



Dr. B.G. Sreedevi is the former director and presently Chief Scientist of National Transportation Planning & Research Centre (NATPAC), an R&D Centre of Govt. of Kerala. She was the director of NATPAC for 6.5 years (2010 to 2017). She is a Doctorate Holder from CUSAT and a Post Graduate from Indian Institute of Technology Madras in Civil Engineering and also possess Post Graduation in Urban and Highway Engineering from Vinayaka Mission Deemed University (VMDU). She also has obtained a Post Graduate Diploma in Management from All India Management Association (AIMA). Has got 30 years of professional experience. The field of experience and expertise includes Highway Engineering, Water Transport, Management Information System, Road Safety, S&T Management and Administration.

She has worked in various positions as Design Engineer in Kerala Electricals and Allied Engineering Company, as Scientific Officer (Technology) in Science & Technology Department and as Scientist in NATPAC.

Has published 23 papers in referred journals/online journals and has got more than 130 publications in seminar/ workshop proceedings and other compendiums. Contributed one section on 'Transport' in Childrens Book of Encyclopedia published by Govt. of Kerala. As Scientist in NATPAC, completed more than 15 research projects as lead researcher, 50 sponsored projects as team leader and guided more than 15 projects for M.Tech, M.Sc and B.Tech students in the area of Transportation Engineering and GIS.

Is a Life Fellow of Institution of Engineers, Life Member of Indian Road Congress, Member of Indian Geotechnical Society and Institute of Urban Transport. Is the expert member of different committees constituted by Kerala State Planning Board, Trivandrum Development Authority, Kerala Road Safety Authority and other departments of Govt. of Kerala, member of Indian Roads Congress Committee on Road Safety (H-7), Director Board Member of Kerala State Road Transport Corporation (KSRTC), Core Advisory Group Member of Energy Management Centre, Government of Kerala and several other committees for the state as official assignment. Also an active member and office bearer of Swadeshi Science Movement and Energy Conservation Society.

## DETAILED BIO-DATA OF Dr. SREEDEVI B.G.

<b>1</b>	<b>Present Position and Address</b>	
	<p><b>Chief Scientist, (Former Director)</b> National Transportation Planning and Research Centre (NATPAC), (An R&amp;D institution of Government of Kerala), Akkulam, Opposite NCESS, Thiruvikkal P O, Thiruvananthapuram – 695 031., Kerala Tel: 0471- 2551282, 2554467</p>	<p><b>Residence</b> TC 6/314(2), Sreenarayaneeyam, PRA- 07 Ulloor-Akulam Road, Pullikulam Lane Trivandrum-695 031, Kerala Tel: 0471-2917128 Mob: 9446342828 <i>Email: <a href="mailto:bgsreedevi@yahoo.com">bgsreedevi@yahoo.com</a> <a href="mailto:bgsreedevi@gmail.com">bgsreedevi@gmail.com</a></i></p>
<b>2</b>	<b>Date of Birth &amp; Age</b>	<b>: 27.05.1960; 58 Years</b>
<b>3</b>	<b>Educational Qualifications</b>	
	<ul style="list-style-type: none"> <li>• <b>Ph.D</b> in Engineering with thesis entitled ‘<b>A Study on the Performance of Flexible Pavements on Mature Soil Subgrades</b>’ from Cochin University of Science and Technology (CUSAT). (2015)</li> <li>• <b>M.Tech</b> in Civil Engineering with thesis on ‘<b>Parametric Study of Cable Stayed Bridges,</b>’ from Indian Institute of Technology, (IIT), Madras.(1984)</li> <li>• <b>B. Sc (Engg)</b> in Civil Engineering from College of Engineering (CET), Trivandrum. (1982) , with <b>Distinction and 8<sup>th</sup> Rank</b> in the university.</li> <li>• <b>PGDM</b> (MBA Level) from All India Management Association (AIMA), Delhi (1997)</li> <li>• <b>ME</b> in Urban and Highway Engineering with thesis on ‘<b>Development of Bridge Information System</b>’ from Vinayaka Mission Deemed University (VMDU), Salem.(2007)</li> </ul>	
<b>4</b>	<b>Professional Experience</b>	<b>: 32 Years</b>
	<ul style="list-style-type: none"> <li>• Design Engineer, M/S Kerala Electricals and Allied Engg. Co. Ltd., Govt. Of Kerala, (1985-1986)</li> <li>• Scientific Officer, Science, Technology And Environment Committee (STEC), Govt. Of Kerala, (1986-1995) (Erstwhile KSCSTE)</li> <li>• Scientist E1, E2 and F in NATPAC, Government of Kerala (1995 – 2010)</li> <li>• Scientist G and Director, NATPAC, Government of Kerala (Nov, 2010– April, 2017)</li> <li>• Chief Scientist, NATPAC (April, 2017- Continued)</li> </ul>	
<b>5</b>	<b>Major Areas of Experience /Expertise and Notable Achievements (Annexure 1 and 2)</b>	
	<ul style="list-style-type: none"> <li>• <b>Highway Engineering</b> - DPR Preparation – Road Network Planning -Geometric design - Highway materials - pavement design - pavement evaluation and modeling - Air Quality monitoring</li> <li>• <b>Road Safety</b> – Research-Training – Organization of extension Programs – Preparation of Road Safety Materials for various target groups – Impact Assessment</li> <li>• <b>Water Transport</b> - Water way development – Feasibility studies -Strategic Option Studies – Dredging supervision and management</li> <li>• <b>Management Information System</b> - Bridge Information System – GIS for Inland Water canals – Pavement Maintenance Management System – Road Information System</li> <li>• <b>S&amp;T Management</b>, Research and Institution Building</li> </ul>	

