical and professional practice

Title of the Lecture	Date & Venue	Occasion & Organisers
Future Transportation Projects - Opportunities and Challenges for Civil Engineers	January 23, 2015, Lions Seva Bhawan, Mangalore	Regular Guest Lecture Association of Consulting Civil Engineers (India), Mangalore Centre.
Transportation Projects in India - Opportunities for Civil Engineers	March 25, 2015, NMAH Institute of Technology, Karkala	ACCE (I) - Engineers' Week (2015) Programme, ACCE(I)-Mangalore Centre.
An Overview on Transportation Projects in India and Opportunities for Civil Engineers	March 26, 2015, Shri Madhwa Vadiraja Institute of Technology & Management, Udupi District	
Birds-eye View on Vision Documents of Transportation Development Plan in India	March 31, 2015, Manipal Institute of Technology, Manipal.	
Highlights of Standards and Specifications for Highway Pavement Construction	September 19, 2016, SDMIT, Ujjire	<b>Techno-Week 2016</b> Programme Jointly organised by the ACCE (I) Mangalore Centre & The Ramco Cements Ltd.
	September 24, 2016, Srinivasa School of Engineering, Mukka, Mangalore.	
Need for Code of Ethics to Practise Civil Engineering	March 22, 2017, Sahyadri College of Engineering and Management, Mangaluru.	<b>Engineers Week-2017</b> Programme Jointly organised by the ACCE (I) Mangalore Centre & ACC Ltd.

Title of the Lecture	Date & Venue	Occasion & Organisers
	March 28, 2017, Shree Devi Institute of Technology, Mangalore	
Code of Ethics to Practise Civil Engineering	September 20, 2017, Manipal Institute of Technology, Manipal.	<b>Techno-Week 2017</b> Programme Jointly organised by the ACCE (I) Mangalore Centre & The Ramco Cements Ltd.
	September 21, 2017, St. Joseph Engineering College, Mangaluru.	
Highlights of Green Highways Policy-2015	September 22, 2017, PA College of Engineering, Mangaluru.	
Code of Ethics to Practise Civil Engineering	March 27, 2018, Vivekananda College of Engineering and Technology, Puttur.	<b>Engineers Week-2018</b> Programme Organised by the ACCE (I) Mangalore Centre.
Sagarmala and the scope for community development	September 18, 2018 KVG College of Engineering, Sullia.	<b>Techno-Week 2018</b> Programme Jointly organised by the ACCE (I) Mangalore Centre & The Ramco Cements Ltd.
	September 25, 2018 PA College of Engineering, Mangaluru.	
	March 28, 2019 Manipal Institute of Technology, Manipal.	<b>Engineers Week-2019</b> Programme Jointly Organised by the ACCE (I) Mangalore Centre and UltraTech Cement
India Transport: Present Status and Future Needs	September 20, 2019 PA College of Engineering, Mangaluru.	<b>Techno-Week 2019</b> Programme Jointly organised by the ACCE (I) Mangalore Centre & The Ramco Cements Ltd.
Code of Ethics to Practise Civil Engineering	September 25, 2019 Shri Madhwa Vadiraja Institute of Technology & Management, Udupi District	
Draft National Policy on Academic Ethics	September 26, 2019 Manipal Institute of Technology, Manipal.	
Code of Ethics to Practice Civil Engineering	September 27, 2022, Vivekananda College of Engineering and Technology, Puttur.	<b>Techno-Week 2022</b> Programme Jointly organised by the ACCE (I) Mangalore Centre & The Ramco Cements Ltd.

## Community Engagement and Outreach

Member, Executive Council of Faculty Association of NITK (Calendar Years: 2015, 2016, 2017, 2018).  
Secretary, Faculty Association of NITK (from February 06, 2019 to July 16, 2019).

## Member of Technical Committee

Corresponding Member, H-3 Committee: Rigid Pavement Committee for the year 2021-23 (3 years), Indian Roads Congress, New Delhi.

# Lifelong Learning

## American Society of Civil Engineers hosted webinars

Webinar Title	Earned Credits
Bus Rapid Transit - A Civil Engineering Perspective - Part III of III	0.1
Bus Rapid Transit - A Viable Alternative - Part I of III	0.1
Bus Rapid Transit - A Viable Alternative - Part II of III	0.1
Structural Design of Municipal Streets and Roadways Using Interlocking Concrete Pavement	0.1
A Closer Look at Road Diets	0.1
Benefits of Pavement Reclamation: How In-Place Recycling has Worked for National Parks/Forests	0.1
Complying with the MUTCD-Traffic Signing for Horizontal Curves	0.1
Permeable Pavement – Design Considerations and Tips for Avoiding Failures	0.2
Toll Technology and Implementation: A look at how Technology has Changed the Implementation of Tolling	0.1
Project Team and People Management - Part I of II	0.1
Project Team and People Management - Part II of II	0.1
Next Generation Street and Traffic Control Device Design for Central Business Districts and Town Centers	0.1
Prevent Accidents and Traffic Delays - The Art of Delivering and Maintaining Successful Signal Timing Improvements	0.1
Construction Manager/General Contractor (CM/GC) Contracting in Transportation Infrastructure Programs	0.1
Delegation - Improve Your Productivity	0.1
Developing, Implementing, & Managing a Comprehensive Citywide Traffic Signal Coordination Program	0.1
Getting Started with HOT Lanes	0.1
Effective Pavement Management and Its Benefits	0.1
The Road Safety and Signage Audit - Proactive Roadway Safety in the 21st Century	0.1
Time Management: A Roles and Goals Approach to Life Balance	0.1
From Project Engineer to Project Manager - Look Before You Leap	0.1
Road Construction Quality Control and Inspection Techniques for Asphalt Surfaced Pavements	0.1
The Ethics of Leadership	0.2
Public Speaking - How to Plan, Design, and Deliver a Presentation	0.1
Waste and By-Product Use in Road Construction	0.1
Traffic Volume Data Collection: A Practical Guide	0.2
Mitigation of Carbon Emissions from Construction Projects	0.1
Traffic Studies for Implementing Short-Term and Long-Range Roadway Improvements	0.2
Pedestrian and Bicycle Safety Assessment Studies	0.2
Principle Changes to FAA "Airport Circular Advisory"	0.2
Implementation of GIS in the Airport Environments	0.2
Emerging Technologies for Airport Pavements	0.2
ASCE Canon 8 - Ethics Guiding the Profession to an Inclusive Future (07/12/2020)	0.1
Engineer Your Own Success: 7 Key Elements to Creating an Extraordinary Engineering Career (08/12/2020)	0.1
Life Cycle Assessment for Transportation Facilities (09/12/2020)	0.2
Improving the Effectiveness of Traffic Control Devices (11/12/2020)	0.2
Critical Aspects of Timing Traffic Signals to Maximize Road User Safety (14/12/2020)	0.2
Improving Highway Safety: An Overview of 9 Proven Crash Countermeasures (15/12/2020)	0.2
Highway Safety Data Systems (21/12/2020)	0.2
The Infrastructure Challenge: Prioritization (22/12/2020)	0.2
From Engineering to Entrepreneurship: How to Prepare For, Start and Manage Your Own Engineering firm (23/12/2020)	0.2
Improving Walkability at Signalized Intersections with Control Strategies (24/12/2020)	0.1
Beneficial Uses and Reuses of Dredged Material (15/12/2021)	0.1
Thin Pavement Surface Treatments to Improve Friction and Reduction Moisture Infiltration (16/12/2021)	0.1

