

### List of Ph.D Works and Publications Associated with TRC projects 2012-24

Sl. No	Project Ids. Associated	Title of Research work	Ph.D (Status)	Publications/Conferences
1	TRC12 CET RP 2 & TRC 14 RP 11	Effect of Side frictions on Traffic Flow Characteristics of Urban Roads <b>Prof. Salini S.</b> <b>Guided by: Ashalatha R.</b>	Completed	<ol style="list-style-type: none"> <li>1. Manu, O Kuttan., Salini, S., and Ashalatha, R. (2013). Influence of Pedestrians on Capacity of Urban Arterials, National Conference on Technological Trends, College of Engineering, Trivandrum.</li> <li>2. Salini, S., Manu, O Kuttan., and Ashalatha, R. (2014). Impact of pedestrians on capacity of urban arterials, Proceedings of Colloquium on Transportation Systems Engineering and Management (CTSEM), NIT Calicut.</li> <li>3. Sreelekshmi S and Ashalatha R (2015). Calibration of VISSIM for Simulating Bus Stops on Indian Urban Roads. Proceedings of 16th National Conference on Technological Trends, College of Engineering Trivandrum, Thiruvananthapuram.</li> <li>4. Ashalatha R, Salini S and Sreelekshmi S. (2018) Calibration and validation of Vissim for urban heterogeneous traffic. Journal of Indian Highways, Indian Roads Congress, Vol 46 (1), pp. 13-26.</li> </ol>
2	TRC 13- CET RP1	Capacity Analysis and Performance Evaluation of Signalized Intersections <b>Prof. Preethi P</b> <b>Guided by: Dr. Ashalatha R</b>	Completed	<ol style="list-style-type: none"> <li>1) Aswathy, P., Preethi, P., Ashalatha, R. (2014). Modelling Right Turn Adjustment Factor of Saturation flow at Signalized Intersection, Proceedings of 15th National Conference on Technological Trends, College of Engineering Trivandrum, Thiruvananthapuram, 538-542.</li> <li>2) Neethu Mariam Johns., Preethi, P., Ashalatha, R. (2016). Control Delay Variability under heterogeneous Traffic Conditions, Proceedings of 17th National Conference on Technological Trends, College of Engineering Trivandrum, Thiruvananthapuram, 807-811.</li> <li>3) Shwaetha Radha Devi and Preethi P (2017). Effect of exclusive bus lanes on performance of signalised intersections, Proceedings of 18th National Conference on Technological Trends, College of Engineering Trivandrum, Thiruvananthapuram, 652-656.</li> <li>4) Navathy M K and Preethi P (2017). Impact of right turn lane on performance of signalised intersections under heterogeneous traffic conditions, Proceedings of 18th National Conference on Technological Trends, College of Engineering Trivandrum, Thiruvananthapuram, 646- 651.</li> </ol>

3	TRC 14 CET RP6	Experimental investigation on effect of coir geotextile on Reduction of Pavement Distress in Asphalt Pavement Overlay <b>Dr.Loui.T.R</b> <b>Guided by Dr. M.Satyakumar</b>	Completed	<ol style="list-style-type: none"> <li>1. Experimental investigation on effect of coir geotextile on rutting characteristics on asphalt overlays. Indian Highways, July 2014 Vol 42 No.7 Pp 13-22</li> <li>2. Study on Open Graded Friction Course Mixes with Surface Treated Coir Fibre and Natural Rubber, Modified Bitumen. National Conference on Technological Trends. NCTT 2014 Pp 271-276.</li> <li>3. Laboratory Evaluation on The Performance Of Modified Bitumen In Wearing Course, National Conference on Technological Trends (NCTT)- 2014 College of Engineering Trivandrum, NCTT 2014 Pp265-270</li> <li>4. Effect of temperature on rutting potential of a geotextile modified bituminous pavements, 16th National Conference Technological on Trends (NCTT-2015)</li> <li>5. Effect of temperature on rutting potential of a geotextile modified bituminous pavements, 3rd international Conference on Modeling and Simulation in Civil Engineering ICMSC 2015, 9-11 Dec 2015</li> <li>6. Performance Evaluation of coir geotextile reinforced bituminous overlays-A case study, Coir Kerala 2016 proceedings of international seminar, February 2016.</li> <li>7. Sensitivity analysis of effect of temperature on rutting performance of coir geotextiles modified flexible pavement system, Compendium of research articles, uses and established Environmental Friendly Applications of Coir Geotextiles, National Coir research &amp; Management Institute Thiruvananthapuram, 4th Feb 2017</li> </ol>
4	TRC 15 CET RP 1	Performance of Flexible Pavements on Soft Soil Subgrade Stabilized with Coir Waste and Lime <b>Prof. Leema Peter</b> <b>Guided by: Dr. Balan &amp; Dr. P. K. Jayasree</b>	Completed	<ol style="list-style-type: none"> <li>1. Remya, Y. K., Leema Peter., Jayasree, P. K. and Balan, K. (2015). "Influence of Coir Waste and Lime On Strength Characteristics of Soft Soil Subgrade", Proc. of National Conference on Technological Trends, College of Engineering Trivandrum, pp 497-503, September 2015</li> </ol>
5	TRC 15 CET RP3	Effect of Traffic Heterogeneity on Coordinated Signals  <b>Praveen P.S. Guided by: Dr. Ashalatha R.</b>	Completed	<ol style="list-style-type: none"> <li>1. Praveen P. S. and Ashalatha R (2016). Platoon Diffusion along Signalized Corridors. Procedia Technology, Vol. 25, pp 154-161. (ISSN: 2212-0173)</li> <li>2. Praveen P. S. and Ashalatha R. Identification of Platoon Dispersion Pattern under Heterogeneous Traffic Conditions. Elsevier's Case Studies on Transport Policy (Under Review)</li> <li>Praveen P. S. and Ashalatha R. Passenger Car Equivalency Factors under Platooning Conditions, Transportation in Developing Economies, Springer</li> <li>4 Praveen P. S. and Ashalatha R. Passenger Car Equivalency Factors under Platooning Conditions, 4th Conference of the Transportation Research Group of India (CTRG-2017), Mumbai, India, December 17- 20, 2017.</li> </ol>