<b>6</b>	<b>Publications/Reports/Guidance to Students</b>
	<ul style="list-style-type: none"> <li>• More than <b>150</b> publications including <b>23</b> papers in referred and online journals and more than <b>130</b> papers in Seminar Workshop Proceedings, invited Papers, and popular articles (<b>Annexure 3, 4, 5 and 6</b>).</li> <li>• Completed <b>15</b> Research Projects as lead researcher (<b>Annexure 7</b>).</li> <li>• Completed more than 50 sponsored projects as team leader (<b>Annexure 8</b>).</li> <li>• Guided about 20 student projects for M Tech, M Sc and B Tech (<b>Annexure 9</b>).</li> <li>• Coordinated about 110 <b>sponsored</b> projects relating to transport infrastructure development and about 120 <b>research programs</b> in the area of highways, planning, tourism, water transport, GIS, road safety etc. during the tenure as director. (2011-2017).</li> </ul>
<b>7</b>	<b>Expert Member of Committees (By nomination)</b>
	<p><b>A. <u>Member of National Level Committees</u></b></p> <ol style="list-style-type: none"> <li>1. Corresponding Member of 'Bridge Maintenance and Rehabilitation Committee (B-8)', 2006-2009, Indian Roads Congress, New Delhi.</li> <li>2. Member of Road Safety &amp; Design Committee (H-7), 2012-15, Indian Roads Congress, New Delhi.</li> <li>3. Member, H-5 Committee on Road Safety, 2015- '17, Indian Roads Congress, New Delhi .</li> <li>4. Member, Panel of Experts for Assessment Promotion to staff of Rajiv Gandhi Centre for Bio-Technology (RGCB), Trivandrum, Government Of India</li> <li>5. Indian Roads Congress Council Member for 2016-17, 2017-18</li> </ol> <p><b>B. <u>Member of State Level Committees</u></b></p> <ol style="list-style-type: none"> <li>1. Official Member, Board of Directors of Kerala State Road Transport Corporation (KSRTC), Government of Kerala (2012 - continuing)</li> <li>2. Official Member, Board of Directors of Kerala Urban Road Transport Corporation (KURTC), Government of Kerala (2014 - continuing)</li> <li>3. Member, Committee for preparation of revival package for Kerala State Road Transport Corporation (KSRTC), (2013)</li> <li>4. Expert member of two Committees of Trivandrum Development Authority for Attukal area development and other projects, TRIDA, Government of Kerala</li> <li>5. Member, Kerala Road Safety Authority (KRSA), Government of Kerala (2010-2017 March)</li> <li>6. Executive Committee Member, Kerala Road Safety Authority (KRSA), Government of Kerala, (2010-2017 March)</li> <li>7. Core Advisory Group Member of Energy Management Centre (EMC), Government of Kerala, 2013-14</li> <li>8. Convener of the working group on 'Roads, Bridges and Road Transport' of Kerala State Planning Board, Government of Kerala, 2011</li> <li>9. Member, Technical Committee 'Kozhikode City Road Improvement Project', Kerala Road Fund Board, Government of Kerala, 2014</li> <li>10. Member, 'Expert Committee on Infrastructure Development Including Water supply and sanitation' of Kerala State Planning Board, Government of Kerala, 2013</li> <li>11. Member, Board of Studies in 'Environmental Studies' Cochin University of Science and Technology 2011-2015</li> <li>12. Member, 'Technical Committee for Roads and Road Safety', Kerala State Planning Board,</li> </ol>

Government of Kerala, 2011-12

13. Member, 'Building Committee of Srinivasa Ramanujan Institute for Basic Sciences (SRIBS), Government of Kerala, 2014
14. Member, 'Technical Committee for introducing PRT in Tvpm', INKEL, Govt. of Kerala , 2014
15. Chairperson of Organizing Committee, 27<sup>th</sup> Kerala Science Congress, KSCSTE, 2014-15
16. Member, Electric Mobility Mission Program , Power Dept., Government of Kerala, 2014
17. Chairperson, Building Committee, Jawaharlal Nehru Tropical Botanical Garden & Research Institute, Thiruvananthapuram, Government of Kerala constituted by KSCSTE,
18. Expert Committee member for Promotion of Technical Officers for CWRDM & JNTBGRI, constituted by KSCSTE (2015)
19. Executive Committee (EC) member of KSCSTE, Government of Kerala (92014-16)
20. Member, Management Committee , Malabar Botanical Garden (2015-17)
21. Chairman, Technical Expert Committee – Urban 2020 Scheme (Urban Transport and Roads & Bridges) of Kerala State Urban Development Project -2015
22. Expert member for the selection of project manager, Kerala Road Fund Board, 2015
23. Management Committee member of Srinivasa Ramanujam Institute for Basic Sciences (SRIBS), Kottayam, constituted by KSCSTE, 2015
24. Member of the committee for preparation of plan document for Roads and Bridges for 11<sup>th</sup> five year plan , Kerala State Planning Board, 2006
25. Member of the committee for preparation of plan document for Roads and Bridges for 12<sup>th</sup> five year plan , Kerala State Planning Board, 2011
26. Member of the committee for preparation of plan document for Roads and Bridges for 13<sup>th</sup> five year plan , Kerala State Planning Board (Served as convener of the sub- committee for preparing the report), 2011
27. Member of the committee for preparation of plan document for Inland Water Transport for 13<sup>th</sup> Five year plan , Kerala State Planning Board (Served as convener of the sub- committee for preparing the report), 2016
28. Member of the committee for preparation of plan document for Housing for 13<sup>th</sup> five year plan , Kerala State Planning Board, 2016
29. Member, Committee for Coastal Highway (G.O.(R.t) No.1343/2016/PWD dated 30.09.2016), Government of Kerala
30. Member, Committee for Hill Highway (G.O.(R.t) No.1343/2016/PWD dated 30.09.2016), Government of Kerala
31. Member, TS Committee for PWD Projects related to KIIFB, Government of Kerala (2016-17)
32. Member, Evaluation Committee of KRFB for the selection of Transaction Advisor for Alappuzha City road improvement project (NO : 75/P2/KRFB/2017 dtd.20-5-17)
33. Expert member for the selection of G M, DGM for Kerala Road Fund Board (No. 3071/ EL/ KRFB/2016 dtd. 19-6-2017)
34. Member, Technical Committee for scrutiny of DPR for Alappuzha City Road improvement project . (GO (Rt) NO:1090/2017/PWD dtd 26-7-2017)
35. Member, Expert committee for review of TRDCL claims of City Road Improvement Project (GO (Rt) No: 1674/2017/PWD dtd. 10-11-2017)
36. Member of consultative committee, Transportation Engineering Research Centre(TRC), College Of Engineering, Trivandrum (2012 onwards)