Webinar Title	Earned Credits
Roadway Construction Quality Control and Inspection Techniques for Concrete Surfaced Pavements (17/12/2021)	0.1
Roller-Compacted Concrete Pavements - Applications and Guidance (21/12/2021)	0.1
Developing Pavement Performance Models for Asset Management Applications (30/12/2021)	0.1
Best Practices of Incorporating Reclaimed Asphalt Pavement and Rejuvenation Alternatives (31/12/2021)	0.2
Planning and Design Guidelines for Small Craft Harbors - An Overview of ASCE Manuals and Reports on Engineering Practice No. 50 (31/12/2021)	0.1
Practical Use of Drones for Diverse Infrastructure Projects (31/12/2021)	0.1
Single Lane, Multi Lane and Mini Roundabouts - The Geometric Aspects (31/12/2021)	0.2
Principle-Based Ethics: Character-Builder or Career-Ender (27/12/2022)	0.1
Ethics in Sustainable Development for Civil and Structural Engineers (28/12/2022)	0.2
Avoiding Ethical Pitfalls in Failure Investigations (31/12/2022)	0.2
Climate Resilience for Critical Infrastructure (31/12/2022)	0.2
What Works for Traffic Calming and What Doesn't - An Interactive Approach to Identifying Best Practices (31/12/2022)	0.2
Total PDHs till date	77

## Austrroads and ARRB Webinars

Webinar Title	Duration
"Geopolymer Concrete and its Applications" by Dr. Ahmad Shayan and Mr.Fred Andrews-Phaedonos, May 1, 2018 7:30 AM - 8:45 AM IST	1.0 Hour
"Towards Safe System Infrastructure" by Dr.Blair Turner and Dr.Jeremy Woolley, May 10, 2018 8:30 AM - 9:45 AM IST	1.0 Hour
"Best Practice in Road Safety Infrastructure Programs" by Mr.Paul Durdin and Mr.Dave Smith, May 15, 2018 8:30 AM - 9:30 AM IST	1.0 Hour
"Guidelines and Specifications for Microsurfacing" by Mr. Steve Patrick, June 14, 2018 8:30 AM - 9:30 AM IST	1.0 Hour
"Benefits of Safety and Traffic Management Technologies" by Dr. Glenn Geers, June 19, 2018 8:30 AM - 9:30 AM IST	1.0 Hour
"Guideline for Continual Improvement Processes for Asset Management" by Mr.Aneurin Hughes and Mr. Stephen Walker, June 28, 2018 8:30 AM - 9:30 AM IST	1.0 Hour
"Appropriate Use of Marginal and Non-standard Materials in Road Construction and Maintenance" by Mr.Mick Savage, Mr.Tyrone Toole, and Ms.Zia Rice, Jul 17, 2018 8:30 AM - 9:30 AM IST	1.0 Hour
"Guide to Project Delivery Part 5: Road Construction Quality Assurance" by Mr.Peter Balfe, Sep 20, 2018 8:30 AM - 9:30 AM IST	1.0 Hour
"Implications of Traffic Sign Recognition Systems for Road Operators" by Mr.Chris Jones, Mr.Mark Rowland, and Yasmin Roper, Oct 23, 2018 7:30 AM - 8:30 AM IST	1.0 Hour
"Bituminous Binders and Selection and Design of Sprayed Seals: Guide to Pavement Technology Parts 4F and 4K" by Young Choi and Steve Patrick, Oct 31, 2018 7:30 AM - 8:30 AM IST	1.0 Hour
"Measuring and Reporting the Value of Road Maintenance and Renewal Works" by Mr. Martin Chow, Nov 27, 2018 7:30 AM - 8:30 AM IST	1.0 Hour
"Level of Service Requirements for Freight on Rural Roads and Refinement of Heavy Vehicle Roughness Band Index" by Mr.Ulysses Ai Jan 31, 2019 7:30 AM - 8:30 AM IST	1.0 Hour
"Sustainable urban mobility planning (SUMP)" by Dr Zbyněk Sperat, Feb 12, 2019 9:30 AM - 10:30 PM IST (ARRB)	1.0 Hour
"Austrroads Guide to Asset Management" by Dr. Tim Martin, July 04, 2019 8:30 AM - 9:30 AM IST	1.0 Hour
"Guide to Pavement Technology Part 5: Pavement Evaluation and Treatment Design" by Geoff Jameson and Dr Michael Moffatt, Thu, Aug 22, 2019 8:30 AM - 9:30 AM IST	1.0 Hour
"Infrastructure Changes to Support Automated Vehicles on Rural and Metropolitan Highways and Freeways" by John Wall, Andrew Somers, and Anthony Germanchev, Thu, Nov 7, 2019 7:30 AM - 8:30 AM IST	1.0 Hour
"Australasian Road Asset Data Standard – Opportunities for Local Government." by Angus Draheim, Georgia O'cianain, Ashish Shah and Muhammad Khatree, Fri, Nov 29, 2019 7:00 AM - 8:00 AM IST	1.0 Hour
"Integrating Safe System with Movement and Place with for Vulnerable Road Users." by Dr. Bruce Corben, Thu, March 26, 2020 7:30 AM - 8:30 AM IST	1.0 Hour
"Assessment of Key Road Operator Actions to Support Electric Vehicles." by John Wall, David Green, Mark Gjerej, and Nathan Gore-Brown, Tue, March 31, 2020 7:30 AM - 8:30 AM IST.	1.0 Hour