				<p>5. Praveen P. S. and Ashalatha R. Characterising Platoon Dispersion Model Along Urban Arterials under Heterogeneous Traffic, 18th Crossroads World Road Meeting 2017(IRF-WRM 2017), Delhi, India, November 14-17, 2017.</p> <p>6. Praveen P. S. and Ashalatha R. Characterising Identification of Critical Inter Arrival Time at Signalized Intersections, 3rd International Conference on Materials Mechanics and Management (IMMM 2017), Trivandrum, India, July 13-15, 2017.</p> <p>7. Praveen P. S. and Ashalatha R. Characterization of platoondispersion variables under heterogeneous traffic, The ASCE International Conference on Transportation &amp; Development (ICTD 2016), Houston, Texas, USA, June 26-29, 2016.</p> <p>8. Praveen P. S. and Ashalatha R. Platoon Diffusion along Signalized Corridors, In abstracts of the Proceedings of Global Colloquium in Recent Advancement and Effectual Researches in Engineering, Science and Technology (RAEREST 2016), Palai, Kottayam, India, April 22- 23, 2016.</p> <p>9. Praveen P. S. and Ashalatha R. Development of Adjustment Factors for Robertson's Platoon Dispersion Model, 15th World Conference on Transport Research - WCTR 2019, Mumbai, India, May 26-31, 2019. (<i>This paper received Best Paper Award in the topic area - Transport in Developing and Emerging Countries</i>)</p> <p>10. Praveen P. S. and Ashalatha R. Modeling Adjustment Factor for Robertson's Platoon Dispersion Model, Proceedings of the Institution of Civil Engineers - Transport. (Under Review).</p>
6	TRC18CETRP4	<p>Investigations On Ambient Cured Ternary Blended Geopolymer Concrete Slabs</p> <p><b>Nithin A V</b>  <b>Guided by: Dr. Mini Soman &amp; Dr. Deepa Raj S</b></p>	On going	<p>1. Nithin A V, Mini Soman and Deepa Raj S," A Review on Ambient cured Geopolymer Concrete", International Conference on Materials, Mechanics and Structures 2020 (ICMMS2020) 14-15 July 2020, NITC, Kerala, India.</p>

7	TRC18CETRP4	Study on the strength and behavior of geopolymer concrete structural elements using industrial waste  <b>Renju C</b> <b>Guided by: Dr. Mini Soman &amp; Dr. Deepa Raj S</b>	On going	1. Renju M., Deepa Raj S and Mini Soman "Experimental study on the durability properties of Geopolymer Concrete with optimum dosage of quarry dust. International Conference on Advances in Materials, Modeling and Analysis for Sustainable and Resilient Infrastructure. AMMA SRI -2025 (Accepted for publication)
8	TRC 20CET RP 2	Strength and behaviour of concrete with partial replacement of cement by hybrid glass powder  <b>Deepa Paul,</b> <b>Guided by: Dr. Bindhu K.R.</b>	Completed	1. Deepa Paul, Bindhu K.R., 'Strength, durability and bond characteristics of hybrid glass powder concrete for applying as an overlay', Science and Technology Asia, Vol.28, No.3, 26 September 2023. <a href="https://ph02.tci-thaijo.org/index.php/SciTechAsia/article/view/249565">https://ph02.tci-thaijo.org/index.php/SciTechAsia/article/view/249565</a> Impact factor 0.50, SJR 0.15, Indexing: Scopus. 2. Deepa Paul, Bindhu K.R., Ana Mafalda Matos, João Delgado, 'Eco-friendly concrete with waste glass powder: A sustainable and circular solution', Construction and Building Materials, Volume 355, 14 November 2022, 129217, ISSN 0950-0618, <a href="https://doi.org/10.1016/j.conbuildmat.2022.129217">https://doi.org/10.1016/j.conbuildmat.2022.129217</a> 3. Impact factor: 7.693, SJR 1.662, Indexing: SCIE/SSCI, Scopus. 4. Deepa Paul, Bindhu K.R. 'Utilisation of glass powder in reinforced concrete beams for a green environment', International Journal of Sustainable Building Technology and Urban Development. Vol.14, No.4, 2023, Impact factor 0.44, SJR 0.16, Indexing: Scopus <a href="https://doi.org/10.22712/susb.20230034">https://doi.org/10.22712/susb.20230034</a>
9	Project ID: TRC23CE T-RP1	Evaluation of Coated Coir Geotextile Reinforced Flexible Pavement  <b>Jayita V Mohan</b> <b>Guided by: Dr. Anil R.</b>	Ongoing	1. Jayita V Mohan, Dr. Anil R. "Coir Geotextile in Rural Road Construction - A brief Review", 9th Conference on Transportation Engineering System and Management 2023