	<b>8 Membership in Professional Bodies and NGOs</b>
	<ul style="list-style-type: none"> <li>• Life Fellow, Institution of Engineers, India</li> <li>• Life Member, Indian Roads Congress'</li> <li>• Life Member, Indian Geotechnical Society</li> <li>• Life Member and Trainer, Institute of Urban Transport</li> <li>• Life Member, Trivandrum Management Association (TMA) and MC member for 2015</li> <li>• Life Member, Swadeshi Science Movement and Chairperson, Trivandrum Chapter for 2014-15</li> <li>• Life Member, Energy Conservation Society, Office bearer several times, Trivandrum District President for (2012-14), State President for 2014-16</li> <li>• Member, University Women's Association (UWA) (NGO), EC member for 2018</li> <li>• Life member and Executive committee member, TRUST( An NGO for road safety)</li> <li>• Member, Sreevaraham Vanitha Samithi (NGO), EC member since 2015</li> <li>• Member, Environment and development initiatives for Trivandrum (EDIT), NGO</li> <li>• Former member, Indian Institution of Bridge Engineers</li> </ul>
9	<b>Media Presentations . (Annexure 10).</b>
	<ul style="list-style-type: none"> <li>• Participated in <b>about 65</b> media programs on road safety and transport development in visual media like Doordarsan (DD), Amrita, Asianet, Manorama, Reporter, Kairali, Mathru bhoomi etc. and All India Radio and other Channels during the last 6 years These programs have helped in imparting information and dissemination of knowledge and awareness to common people on road development and road safety.</li> </ul>
10	<b>Awards and Honors</b>
	<ul style="list-style-type: none"> <li>• Recipient of National Merit Scholarship throughout studies.</li> <li>• Received the <b>Commendation Certificate</b> in the <b>Individual category</b> for the <b>State Energy Conservation Award., 2015</b> (Govt. of Kerala)</li> <li>• Certificate for <b>'Outstanding Trainer'</b> of Institute of Urban Transport, New Delhi, 2015</li> <li>• Received the <b>Commendation Certificate to Energy Conservation Society (NGO)</b>, while functioning as its State President, in the Institutional category for the <b>State Energy Conservation Award., 2016.</b> (Govt. of Kerala)</li> <li>• NATPAC got the Maruthi-Times Now <b>Road Safety Award for 2015</b> in the Institutional Category</li> <li>• NATPAC got prizes for exhibitions several times during my tenure as director (<b>Annexure 11</b>)</li> </ul>
11.	<b>REFERENCES</b>
	<ol style="list-style-type: none"> <li>1. <b>Dr. K M Abraham, IAS,</b>( Former Chief Secretary, Govt. of Kerala), CEO, KIIFB, 2 nd Floor, Felicity Square, M G Road , Statue, Thiruvananthapuram 1 Mob:8547497773, email:ceo@kiifb.org</li> <li>2. <b>Prof. A Veeraragavan,</b> Professor , Dept. Of Civil Engineering, Indian Institute of Technology, Chennai. Mob: 09444742710, email:aveeraragavan@gmail.com</li> </ol>

### Key Qualifications and Experience

- **Ph.D** in Engineering with thesis entitled ‘**A Study on the Performance of Flexible Pavements on Mature Soil Subgrades**’ from Cochin University of Science and Technology (**CUSAT**)  
**M.Tech** in Civil Engineering with thesis on ‘**Parametric Study of Cable Stayed Bridges,**’ from Indian Institute of Technology, (**IIT**), Madras  
**B. Sc (Engg)** in Civil Engineering from College of Engineering (**CET**), Trivandrum  
**PGDM** (MBA Level) from All India Management Association (**AIMA**), Delhi  
**ME** in Urban and Highway Engineering with thesis on ‘**Development of Bridge Information System**’ from Vinayaka Mission Deemed University (**VMDU**), Salem.
- Over **32** years of professional experience after Post Graduation in Engineering in various positions at managerial level with experience in Science & Technology management, research and consultancy projects related to transport infrastructure development.
- As **Design Engineer** in Kerala Electrical and Allied Engineering Ltd., done the design and detailing of hydraulic gates (radial and vertical) and other steel structures.
- As **Scientific Officer** (Technology) in State Committee on Science, Technology & Environment of Government of Kerala for about nine years, was actively involved in all activities of STEC which included monitoring and evaluation of research projects in engineering and Technology and S & T promotion in the state through various extension programs. The Kerala Science Congress which is an annual event was started during this time.
- As Project-Coordinator (**Scientist E1**), Deputy Chief Project Coordinator (**Scientist E2**) and **Scientist F**, and in the capacity as Head of Highway Engineering Division in NATPAC, was responsible for the projects (both research & consultancy) relating to Highway, Geotechnical & Bridge Engineering, Highway material testing, pavement evaluation, Inland waterways and GIS. Currently functioning as Chief Scientist coordinating about 10 research studies and 10 consultancy projects in Highways, Water Transport and Port Sector.
- Notable research projects include development of a Bridge Information System, development of pavement design charts for different geographic zones of Kerala using soil map studies, development of a Pavement Maintenance Management System for Kerala, evaluation of roads laid with Natural Rubber Modified Bitumen, study on the effect of ageing of bitumen, impact of digging on roads by Public Utility Departments and scientific management of utility cuts, use of waste plastics in bituminous mixes, extent of overloading prevalent in Kerala, Ambient air quality monitoring and estimation of vehicular pollution, use of other materials like industrial waste, OGFC, Building waste, reclaimed asphalt etc in road

construction.. The study findings are published in referred journals and presented in seminars/workshops.

- The notable sponsored projects include Kerala Sustainable Urban Development Project, an ADB funded project for Local Self Government Department, Government of Kerala (base line data collection and preliminary analysis of data necessary for preparation of a Detailed Project Report for 150 km of road length spread across five major cities of Kerala), Functional evaluation of pavements for certain road stretches of KSTP, World Bank Funded project,, Detailed Project Report for Development of Tourist Highway from Kottayam to Cherthala, Project Report for improvements for connectivity to major tourists locations in Kerala, Design and installation of tourism signs for Kerala. Feasibility study for mass transport system for Trivandrum, Demonstration project on the use of waste plastic for road construction with periodic performance evaluation, Preparation of Comprehensive mobility plans for Trivandrum and Kozhikkode, Project report for the four laning of Kazhakkuttam to Kochullur section of NH 47 (66) in Trivandrum, project reports for the development of Hill Highway and Coastal Highway for Kerala. Ambient Air Quality monitoring for Kerala , Pavement design for roads, and so on.
- Extensive work has been done for the development of inland waterways for Kerala
- Has successfully completed the mapping and road net work planning for three ports namely Goa, Mangalore and Vizakhapatnam which were implemented by the port authorities.
- Worked extensively on pavement performance evaluation of Flexible pavements in Kerala and developed models which can be of help for asset management and maintenance planning.
- Conversant with softwares like Auto CAD Map, ARC GIS, MX ROAD, STAAD – PRO, HDM IV, KENLAYER. etc.