<b>Webinar Title</b>	<b>Duration</b>
"Education and Training for Drivers of Assisted and Automated Vehicles" by Professor Michael Regan, Dr Prasannah Prabhakaran, Phil Wallace and Mitch Cunningham, May 13, 2020 8:00 AM - 9:15 AM IST	1.25 Hours
"Transport Modelling for Project Managers" by Bryan Li., Thu, Jul 9, 2020 8:30 AM - 9:30 AM IST	1.0 Hour
"Tactical Urbanism – Streets for People" by Mike Lydon, Claire Pascoe and Sara Stace, Tue, Jul 21, 2020 7:30 AM - 9:00 AM IST	1.5 Hours
"Vehicles and Technology - Future State 2030" by Andrew Somers and John Wall, Thu, August 06, 2020 8:30 AM - 9:30 AM IST	1.0 Hour
"Standards Australia – Bitumen and Related Materials for Roads" by Robert Urquhart, Tue, August 11, 2020 8:30 AM - 9:30 AM IST	1.0 Hour
"Updated Roadside Design Guidance – Crash Risk Evaluation" by Dr Rod Troutbeck and Mr. Peter Ellis, Tue, Sep 22, 2020 8:30 AM - 9:30 AM IST	1.0 Hour
"Updated Roadside Design Guidance – Crash Risk Evaluation Procedure Background" by Dr Rod Troutbeck and Mr. Peter Ellis, Tue, Oct 06, 2020 8:30 AM - 9:30 AM IST	1.0 Hour
"A Holistic Investment Prioritisation Framework for Road Assets" by Martin Chow and Dylan Frangos, Oct 08, 2020 7:30 AM - 8:30 AM IST	1.0 Hour
"Opportunities to Build Capacity in Traffic Management" by Paul Bennett and Graham McCabe, Thu, Jan 21, 2021 7:30 AM - 8:30 AM IST	1.0 Hour
Total PDHs till date	28.75

## **Elsevier Researcher Academy**

<b>Webinar Title</b>
How to prepare your manuscript by Anthony Newman (06/04/2020)
Structuring your article correctly by Anthony Newman (06/04/2020)
10 tips for writing a truly terrible journal article by Bert Blocken (06/04/2020)
Make the most of your research: publish your data & methods by David Parsons, Valerie Teng-Broug (07/04/2020)
Diversity in peer review by Sanjana Balu and Shirin Heidari (07/04/2020)
Recognizing peer reviewers: A webinar to celebrate editors and researchers by Julia Wilson, Luiza Cabeza, Fei Chen (07/04/2020)
Ethics responsibilities for peer reviewers by Jaap van Harten (08/04/2020)
How to turn your thesis into an article by Adolfo Cuevas, Cecily L. Betz (08/04/2020)
How to review a manuscript by Jaap van Harten (08/04/2020)
Why get involved in peer review by Bahar Mehmani (08/04/2020)
Transparency in review by Richard Morey, Emily Jesper-Mir, Riaz Agha, Catriona Fennell (12/04/2020)
How to write an abstract and improve your article by Hannah Foreman (12/04/2020)
Guide to reference managers: How to effectively manage your references by Daniel Christe, Jorge Sinval (12/04/2020)
Writing a persuasive cover letter for your manuscript by Anthony Newman, Lora Heisler (12/04/2020)
Using proper manuscript language by Anthony Newman, Lora Heisler (12/04/2020)
5 diseases ailing research - and how to cure them by John Antonakis (12/04/2020)
Systematic reviews 101 by Naomi Lee and Paul Whaley (14/04/2020)
Beginners' guide to writing a manuscript in LaTeX by Hannah Foreman (17/04/2020)
An editor's guide to writing a review article by Lindsey Drayton, Matt Pavlovich (17/04/2020)
Plagiarism by Catriona Fennell (01/05/2020)
Content ownership by Christiaan van Vliet (07/05/2020)
Seven strategies for scientists to communicate their research and create a brand by Dr. Joshua Barham (21/06/2020)
Demystifying permissions by Hop Wechsler (18/07/2020)
Why you can't afford to ignore publication ethics by Catriona Fennell (19/07/2020)
Authorship by Catriona Fennell (19/07/2020)
Plagiarism: Decision making & dealing with grey-zones across academic fields by Michael Seadle, Thorsten Beck, Melanie Rügenhagen (19/07/2020)
Detecting Image Manipulation: Routines, Tools & Limitations by Michael Seadle, Thorsten Beck, IJsbrand Jan Aalbersberg (08/08/2020)
How your research can make an impact on society by Alex Ford (08/08/2020)

<b>Certificate of Excellence</b>
Certificate of Excellence - Fundamentals of manuscript preparation (12/04/2020)
Certificate of Excellence - Writing Skills (12/04/2020)
Certificate of Excellence - Fundamentals of peer review (12/04/2020)
Certificate of Excellence - Certified Peer Reviewer Course (13/04/2020)
Certificate of Excellence - Ethics (08/08/2020)

## International Road Federation (IRF) E-learning webinar series

<b>Webinar Title</b>	<b>Duration</b>
Roadway Analytics: Improving Roadway Performance in Cities and Across Strategic Road Networks (15/02/2017, 7:30 P.M. - 9:00 P.M. IST)	1.0 Hour
Public-Private Partnerships and Innovative Finance for Infrastructure Projects (30/05/2018, 8:30 A.M. - 9:15 A.M. IST)	0.75 Hour
Adapting Pavement Markings to Support Highway Safety and Automated Vehicle Technologies (14/08/2019, 8:30 PM - 10:00 PM IST)	1.5 Hour
Using Artificial Intelligence to Identify Individual Distresses for Pavement Management (25/03/2020, 8:30 PM - 10:00 PM IST)	1.5 Hour
Advances in LIDAR Uses for Advanced Road Asset Monitoring (Wed, Sep 9, 2020 8:30 PM - 10:00 PM IST)	1.5 Hour
<b>Total PDHs till date</b>	<b>6.25</b>

## TRB-PIARC Webinars

<b>Webinar Title</b>	<b>Duration</b>
PIARC Human Factors Guidelines for a Safer Man-Road Interface by Prof. Lorenzo Domenichini (09/04/2018)	1.0 Hour
Unmanned Aerial Systems (UAS) and Highways; an International Perspective (16/04/2018, 8:30 P.M.IST)	1.5 Hours
PIARC COVID-19 Webinar on Road safety and the COVID-19 crisis. (15/07/2020, 4:30 P.M. - 6:30 P.M. IST)	2.0 Hours
"PIARC&COVID-19: Lessons learned so far and way forward"	2.0 Hours
<b>Total PDHs till date</b>	<b>6.5</b>

## BrightTALK Webinars

<b>Webinar Title</b>	<b>Duration</b>
Scopus Data for Ranking Organizations (09/11/2017)	1.0 Hour
Scopus Curation and Re-evaluation = High-Quality Content (12/09/2019)	1.0 Hour
Unlocking the potential of Research Data Management (03/10/2019)	1.0 Hour
Scopus Author Profiles How they work and why you should keep it up-to-date (14/11/2019)	1.0 Hour
Effective Research Database Management (21/11/2019)	1.0 Hour
Introduction to writing research articles (05/03/2020)	1.0 Hour

## Other Webinars

<b>Webinar Title</b>	<b>Duration</b>
Is High Strength Necessary for Concrete Durability? By Prof. Manu Santhanam, "India Next Webinar Session 2", June 22, 2018 4:00 PM - 5:00 PM IST	1.0 Hour
Mintab's "The Modern Toolkit for Process Excellence" Thu, Jan 17, 2019 7:30 PM - 8:30 PM IST	1.0 Hour
"Case Studies on Ground Improvement and Instrumentation" by Shri. Guruvittal, U.K., Organised by Kerala Highway Research Institute, May 02, 2020, 3:00 P.M. - 4:30 P.M. IST	1.5 Hours
Panel Discussion on "Data-Driven Road Safety Management" organised by the KSCSTE-NATPAC, Kerala, Thu, May 28, 2020, 11:00 A.M. - 12:30 P.M. IST	1.5 Hours
"Building Competence over Lifetime" by Prof. C.V.R.Murthy, Organised by Kerala Highway Research Institute, June 03, 2020, 7:00 P.M. - 8:30 P.M. IST	1.5 Hours
"Waterproofing and Rehabilitation in Segment and Concrete Lining Tunnels" organised by the TPH. Waterproofing systems, Thu, Jun 4, 2020 8:30 PM - 9:30 PM IST	1.0 Hour
IEEE - ABET Webinar on Accreditation and Quality of Engineering Education in South Asia Organised by the IEEE India Council, Wednesday 08, 2020, 6:00 P.M. - 8:30 P.M. IST	2.5 Hours

"State Level Online Awareness Programme on PDS-ShodhShuddhi in Karnataka & Goa" Organised by the Information and Library Network Centre (INFLIBNET Centre), Thursday, 23.07.2020 @11.00 am to 13.30 pm	2.5 Hours
Total PDHs till date	10.0

## Workshops/Training Programmes/Seminars/Conferences PARTICIPATED

Type of Event	Name of the Event	Dates & Duration	Organised by
Workshop	"Using Science and Data in Road Safety Management"	15-16, February 2013. (2 Days)	Department of Civil Engineering, IIT Madras, Chennai.
Workshop	"Warm Mix Asphalt –Challenges and Way Forward"	8-9, August 2013. (2 Days)	Department of Civil Engineering, IIT Madras, Chennai.
International Course	"International Course on Dissemination of HDM-4"	16-27, September 2013. (12 Days)	CSIR-Central Road Research Institute, New Delhi.
National Workshop	QS Rankings and Ratings	January 20, 2020 (One Day)	QS I.GAUGE, and SRM Institute of Science and Technology, at IISc Bangalore

## MOOCs/e-Courses

1. WBGxUR01x: e-Learning Course on Urban Rail Development, by Open Learning Campus-World Bank Group, edX verified. (Certificate issued on 29/10/2020).
2. Asian Development Bank Institute Course on Private Financing for Infrastructure and Sustainable Growth. (Certificate issued on 02/07/20201).
3. Accreditation of Undergraduate Engineering Programmes, SWAYAM Course, National Institute of Technical Teachers Training and Research, Bhopal. (Date of issue: 16/08/2021).

## Role and Responsibilities at NITK, Surathkal

### Department Level

Coordinator (Overall), NBA-UG Programme Accreditation (July 2020 - April 18, 2023 - Accreditation letter received)

Faculty In-charge, Advanced Asphalt Characterisation and Rheology Laboratory (Active)

Faculty In-charge, Transportation Engineering Laboratory. (from 01/03/2014 to 14/01/2019)

Faculty In-charge, Computer-Aided Design Laboratory-II. (from 16/08/2013 to 14/01/2019)

Member, Department Testing and Consultancy Recommendation Committee. (from 01/07/2013 to 21/03/2018)

Faculty Advisor, for Students of B.Tech Civil Engineering (Academic Batch 2013-17)

Faculty Advisor, for Students of M.Tech Transportation Engineering (Academic Batch 2016-18, 2018-20, 2021-23)

### Institute Level

Associate Dean (P&D) - I, NITK (Date: 26/04/2023 - )

Member, "Institute Level NIRF Committee", NITK (Date: 21/05/2019).