*Key Qualifications and Experience*

### Notable Achievements

- Matriculate from Govt. Girls High School, Adoor by scoring **the highest mark from among the departmental schools of the district** with **National Merit Scholarship** throughout the studies; Graduate from Kerala University in Civil Engineering with **distinction and eighth rank**; Post Graduate from Indian Institute of Technology in Civil Engineering with CGPA of **8.4/10**; and **PhD** from Cochin University of Science and Technology in Engineering.
- Has got industrial, administrative and R & D experience. Could associate with STEC, which was the previous institution of the State Council for Science, Technology and Environment, Govt. of Kerala for about 9 years as scientific officer (Technology) in its initial stages. Could associate with starting of many programs of STEC. This has helped to get wide exposure in S & T development for the country. Was associated with programs like National Environment Awareness Campaign (NEAC), Kerala Science Congress, Programs on Energy conservation, etc.
- Has done the project management and construction supervision of ‘**Sasthra Bhavan**’- the office building for NATPAC and KSCTE (erstwhile STEC) .
- **Was instrumental in setting up of Highway Engineering and Geotechnical Laboratory for NATPAC right from its inception including various stages such as proposal formulation, procurement of equipments, training of engineers and various field and lab activities.**
- **Was instrumental in the setting up of the laboratory complex and campus of NATPAC at Akulam including the building construction. All activities right from getting the land, planning and construction management was coordinated.**
- Has done extensive application oriented research in Highway Engineering, especially on pavement materials, pavement performance evaluation, air quality monitoring and road safety . Studies were done on overloading on Kerala roads, use of waste plastics and alternate materials like RAP, construction waste, industrial waste etc for road construction. The pavement performance models developed are helpful for proper asset management by predicting the timely interventions required in terms of patching, repair, maintenance or rehabilitation for flexible pavements.

Has done more than 50 projects on road development with lead role and coordinated around 75 projects as director of the centre. Some of the projects include Study on Ambient Air Quality Monitoring and its contribution to climate change in Kerala, Traffic Studies and Engineering Surveys for Modernization of Interstate Checkpost at Walayar in Kerala, Preparation of drawings for four-laning of Kesavadasapuram-Mannanthala section of SH-1, Preparation of alignment drawings for ROB at rail crossings No. 50 & 49 in Palakkad, Traffic improvement schemes for Kozhikode city, Preparation of tourist map for Kerala, Development of Pilot Safe Road corridor –Base line data collection and analysis – KSTP,



Project report for Green field Highway between Nedumbassery, Vyttila Hub and Kundanoor in Kochi- Kochi Metro Rail Corporation, Preparation of DPR for Kochulloor – Pallipuram stretch of NH-47, Feasibility Study on setting up of Monorail between Technocity Pallippuram and Mangalapuram in Trivandrum, etc. Some of these projects are already implemented and some are in various stages of implementation.

**Use of waste plastic was demonstrated in seven road stretches with the help of local self department and these stretches were periodically evaluated for their structural and functional performance. Performance models were developed.**

**Was actively involved in the finalization of alignments for Hill Highway and coastal Highway in Kerala and is under implementation by Kerala PWD.**

Worked extensively in the area of Inland Water Transport and prepared more than 10 project reports on the development of inland waterways of Kerala with lead role in the team. Coordinated the Land Acquisition and Dredging supervision which enabled the development of National waterway (NW 3) in the state. Some of the Project Reports prepared are Extension of NW-3 further to Kasargod in the north and Kovalam in the south, Details of cross structures along NW3, Development Of Parvathy Puthanar for recreation and tourism, Development of Kottapuram Chettuva Stretch of waterway, Revival of T S Canal for Inland Navigation and Tourism Promotion in Varkala Region, Development of waterway from Neeleswaram to Ezhimala, Preparation of Tourism Signages for the Inland Water Canals in Kerala, Techno-economic feasibility study and hydrographic survey for the extension of NW3 to Kolachal in Tamilnadu, Techno-economic feasibility study for the extension of NW3 from Kovalam to Kasargode, Study on the developments of reports are further taken up for implementation by the respective departmental canals of Alappuzha, Urban regeneration and developments of canals of Kochi, etc.

The development of Parvathy Puthanar is in progress for which the project report preparation and supervision is being organized now.

**Advancement of NATPAC during the period Nov. 2010 to March 2017 while functioning as Director**

- As Director of NATPAC, stabilized its financial position by undertaking sponsored projects from various govt. agencies.
- Could lead NATPAC, which is an important R & D Centre of the state and unique in the country in its areas of functioning, successfully for six and a half years as its Director. The Centre is now a service provider for many govt. departments and organizations.
- Could revitalize NATPAC to an advisory role to govt. in all aspects of Traffic and Transportation. The Centre is well equipped to respond to any type of queries now with all the state-of-the-art equipments and software.
- The R & D activities of NATPAC showed remarkable progress during the (November 2010 – April 2017, thus enabling the growth of road infrastructure of the state.

- Could work as expert member for various committees constituted by the government and provided inputs and support for transport infrastructure development for the state.
- NATPAC signed Memorandum of Understanding (MoU) with with three premier institutions viz. NIT Calicut, NIT Tiruchirappalli and TRC of College of Engineering, Trivandrum for collaboration in Research and Extension Activities,during the tenure as director,
- Natpac has done the design and project management of installation of Tourism signages for the state of Kerala for Tourism Department. Coordinated about sixty research projects and more than 70 consultancy projects and presented in various forums.

#### **Programmes on Road Safety:**

- During the tenure as director, NATPAC was able to make remarkable progress in conducting road safety research and awareness programs. Associations with Kerala Road Safety Authority, Police Dept and Motor Vehicles Dept were maintained for reducing the accidents and related trauma in the state. There is good demand for the road safety materials prepared by NATPAC for different target groups all over the country. Enquiries are being received from other states also.
- NATPAC played a key role in the road safety activities of the state as an active member of Kerala Road Safety Authority. **Policy documents viz., Transport Policy, Transport Vision 2030, Road Safety Policy, Parking Policy and Policy for Outdoor Advertisement, Road Safety Action Plan, Mission document on Transport development, Road Safety Protocol etc. were prepared for Govt.**
- Several innovative outreach programs on ‘Road Safety’ were initiated and successfully conducted throughout Kerala. About 600 training programs were organized for different road users. The major tailor made programs are Safe Road To School (SRS), Safe Community Program (SCP), Road Safety and Youth Leadership (RSYLP), Road safety through School-A Program for teachers, training to different target groups of drivers (Two wheelers, Auto rickshaw, Tipper and other heavy vehicles, School bus, Ambulance and emergency vehicles, hazardous goods carriers, KSRTC, driving school instructors, representatives from residence associations, etc.). These programs are being arranged systematically in association with police, motor vehicle department and other agencies.. Several publications on Road Safety including books, leaflets, posters, banners, bookmarks and short films are prepared for different target groups of road users. These are extensively being used by NATPAC, Police, motor vehicle department and several NGOs for the road safety awareness programs. This also has helped to arrest the growth of traffic accidents and casualties in the State.
- Natpac was identified by Government of Kerala as the authorized Training centre for Training of drivers carrying hazardous goods. On an average, twelve programs are conducted every year.
- NATPAC got several prizes for its road safety exhibitions every year.