Member, "Safety of multi-storeyed buildings in the Institute Campus", NITK. (Date: 10/12/2018)

Member, "Academic Space Audit Committee", NITK. (Date: 23/08/2018)

Faculty In-charge, Estate and Works (from 17/06/2016 to 15/06/2018)

Faculty Advisor, NITK-American Society of Civil Engineers Student Chapter (Active from Academic Year 2013-14 till Academic Year 2018-19, June 2019 - July 2020)

**Suresha S.N.**

# Annexure – A: Project, Thesis and Dissertations

## Ph.D. Research Supervision

Sl. No.	Name of Scholar	Ph.D. Title/Research Area	Date of Thesis Submission	Date of Viva Voce
1	Mr. Shivakumar G. Roll No.: CV13F03	Effect of Lower Working Temperatures on Physical and Mechanical Properties of Warm Mix Asphalt Mixtures	July 24, 2017	January 04, 2018
2	Mr. Jayakesh K. Roll No.: CV13F01	Experimental Studies on Interface Bond Strength of Ultra-Thin Whitetopping Pavements under Static and Dynamic Loading Conditions	July 02, 2018	August 01, 2019
3	Mr. Ningappa A. Roll No.: CV16F13	Influence of Aging Condition on Performance of Fine Aggregate Asphaltic Matrix	August 25, 2020	February 16, 2021
4	Mr. Hemantha Kumar V. Roll No.: CV16F08	Effect of Working Temperature on Rheological Properties of Crumb Rubber Modified Binders with Warm Mix Additives	August 30, 2021	May 10, 2022
5	Mr. Ashik Bellary Roll No.: 177CV002	Experimental and Numerical Study on Performance of Undowelled Joints in Concrete Pavements	January 10, 2022	June 20, 2022
6	Mr. Vijaykumar A.S. Roll No.: 187CV015	Area: Asphalt Pavement - Recycle	Ongoing	-
7	Mr. Arun V. Roll No.: 187CV500	Area: Maintenance Management of Rural Roads	Ongoing	-
8	Mr. Muralidhara H Roll No.: 217CV504	Area: Yet to be finalised.	Ongoing	-
9	Mr. Rahul Roll No.: 237CV007	New Admission	-	-

## Guidance for M.Tech. (Research) Dissertation Works

Sl. No.	Student Name	Dissertation Title	Month, Year
1	Mr. Abhijith B.S.	Investigation of bailey method for gradation selection in HMA mixtures over conventional method adopted in India	August 2015
2	Mr. Adhithya Tantri	Experimental investigation on thin layer asphalt mixtures modified with warm mix asphalt additives	April 2017

## Guidance for M.Tech. Dissertation/Project Works

Dissertations submitted to the Visvesvaraya Technological University, Belgaum, India.

Sl. No.	Student Name	Dissertation Title	Month, Year
1	Mr. Satish D.	Laboratory evaluation of interface bond strength between UTW and HMA layer by direct shear method.	Jul., 2011
2	Mr. Harish H.S.	Studies on mobility indicators and the effect of congestion reduction measures on the movement of vehicular traffic along G-6 bus route in Bangalore city using micro simulation software.	Aug., 2011
3	Mr. Prasad B.R.	Laboratory studies on effect of interlayer treatment on the bond strength between HMA composites by direct shear test.	Oct., 2011
4	Mr. Gyanen Takhelmayum	Experimental investigation on comparison of properties of pervious concrete using stone dust and river sand.	Nov., 2011
5	Mr. Langpoklakpam Deni Singh	Comparative study on the properties of expansive soils stabilised with RBI Grade-81, Cement, and Lime.	Nov., 2011
6	Mr. Muralidhara H.	Dynamic route clearance for emergency vehicle preemption on a selected stretch from Nayandahalli junction and Devegowda petrol bunk junction in Bangalore city using VISSIM	Dec., 2011
7	Ms. Bhavya A.*	Uses of waste plastic and crumb rubber modified bitumen in structural layers of flexible pavements.	Jan., 2012
8	Ms. Sindhu Narasimaiah	A Comparative study between bituminous macadam and asphalt treated permeable base layers	Aug., 2012
9	Mr. Shivaraj B.S.	Experimental investigation on mix design properties and moisture sensitivity characteristics of dense bituminous macadam mixes modified with REDISET, a warm mix additive.	Sep., 2012
10	Mr. Kiran Kumar K	Evaluation of Road Condition and prioritization of road maintenance activity of selected stretches of PMGSY roads in the State of Karnataka.	Sep., 2012

\*Joint guidance with Dr. B.V. Kiran Kumar, Assistant Professor, SKSJIT, Bangalore.

Dissertations submitted to the **National Institute of Technology Karnataka, Surathkal, India.**

Sl. No.	Student Name	Dissertation Title	Month, Year
11	Mr. Manda Rakesh	Evaluation of indirect tensile strength of HMA subjected to short-term ageing.	July, 2013
12	Ms. Sneha N.S.	Airfield capacity analysis of Trivandrum International Airport using FAA Airfield Capacity Spreadsheet model.	June, 2014
13	Ms. Shajila D.S.	Study on mix design and performance properties of half warm bituminous emulsion mixtures.	June, 2014
14	Ms. Chinju Chandran	Evaluation of mix design and properties of cationic bitumen emulsion based cold mixes with cement and fly ash.	July, 2014
15	Mr. Anurag Thombre	Assessing the service quality of intercity public bus transport using fuzzy logic approach.	July, 2014
16	Mr. Roopak Phandis	Effect of carriageway width and traffic composition on PCU value using simulation.	July, 2014
17	Mr. Kunal	Vehicular occupant star rating of B.C.Road to Hassan stretch of NH-48 by iRAP methodology.	July, 2014
18	Ms. Nivya George	Development of suitable maintenance strategies for main central road (SH-I) using HDM-4.	July, 2014
19	Mr. Sandeep Kumar Prusty	Development of microscopic pedestrian model and signal timings for urban emergency preparedness using Paramics.	June, 2015
20	Ms. Maneesha B.	Study on pedestrian – vehicle interactions and its effect on traffic at intersections	July, 2015
21	Mr. Revanth Nannapaneni	A study on plausible migration of passengers to public transport based on vehicle occupancy	July, 2015
22	Mr. Pavan Kumar K.	A study on effect of curbside parking on the on-stream traffic using cox proportional hazard based duration model	July, 2015
23	Mr. Manoj B.S.	Laboratory investigation of shear strength in tack coats between HMA layers under direct shear and fatigue shear test	July, 2015
24	Ms. Angel Sebastian	Study of pedestrian and cycling zones in an educational area and an urban area	June, 2016
25	Mr. Burhan Showkat	Rheological Characterization and Creep Recovery Properties of Bitumen Modified with Waste Toner	June, 2017
26	Mr. Jinadev K.V.	Replacement of River Sand by Crushed Stone Dust in High Cement Content Pavement Quality Concrete	July, 2017
27	Mr. Bisinigi Husseni	Replacement of River Sand by Crushed Stone Dust in Low Cement Content Pavement Quality Concrete	July, 2017
28	Ms. Sai Niveditha	Improvement to Horizontal Alignment of Group A and B Routes of Existing Railway Network in India	July, 2017
29	Mr.Akhilesh Mathur	Study of properties of dense and semi dense bituminous mixes for nominal maximum aggregate size of 9.5 mm.	22/06/2018
30	Mr.Harsha Vardhan Singh Sisodia	Evaluation of six major road stretches in Mangaluru city using pavement condition index (PCI) and calculation of remaining service life.	22/06/2018
31	Mr. Himanshu Kumar Das	Study on improvement measures at Surathkal and Honnakatte junction.	03/07/2018
32	Mrs. Jayashree	Identifying road congestion using travel time data.	03/07/2018
33	Mr. Ajay Kumar Maurya	Effects of hydrated lime and silica fume fillers on the rheological characteristics of asphalt binder after short-term aging.	05/07/2019
34	Mr. Enrico D Shira	New approach to study the rutting property of asphalt mixtures using Superpave gyratory compactor.	05/07/2019
35	Mrs. Kavya Prasanna	Congestion evaluation on roads parallel to Kochi Metro and Metro Ridership Assessment	05/07/2019
36	Mr. Saurabh Abhishek	Alignment and delay study of existing Delhi-Mumbai rail route for high speed rail operation.	05/07/2019
37	Mr. Sujay Ravindran	Study of rural public transport accessibility for population below poverty line in the Payyanur taluk.	05/07/2019
38	Mr.Rahul Kumar	Congestion analysis of arterial road using instantaneous speeds of vehicles and effect of introduction of dedicated bus lane.	09/07/2019
39	Mr.Mithun Apat	Evaluation of the effect of 3rd phase of odd-even policy on travel time and journey speed	27/07/2020
40	Mr. Aniket D. Gangreddiwar	Analysing the impact of e.t.c. on waiting time at toll plaza using GPS navigation	27/07/2020

Sl. No.	Student Name	Dissertation Title	Month, Year
41	Mr. Srinivas Naik Kunsoth	Geometric Design and Drainage Analysis of Highway	27/07/2020
42	Ms. Alanka Sai Sailaja	Study of speed humps on other district roads	30/07/2020
43	Mr. ASIFIWE Z. SWALO	ASSESSMENT OF ROAD INFRASTRUCTURE ASSETS MANAGEMENT IN TANZANIA	28/06/2021
44	Mr. HARIHAR PANDA	EFFECT OF INTRODUCING TRAMWAY SYSTEM ON THE TRAFFIC FLOW CHARACTERISTICS OF BHUBANESWAR CITY: A SIMULATIVE STUDY	28/06/2021
45	Mr. ANAND KUMAR	EVALUATION OF TRAFFIC CONGESTION PARAMETERS UNDER HETEROGENEOUS TRAFFIC CONDITIONS: A CASE STUDY ON GORAKHPUR CITY	13/07/2021
46	Mr. VISHAL KUMAR	EFFECT OF SHOULDER WIDTH ON TRAFFIC FLOW PARAMETERS ON TWO LANE UNDIVIDED ROADS	14/07/2021
47	Mr. GUGULOTH YAKUB	EVALUATION OF MECHANICAL PROPERTIES OF SUBGRADE SOIL STABILIZED WITH POLYPROPYLENE IN POWDER FORM	14/07/2021
48	Mr. Anilkumar Dhakappa Lamani (202TS003)	VISUAL INSPECTION TO UNDERSTAND THE NEED FOR JOINT SEALING OF JPCC PAVEMENTS	11/07/2022
49	Mr. Ashok (202TS006)	IDENTIFYING THE CRITICAL CURVES FOR INCREASING MAXIMUM SPEED LIMIT ON NATIONAL HIGHWAY-66	11/07/2022
50	Mr. Vivek Karosiya (202TS032)	STUDY OF VEHICLE COMPOSITION ON ROUNDABOUT USING VISSIM	14/07/2022
51	Mr. Jagirdar Shadab Ashfaque (202TS013)	INVESTIGATING THE EFFECT OF WASTE COOKING OIL AND WASTE ENGINE OIL ON AGED BITUMEN	14/07/2022
52	Ms. Laxmi Parashuram Gaddi (202TS017)	EFFECTS OF DIFFERENT MODIFIERS ON REHOLOGICAL PROPERTIES OF BITUMEN BINDER	14/07/2022
53	Ms. Rigzen Angmo (212TS027)	A STUDY ON DELHI AIR POLLUTION AND TRAFFIC FLOW CHARACTERISTICS	06/06/2023
54	Mr. Ashutosh Ankit (212TS008)	VEHICULAR GAP ACCEPTANCE BEHAVIOUR AT A MEDIAN OPENING NEXT TO TOLL PLAZA	06/06/2023
55	Mr. Chirayu Sanjay Kamble (212TS018)	FRAMEWORK FOR THE ASSET MANAGEMENT OF PAVEMENT MARKING IN INDIA	06/06/2023
56	Mr. Sankala Penchala Karthik (212TS030)	APPLICATION OF ASSET MANAGEMENT PRINCIPLES FOR ROAD SAFETY HARWARE	16/06/2023
57	Mr. V Vinay Shekar Rao (212TS033)	ANALYSIS OF TIME HEADWAY AND SPEED VIOLATIONS ON A SECTION OF URBAN EXPRESSWAY	20/06/2023
58	Mr. Sanju S P (212TS029)	ENHANCING SUSTAINABLE TRANSPORTATION: ASSESSING MODE CHOICE AND BIKE-SAHRING SOLUTION IN DOORVANINAGAR, BENGALURU	28/06/2023
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## Guidance for B.Tech. Project Works