*Notable Achievements*

<b>List of Papers Published in Referred Journals</b>
--

1. *'Use of Coir fibre in Stone Matrix Asphalt for pavement construction'*, U Salini, **B G Sreedevi**, R S Remjish and T V Anoop, Indian Journal of Geo synthetics and Ground improvement, Vol 7, No.1, Jan.2018, pp 28-34
2. *'Road safety in Kerala, A perspective from NATPAC'*, **Dr. B G Sreedevi**, Indian Highways, November 2017, Volume 45, No. 11, pp 47-52
3. *'Limited use over bridges for light vehicles in lieu of low train vehicle unit level crossings'*, Salini P N, **Dr. B G Sreedevi**, Indian Highways, , Vol 45, April 2017, No. 4, PP 35-47.
4. *"Feasibility of Long Haul Bus Terminal (LHBT) on Chala Bypass in Thiruvananthapuram City"*, Salini P. N., T Ramakrishnan, **Dr B.G.Sreedevi**, International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET), Vol:6, Special Issue 4, March 2017
5. *'Design and Analysis of Jarofix Stabilized Clayey Soil as a Subgrade Material for Flexible Pavement'* **B.G Sreedevi** & S N Sachdeva, Indian Highways, Vol.44, No.11, November 2016, pp 17-28.
6. *'Comparative Study on Construction Stage Analysis of Multi Span Conventional Bridge with Integral Bridge'* Ancy M R, **Dr. B G Sreedevi** & Ritzy R, *International Journal of Science and Research*, Vol 5, Issue 6, June 2016.
7. *'Assessment of Stress Loss Evaluation Capability of CSI Bridge Design Software in Post-Tensioning Members'*, Shan B L, Shobha Elizabeth Thomas & **Dr. B G Sreedevi**, *International Journal of Science and Research*, Vol 5, Issue 6, June 2016.
8. *'An Evaluation of Industrial Waste Materials (Fine and Mild Steel) for Sustainable Road Construction- A Case Study'* P P Shijith, S N Sachdeva and **Dr. B G Sreedevi**, Indian Highways, Vol 44. No.3, March 2016. Pp 19-23.
9. *'An overview on the performance of Open Graded Friction Courses in road accident reduction and in replenishing ground water resources'*, Soorya Ann Koshy, S N Sachdeva and **B G Sreedevi**, Journal of Civil Engineering and Environmental Technology, Volume 2, Issue 16, October- December 2015, pp 54-59
10. *'Prediction of Structural Performance of State Highway-1'*, Nija Bind T A, **Dr. B G Sreedevi** & Prof. Benny Mathews Abraham, *International Journal of Engineering Research and Technology*, Vol.4, Issue 05, May 2015.
11. *'Development of Pavement Roughness Model and Maintenance Priority Index for Kerala State Highway-1'* Minu P K , **B.G. Sreedevi** & Roshina Babu, *International Journal of Engineering Research and Technology*, Vol.3, Issue 11, November 2014.

12. **'Evaluation of Physical Properties of modified bitumen'**, Sreeshma K.P, **B.G. Sreedevi** & Prof. Gymmy Joseph Kattoor , *International Journal of Engineering Research and Technology*, Vol.3, Issue 11, November 2014.
13. **'Traffic Management at interstate Checkposts- Case study of Walayar Check post in Kerala'** Satheish B Nair, **B G Sreedevi**, Salini P N, Kalaiarasan P, *Indian Highways*, Vol.42, No. 8, pp 45-37, 2014.
14. **'Pavement Distresses And Roughness Modeling – A Case Study'** Saranya Ullas, Sreelatha T, **B.G Sreedevi**, *International Journal of Innovative Research in Science, Engineering and Technology*, Volume 2, Special Issue 1, December 2013.
15. **'Pavement Performance Studies on Roads Surfaced using Bituminous Mix with Plastic Coated Aggregates'** **B.G Sreedevi**, Salini P N, *International Journal of Engineering Research and Technology (IJERT)*, September 2013, Vol.2, Issue 9.
16. **'A Study on Pavement Performance & Overlay Design using HDM-4'**, Geethu Saji, Sreelatha T & **B.G Sreedevi**, *International Journal of Innovative Research in Science, Engineering and Technology (IJIRSET)*, August 2013, Vol.2, Issue 8.
17. **'Pavement Performance Modeling using SPSS – A Case Study'** Saranya Ullas, **B.G Sreedevi** & Sreelatha T, *International Journal of Innovative Technology and Exploring Engineering (IJITEE)*, August 2013, Vol.3, Issue 3.
18. **'Field Performance Indicators for Natural Rubber Modified Bitumen in a Tropical Setting'** **B.G Sreedevi**, Salini P N & Satheish B Nair, *Indian Highways*, January 2011, Vol.39, No.1.
19. **'Design Charts for Thin Concrete Overlays on Asphalt Pavements'** M A Joseph, **B.G Sreedevi** & T Elangovan, *Indian Highways*, Jan 2009 pp 27-33.
20. **'Impact of Digging by Public Utility Departments and Scientific Management of Cuts on Urban Roads'** P N Salini, **B.G Sreedevi**, M A Joseph, Satheish B Nair, *Indian Highways*, November 2007, pp-49.
21. **'Studies on the effect of ageing of Bitumen'** Abhilash S, **B.G Sreedevi**, Sathikumar S, *Indian Highways*, April 2007, pp 49-55.
22. **'Prioritization of Roads for Improvement- A case study of road links connecting to Tourist destinations in Kerala'**, **B.G Sreedevi**, *Indian Roads Congress Journal*, Vol 67, No.3, October-December 2006, pp 253-263.
23. **'Data Management of Bridges –A GIS approach'**, **B.G Sreedevi**, Denish R, Noggy Augustine, *Indian Highways*, Vol 34, No.2, February 2006, pp 29-39.
24. **'Reliability based pavement design charts for low volume roads of Kerala'**, M A Joseph, **B.G Sreedevi** & T Elangovan, *Indian Highways*, Vol 32, No.10, October 2004, pp 25-34.

<b>Selected List of Invited talks/ presentations</b>
--

1. Presentation on '*Road safety policies and action plan for Kerala*' Seminar organized by Press Club, Thiruvananthapuram, October. 8 th, 2018.
- 2.
3. Invited Lecture on '*Integration of urban road infrastructure*', Training Program organized by Institute of Urban Transport (IUT), Trivandrum, March 22, 2018
4. Session chair, National Environment and Climate Change Congress, 2018, organized by DoECC, Trivandrum, MARCH 20, 2018.
5. Session Chair, Renewable Energy Congress, 2018, organized by CED and ANERT, Trivandrum, February 26, 2018.
6. Presentation on '*Transportation problems of Alappuzha*', Discussion organized by Alappuzha Municipality, October 23, 2017.
7. Chief Guest and technical presentation on '*Transportation development in Kerala, opportunities and challenges*', St. Thomas Institute of Technology, Trivandrum, September 27, 2017.
8. Chief Guest and technical presentation on '*Need for Mass Transportation - an analysis*' Sasthra University, Thanjavore, September,8, 2017.
9. Chief Guest and technical presentation on '*Transportation scenario of Kollam*', Bishop Jerome College of Technology, Kollam, August 14, 2017.
10. Panelist, Discussion on '*Waterway development for Kerala*', organized by Malayala Manorama, August,8, 2017
11. Chief Guest, Workshop on '*Walkability in Kochi*', organized by ESAF, Kochi, August 10, 2017.
12. Invited Lecture on '*Integration of urban road infrastructure*', Training Program organized by Institute of Urban Transport (IUT), Chennai, July 27, 2017.
13. Invited Lecture on '*Urban Transportation Planning and Management*', Training Program organized by Institute of Urban Transport (IUT), Chennai, July 27, 2017.
14. Keynote address on '*Road infrastructure development*', NCTT,2017, Civil Engg Dept, College of Engineering, Trivandrum, July 21,2017
15. Special address, Seminar on Road Safety Bill, organized by IGS and SSOT, Press Club, Trivandrum, March 22, 2017.

16. Invited Guest, Seminar on two wheeler safety, organized by '*Safety Ride*', March 19,2017
17. Felicitation address, Inauguration of the '*SOFT- Save Our Fellow Traveler*'- An initiative of Kerala Police, Ananthapuri Hospital on 3<sup>rd</sup> September 2016.

*Selected List of Invited talks/ presentations*

18. Convocation address, Vidya Academy of Science & Technology, Thrissur, 12 August, 2016.
19. Invited talk on Road Safety, organized by Citizen Initiative Trust at Trivandrum, 7 August, 2016.
20. Invited talk – '*Safe Road Infrastructure for Zero Mortality – National Seminar on Trauma Care*', organized by Indian Medical Association, Trivandrum, 4 August, 2016.
21. Invited talk – '*Workshop on Climate Change and Technological Advancements*', Kottayam, organized by Institute for Climate Change and Studies, 4 May, 2016.
22. Invited talk – District Level Seminar on '*Energy Efficiency and Productivity*' at Kochi – Energy Conservation Society, 3 May, 2016.
23. Invited talk on '*Transportation Engineering- Opportunities and Challenges*', Rajadhani Engineering College, Nagaroor, 31 March, 2016.
24. Invited talk on '*Recent Trends in Highway Engineering*', Rajiv Gandhi Institute of Technology, Kottayam, 29 march, 2016.
25. Presentation on '*Transport Development*' – Alappuzha Vikasana Seminar, March 21, 2016.
26. Invited talk on '*Trivandrum Development*' – meeting organized by Kazhakkuttam Vikasana Samithi, 16 March, 2016
27. Invited talk on "*Non-Conventional Energy Sources and Energy Conservation.*"- KSEB Officer's Association Annual Meeting, Trivandrum, 14 March, 2016.
28. Panelist- '*Green Heritage City*' Seminar organized by Kerala Kaumudi, March 4, 2016.
29. Science Day 2016, Invited Lecture, Sree Saraswathi Vidyalayam, Ooruttambalam, Trivandrum, 25 February, 2016.
30. Felicitation address, Foundation Stone Laying for Techno Park Bus Stand, February 8, 2016.
31. Inaugural address, Symposium on Road Safety, Transportation Research Centre, College of Engineering, Trivandrum, January 30, 2016
32. Felicitation address, State Level Inauguration, 27<sup>th</sup> Road Safety Week, Kalamassery, January 19, 2016.
33. Inaugural address, *Sastra Prathibha Matsaram*, District level training program, NCESS, Trivandrum, January 16, 2016.
34. Presidential address, '*Urjakiranam*' program organized by Sreevaraham Vanitha Samithi, January 12, 2016.

*Selected List of Invited talks/ presentations*

35. Panelist- 'Samvadam' in connection with 27<sup>th</sup> Road Safety Week organized by Motor Vehicles Dept., Kalamassery, January 9, 2016.
36. Panelist- 3<sup>rd</sup> International Conference on '*Modeling and Simulation in Civil Engineering*' at TKM College of Engineering, Kollam, December 2015
37. Chairman of the panel discussion and panelist on transportation, National Seminar held at Government College, Nedumangadu, December 2015.
38. Annual Convention 2015 on '*Leapfrogging Road Safety: Way Forward*' organized by Society for Automotive Fitness & Environment (SAFE) in association with Ministry of Road Transport & Highways, Transport Department, GoK on April 21, 2015 at Vivanta by Taj, Kovalam, Thiruvananthapuram.
39. Inaugural Address, Meeting of Laurie Baker Memorial Lecture organized by Swadeshi Science Movement, Institution of Engineers, Vellayambalam, Trivandrum, April 1, 2015
40. Invited presentation in the National Conference on Recent Engineering Advances & Trends – 2015 organized by Pankajakasthuri College of Engineering and Technology, Trivandrum, on 20<sup>th</sup> March, 2015.
41. Presentation, One day work shop on '*Capital Region Development Phase-II*', at Govt. Guest House, Trivandrum, 2015
42. Chief Guest of '*Utbhav-2014-15*' organized by Dept. of Civil Engineering, Mar Baselios College of Engineering and Technology, Trivandrum, on 9<sup>th</sup> January 2015.
43. Inauguration of Shakti Women's Tailoring Unit , Pippinmoodu on 1<sup>st</sup> January 2015.
44. Inaugural Address on 'Energy Conservation', Meeting of Residence association, Maruthumkuzhy, 23.11.2014 .
45. Talk on '*Sustainable urban transport initiatives in India*' Dept. of Architecture, College of Engineering Trivandrum, 19.11.2014
46. Invited talk on '*Transport Development in Trivandrum*' Chamber of Commerce, Trivandrum Chapter, 04.11.2014
47. Invited presentation in the meeting by Confederation of Indian Industries, at Prime Ministers '*Make in India Program*'
48. Key note speaker for '*AUTO BAN 13*' seminar and exhibition organized by Sree Chithira Thirunal College of Engineering, 8.2.2013.
49. Invited talk on "*Road Development in Kerala*", organized at Press Club, Thiruvananthapuram, December 2012.
50. '*Safety on Roads*' – Training program on safety organized at CUSAT on April 7, 2012.