National Institute of Technology Karnataka, Surathkal, India

Sl. No.	Type of Project	Student(s)Name	Project Title	Month, Year
1	Minor	Mr. Pradeep Acharya; Mr. Suman Pokharel	Analysis of Road Humps	May, 2015
2	Major	Mr. Galla Raghuvamsi; Mr. Gandham Sri Hruday; Mr. Kungulwar Akshay Kumar	Analysis of multi-layered flexible pavement for various axle-load configurations	May, 2017
3	Minor	Mr. V.K.Prakrith Abhishek	High-Speed Railways in the Western Coastal Plains: A pre-feasibility study modelled after the Shinkansen Trains.	Dec. 02, 2017
4	Minor	Mr.Pralay Sankar Maitra	Theoretical Study and Numerical and Graphical Analysis in Design of Rigid Pavements	June 02,2018
5	Minor	Mr.Adithya Krishnan; Ms.Haya Faizel; Mr.Sanju Jayakumar	Study on Road Drainage and Surface Runoff and Identification of Potential Water Holding Places in the Eastern Campus of NITK.	November 21, 2018
6	Minor	Mr. Abhishek Hiremani Mr KRISHNA PRASAD KUDDANNAYA Mr. Kushagra Katiyar	Modal Shift of Passengers from Rail to Air Transport	April 25, 2022
7	Major	Mr. puneeth kumar N R Mr. R Naveen Kumar Reddy Mr. Yashas S Gowda	Improvement of Traffic Operation at Silk Board Junction	April 28, 2022

# Annexure – B: Research Articles

## Articles in SCOPUS Indexed Journals

1. Bellary, A. Suresha, S.N.(2022). "ANN Model to Predict Joint Stiffness of White-topped Pavements Using Falling Weight Deflectometer (FWD) Data." *Int. J. Pavement Res. Technol.* <https://doi.org/10.1007/s42947-021-00137-8>.
2. Ashik Bellary & S. N. Suresha (2021) Influence of NMAS and groove depths on the static and fatigue shear performance of aggregate interlocking in PQC mixes, *International Journal of Pavement Engineering*, [DOI: 10.1080/10298436.2021.1968392]
3. Suresha, S.N., Arun, V. (2021). "Delay in Rural Road Construction: Evidence from Pradhan Mantri Gram Sadak Yojana in Shimoga District, Karnataka, India." *J. Inst. Eng. India Ser. A*, 102(1), 121-135. [Publishers: Springer Nature, <https://doi.org/10.1007/s40030-021-00509-0>]
4. Suresha S.N., and Vijayakumar A.S. (2021). "[Chemical and rheological characteristics of accelerated aged asphalt binders using rolling thin film oven](#)" *Construction and Building Materials*, 272 (x), pp. Xxx-xxxx, Article No. 121995 [Publisher: Elsevier Ltd., The Netherlands].
5. Burhan Showkat, Suresha S.N., and Ningappa A. (2020). "Study of Rheological and Creep Recovery Properties of Asphalt Binder Modified with Waste Toner." *Journal of Materials in Civil Engineering*, 32 (11), pp. [Publisher: ASCE, VA, USA, [https://doi.org/10.1061/\(ASCE\)MT.1943-5533.0003411](https://doi.org/10.1061/(ASCE)MT.1943-5533.0003411)]
6. Kumar H.V., and Suresha S.N. (2020). "Effect of optimized short-term aging temperature on rheological properties of rubberized binders containing warm mix additives." *Construction and Building Materials*, 261 ( ), pp. . [Publisher: Elsevier Ltd., The Netherlands].
7. Ningappa A. and Suresha S.N. (2020). "Laboratory evaluation of long-term aging effect on linear viscoelastic and fatigue properties of FAM mixtures." *Construction and Building Materials*, 241 ( ), pp. . [Publisher: Elsevier Ltd., The Netherlands].
8. Kumar H.V., and Suresha S.N. (2019). "Investigation of aging effect on asphalt binders using thin film and rolling thin film oven test." *Journal of Advances in Civil Engineering Materials*, 8(1), pp. 637 - 654. [Publisher: American Society for Testing and Materials International, PA].
9. Patil, B., Bharath Kumar, B.R., Bontha, S., Balla, V.K., Powar, S., Hemanth Kumar, V., Suresha, S.N., Doddamani, M.(2019). "Eco-friendly lightweight filament synthesis and mechanical characterization of additively manufactured closed cell foams", *Composite Science and Technology*, 183, 107816.
10. Shiva Kumar G., and Suresha S.N. (2019). "State of the art review on mix design and mechanical properties of warm mix asphalt." *Journal of Road Materials and Pavement Design*, 20(7), 1501 - 1524. [Publisher: Taylor & Francis, London].
11. Suresha S.N., and Ningappa A. (2018). "Recent trends and laboratory performance studies on FAM mixtures: A state-of-the-art review" *Construction and Building Materials*, 174 (x), pp. 496 - 506. [Publisher: Elsevier Ltd., The Netherlands].
12. Shiva Kumar G., and Suresha S.N. (2018). "Evaluation of Workability and Mechanical Properties of Nonfoaming Warm Mix Asphalt Mixtures." *Journal of Advances in Civil Engineering Materials*, 7(1), pp. 131 - 157. [Publisher: American Society for Testing and Materials International, PA].
13. Jayakesh K, and Suresha S.N.(2018). "Experimental investigation of interface treatment technique on interface shear bond fatigue behaviour of Ultra-Thin Whitetopping." *Construction and Building Materials*, 161 (1), pp. 489 - 500. [Publisher: Elsevier Ltd., The Netherlands].
14. Suresha S.N., and Satish D. (2017). "Interface Bond Strength of Ultra-Thin Whitetopping (UTW) and Hot Mix Asphalt (HMA) Composites by Direct Shear." *Journal of Testing and Evaluation*, 45 (6), pp. 1999 - 2008. [Publisher: American Society for Testing and Materials International, PA].
15. Shiva Kumar G., and Suresha S.N. (2017). "Evaluation of Properties of Nonfoaming Warm Mix Asphalt Mixtures at Lower Working Temperatures." *Journal of Materials in Civil Engineering*, 29 (11), pp. [Publisher: ASCE, VA, USA, [https://doi.org/10.1061/\(ASCE\)MT.1943-5533.0002071](https://doi.org/10.1061/(ASCE)MT.1943-5533.0002071)]
16. Punith V.S., Suresha S.N., Sridhar Raju, Sunil Bose, A. Veeraragavan. (2012). "Laboratory investigation of open-graded friction course mixtures containing polymers and cellulose fibers". *Journal of Transportation Engineering*, 138 (1), pp.67-74. [Publisher: American Society of Civil Engineers, VA, USA]
17. Suresha S.N., Varghese George, and Ravi Shankar, A.U. (2010). "Properties of cellulose fibres and waste plastics modified porous friction course mixes." *The Baltic Journal of Road and Bridge Engineering*, 5(3), pp. 156-163. [Publisher: Vilnius Gediminas Technical University, Lithuania].
18. Suresha S.N., Varghese George, and Ravi Shankar, A.U. (2010). "Effect of aggregate gradations on properties of porous friction course mixes." *Materials and Structures*, 43(6), pp. 789-801. [Publisher: RILEM and Springer, The Netherlands].
19. Suresha S.N., Varghese George, and Ravi Shankar, A.U. (2010). "Laboratory and theoretical evaluation of clogging behaviour of porous friction course (PFC) mixes," *International Journal of Pavement Engineering*, 11 (1), pp. 61 -70. [Publisher: Taylor & Francis, London].
20. Suresha S.N., Varghese George, and Ravi Shankar, A.U. (2009). "Evaluation of properties of porous friction course (PFC) mixes for different gyration levels." *Journal of Materials in Civil Engineering*, 21(12), pp. 789 -796. [Publisher: ASCE, VA, USA].
21. Suresha S.N., George Varghese, and Ravi Shankar, A.U. (2009). "Characterization of porous friction course mixes for different Marshall compaction efforts," *Construction and Building Materials*, 23 (8), pp. 2887-2893. [Publisher: Elsevier Ltd., The Netherlands].
22. Suresha S.N., Varghese George, and Ravi Shankar, A.U. (2009). "A comparative study on properties of porous friction course mixes with neat bitumen and modified binders," *Construction and Building Materials*, 23 (3), pp. 1211-1217. [Publisher: Elsevier Ltd., The Netherlands].
23. Ravi Shankar A.U., and Suresha S. N. (2006). "Strength behaviour of geogrid reinforced shedi soil subgrade and aggregate system," *Road Materials and Pavement Design (RMPD) an International Journal*, 7-3/July-September,