51. Invited talk on “*Appropriate treatment of road features from becoming safety hazards*” for Seminar on “Modernization of Road Safety Initiatives in Public Works” on 28<sup>th</sup> & 29<sup>th</sup> March, 2012.
52. Felicitation address at Energy Conservation Society at Press Club, Thiruvananthapuram on 31/01/2012 – *National Energy Auditing Competition/Award Function*.
53. Session Chairperson of National Conference on Advances in Civil Engineering on 03.12.2011 at Mar Baselios College of Engineering, Thiruvananthapuram
54. Technical Presentation on “*Transport Development*” for District Development Forum ,Seminar conducted by Solidarity Youth Movement on 03.12.2011 at Public Library Hall, Thiruvananthapuram.
55. IEEE Seminar, Panelist on “*Women achievers in Engineering*” on 02.12.2011 at Kollam.
56. Keynote address on ‘*National Cycle Day*’ Sep 22, 2011, organized by Energy Conservation Society, at Institution of Engineers, Thiruvananthapuram.
57. Presentation and Discussion on “*Expressways – Challenges and Myths*” at TKM College of Engineering, Kollam on 22.09.2011.
58. Invited Paper on “*Energy consumption in Transport Sector and its effect on climate*”, Energy Conservation Seminar, 2011. Environmental Congress on 25<sup>th</sup> & 26<sup>th</sup> August, 2011, organized by Centre for Environment & Development.
59. *Transport infrastructure for Trivandrum Capital Region*, Invited Talk, Seminar on Second Master Plan for TCR, 28-2-2009, organized by TRIDA.
60. “*Eco-friendly reuse of waste plastics*”, 15-10-2008, Invited Talk, Institution of Engineers, Thiruvananthapuram.
61. “*Road Network planning*”, Invited Talk, 29-10-2008, Kerala Highway Research Institute, Thiruvananthapuram.
62. *Report Preparation for highway and bridge projects*, Invited talk, Kerala Highway Research Institute, April, 2008.
63. ‘*Green Transportation*’ Invited lecture for Refresher Course at Academic Staff College, Kerala University, Jan. 2007.
64. ‘*Traffic and Transportation Network in Kerala*’, Invited Lecture, Two day workshop on ‘State Level Spatial Development Plan’ at KILA, Thrissur.



**Indicative List of publications in Seminar/workshop proceedings/ presentations**

1. P N Salini, **B G Sreedevi**, Sathiesh B Nair , **‘Performance indicators for NRMB Roads’** , Proc. Of Kerala Science Congress, Kollam, Jan, 2009.
2. Kalaiarasan P, **B G Sreedevi**, **‘Ambient Air Quality Monitoring for selected locations in Tvpm city’**, Proc. Of 21 st KSC, Jan 2009.
3. **B G Sreedevi**, Sathiesh B Nair, P N Salini , **‘Use of NRMB for road construction,,** , Proc of 18<sup>th</sup> Swadesi Science Congress, Nov 2008, Tvpm.
4. Sathiesh B Nair, **B G Sreedevi**, **‘Inland waterways-Solutions for traffic problems- A case study’**, Proc of 18<sup>th</sup> Swadeshi Science Congress, Nov, 2008, Tvpm.
5. **B G Sreedevi**, P Kalaiarasan, Sathiesh B Nair, **‘Contribution of Vehicular pollution to air quality’**, Proc of 18<sup>th</sup> Swadeshi Science Congress, Nov 2008, Tvpm.
6. **B G Sreedevi & Sathiesh B Nair**, **‘Prospects and problems of Waterway Development in Kerala-A case study’** Swadeshi Science Congress, Nov. 2006, Pathanamthitta.
7. Sathiesh B Nair and **B G Sreedevi**, **‘Sustainable Development of Waterways- A case study’** Proc. of National Conference on Holistic Water Resource Management,( HOWRAM), Dec. 2006, Chennai, pp-47-54.
8. **B G Sreedevi**, M A Joseph and Sathiesh B. Nair, **‘A perspective analysis of infrastructure needs of Cochi based on Traffic and BBD studies’** Proc. of All India seminar on ‘Metro traffic systems for Greater Cochi, Institution of Engineers, 18-19, Oct.2006.
9. **B G Sreedevi**, Sathiesh B Nair, R Denish, Negual Devan K R. **‘Mapping of Environmental Black Spots in Waterways using GIS- A Pilot Study’** Proc. of Indian Environment Congress, April 28-29, 2006, Kollam.
10. Kalaiarasan, **B G Sreedevi & Abhilash P Pillai**, **‘Revival of Inland Water Canals in Varkala Region- An Environmental Overview’** Proc. of the Indian Environment Congress, April 28-29, 2006, Kollam.
11. Abhilash S, **B G Sreedevi & R Sathi Kumar**, **‘Studies on the Ageing of Bitumen’**, Proc. of the Kerala Science Congress, Jan. 29-31, 2006, pp 301-303.
12. **B G Sreedevi**, Sathiesh B Nair, R Denish & Deepa Radhakrishnan, **‘Application of GIS for Sustainable Development of Waterways’** Proc. of National Conference on Technological Trends, CET, Trivandrum, Nov.25-26, 2005.