pp. 313-330. [Former Publisher: Hermes Science Publications, France. Present Publisher: Taylor & Francis, London].

#### **Articles in Non-SCOPUS Indexed Journals**

1. A.U.Ravi Shankar, Suresha S. N., Sai Kumar G.M.V.S. (2014). "Properties of porous friction course mixes for flexible pavements." *Indian Highways*, 42-3, pp.15-25. [Publisher: Indian Roads Congress, New Delhi, India]
2. Suresha S.N., Ravi Shankar, A.U., and Varghese, G. (2009). "Design charts for drainage capacities of granular sub-bases." *Journal of the Indian Roads Congress*, 70-1, pp.89-99. [Publisher: Indian Roads Congress, New Delhi, India]
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#### **International Seminars/Conferences/Workshops**

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10. Ravi Shankar A.U., Suresha S.N., and Anil Kumar G. (2006). "An approach to develop granular sub base mixes using locally available materials." *In the Proceedings of the International Seminar on Innovations in Construction and Maintenance of Flexible Pavements*, Theme-IV "Flexible Pavements for Low Volume Roads (Rural Roads)," 2<sup>nd</sup> to 4<sup>th</sup> September, held at Agra, India.
11. Punith V.S., Suresha S.N., Sridhar R, Sunil Bose, and Veeraragavan A. (2004). "Characterization of fiber and polymer modified porous asphalt mixes." In: CD-ROM, *83<sup>rd</sup> Annual Meeting of Transportation Research Board (TRB)*, National Research Council, Washington D. C.

#### National Seminars/Conferences/Workshops

1. Angel Sebastian and Suresha S. N. (2020). "STUDY ON PEDESTRIAN AND CYCLING ZONES IN AN EDUCATIONAL AREA AND AN URBAN AREA." Proceedings of the 7th Conference on Transportation Systems Engineering and Management (CTSEM)-2020, held virtually on December 29-30, 2020, jointly organised by the KSCSTE-NATPAC and CET Trivandrum. Paper ID: CTSEM 2020 - 110.
2. Ashik Bellary and Suresha S. N. (2020). "Influence of Aggregate Size and Type on Mechanical Properties of Pavement Quality Concrete (PQC)." Proceedings of the 7th Conference on Transportation Systems Engineering and Management (CTSEM)-2020, held virtually on December 29-30, 2020, jointly organised by the KSCSTE-NATPAC and CET Trivandrum. Paper ID: CTSEM 2020 - 136.
3. Hemanth Kumar V. and Suresha S. N. (2020). "Effect of Short-term Aging Temperature on Rheological and Morphological Properties of Rubber Modified Binder." Proceedings of the 7th Conference on Transportation Systems Engineering and Management (CTSEM)-2020, held virtually on December 29-30, 2020, jointly organised by the KSCSTE-NATPAC and CET Trivandrum. Paper ID: CTSEM 2020 - 173.
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12. Suresha S.N., Ravi Shankar, A.U., and Varghese, G. (2007). "Ecological benefits of porous friction course (PFC) pavements." *Proceeding of National Seminar on ROADS – 2007, 1<sup>st</sup> – 2<sup>nd</sup> March*, Organized by The Institute of Engineers (IE), Belagaum Local Centre, Karnataka, India, 433-439.
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