13. **B G Sreedevi,, Traffic Potential of West Coast Canal and its Impact on Energy Conservation**, Seminar on ‘Relevance of Inland Waterways in Kerala, org by CWRDM, 28<sup>th</sup> Feb.2005, Kochi.
14. Sathiesh B Nair and B G Sreedevi, **‘A GIS Model for Waterways’**,. Seminar on ‘Relevance of Inland Waterways in Kerala’, Org by CWRDM, 28<sup>th</sup> Feb. 2005, Kochi.
15. **B G Sreedevi, ‘Development of Inland Waterways in Kerala and Its Impact on Environment’**, 3<sup>rd</sup> Indian Engineering Congress, 16-18 Dec. 2004, Trivandrum.
16. **B G Sreedevi, ‘Revival of Inland Waterways as a supplementary mode of transport’ and ‘Emerging Trends in Pavement Construction’** Proceedings of the Kerala Science Congress, Trivandrum,2000.
17. **B G Sreedevi, ‘Bridge Information System for Kerala with Inventory of Bridges for Thiruvananthapuram District’** Presentation of the Research Findings of NATPAC for PWD-Sep.1999 at PWD Rest House, Thiruvananthapuram.
18. **B G Sreedevi, ‘Engineering Measures for Safer Roads’** , Regional Workshop on Road Accidents in Kerala- Aug. 1999 Org. by NATPAC and Institute of Town Planners.
19. **B G Sreedevi, ‘Application of Modern Techniques in Mapping and Road Network Planning- A case Study of new Mangalore Port’**. Workshop on ‘Modern Techniques in Surveying and Mapping’ March 1999 Org.by Institute of Town Planners.
20. **B G Sreedevi, ‘Application of Remote Sensing in Transport Planning- A case study of finalizing a new alignment’**., Workshop on Remote Sensing Applications for Kerala-ReSAK ,, Institution of Engineers,18- March 1998,
21. P.Kalaiarasan, **B.G.Sreedevi** , **“Atmospheric Pollution and its correlation with Transportation sector in South Kerala”**, National Conference on Conservation and Management of Wetland Ecosystems (LAKE 2012), at M.G University, Kottayam, November 6-8, 2012.
22. P.Kalaiarasan, **B.G.Sreedevi** , **“Study on air quality and estimation of vehicular emission in South Kerala”** National Conference on Advances in Civil Engineering (NACE 11), Mar Baselios College of Engineering and Technology, Thiruvananthapuram, 3<sup>rd</sup> December 2011.
23. **B.G.Sreedevi, P.Kalaiarasan, “Energy consumption in transport sector and its effect on climate”**, *Kerala Environment Congress 2011, Rajiv Gandhi Centre for Biotechnology (RGCBT), Thiruvananthapuram 25, 26 and 27<sup>th</sup> August 2011.*
24. P.Kalaiarasan, **B.G.Sreedevi, “Status of Air Quality in Thiruvananthapuram District, Kerala”**, 23<sup>rd</sup> Kerala Science Congress, 29<sup>th</sup> – 31<sup>st</sup> January 2011.
25. P.Kalaiarasan, **B.G.Sreedevi, “Ambient Air Quality and Evaluation of Vehicular emission in Thiruvananthapuram district, Kerala”**, Recent Advances in Civil Engineering (RACE 2010), 16<sup>th</sup> – 18<sup>th</sup> September 2010. **(Best paper award)**

26. P.Kalaiarasan, **B.G.Sreedevi**, “**Prediction of Vehicular Pollution on National Highways in Kerala**”, KUNSED, 8<sup>th</sup> – 9<sup>th</sup> October 2009.
27. P.Kalaiarasan, **B.G.Sreedevi**, “**Prediction of in – use automobile emission at selected locations in Thiruvananthapuram city**”, 21<sup>st</sup> Kerala Science Congress, Kollam 28<sup>th</sup> – 31<sup>st</sup> January 2009.
28. P.Kalaiarasan, **B.G.Sreedevi**, “**Contribution of Vehicular Pollution to Air Quality in selected locations in Thiruvananthapuram City**”, Swadesi Science Congress, November, 2008.
29. P.Kalaiarasan, **B.G.Sreedevi**, “**Revival of Inland water canal in Varkala Region, an environmental overview**”, Proceedings of Indian Environment Congress, April 28 -29, 2006, Kollam.
30. P.N. Salini, **B.G. Sreedevi**, “**Study on the Effect of Digging by Public Utility Departments on Urban Roads**”, Contest Paper for Young Scientist Award in 19<sup>th</sup> Kerala Science Congress.,2007, January, Trivandrum
31. P.N. Salini, **B.G. Sreedevi**, “**Pavement Performance Indicators for NRMB Vs Ordinary Bituminous Road**”, Contest Paper for Young Scientist Award in 21<sup>st</sup> Kerala Science Congress, Kollam on 29<sup>th</sup> of January 2009, pp 269 – 272.
32. P.N. Salini, **B.G. Sreedevi**, “**Use of Waste Plastics for Road Construction- Study on Bituminous Mixes**”, KUNSED, 2009 (National Seminar on Emerging Trends in Environment and Development) , Trivandrum, 8<sup>th</sup> - 9<sup>th</sup> October 2009, pp 295 – 302.
33. P.N. Salini, **B.G. Sreedevi** , “**Performance Studies on Use of Plastic Modified Bituminous Mixes for Road Construction**”, Proceedings of 22<sup>nd</sup> Kerala Science Congress, Peechi , 28<sup>th</sup> – 31<sup>st</sup> January, 2010, pp 422 – 423.
34. P.N.Salini, **B.G.Sreedevi**, “**Vehicle Axle Loading Pattern on Highways in Kerala**”, Proceedings of the fourth CUSAT National Conference on Recent Advances in Civil Engineering (RACE 2010), Cochin University of Science and Technology, Cochin, 16<sup>th</sup> – 18<sup>th</sup> of September 2010, pp 254 – 260.
35. T Elangovan, **B G Sreedevi**, T Ramakrishnan, Salini P N, “**Traffic Potentials and Prospects of an Elevated Road Corridor Between Aroor and Edappally in Kochi**”, 11<sup>th</sup> National and 1<sup>st</sup> International Conference on Technological Trends (ICTT 2010), College of Engineering Trivandrum on 25-27 Nov 2010
36. P.N Salini, **B G Sreedevi** and Sathesh B Nair, “**Traffic and Engineering Studies for Modernisation of Interstate Checkpost at Walayar**”, 13<sup>th</sup> National Conference on Technological Trends (NCTT 2012), Organised by College of Engineering Trivandrum on 10-11 Aug 2012 and published in its proceedings, pp 1416 – 1423.
37. Shijith P. P, **Sreedevi B.G** and S N Sachdeva “**Study on the use of Industrial Waste for Sustainable Road Construction – A case study on Jarosite and Mild Steel Slag**”, 27<sup>th</sup> Kerala Science Congress, Alappuzha on 27<sup>th</sup> – 30<sup>th</sup> of January 2015, pp 205.

38. P. Kalaiarasan and **B.G. Sreedevi**, “**Planning Intervention For Revitalization of Inland Waterways for Transport- A Case Study of Parvathy Puthanar Canal in Thiruvananthapuram**”, 27<sup>th</sup> Kerala Science Congress held at Alappuzha, 27<sup>th</sup> – 30<sup>th</sup> of January 2015. Pp 206.
39. Arun Chandran, Ebin Sam, T Ramakrishnan, T Elangovan, **B.G Sreedevi**, “**Evaluation of Pedestrian Infrastructure for Kochi City**”, Proceedings of 27<sup>th</sup> Kerala Science Congress, Alappuzha 27<sup>th</sup> – 30<sup>th</sup> of January 2015. Pp 206.
40. Nija Bind T.A, **B.G. Sreedevi** & Benny Mathews Abraham, “**Prediction of Structural Performance of State Highway 1 with respect to subgrade soil properties**”, 27<sup>th</sup> Kerala Science Congress, Alappuzha, Jan 2015 (**Best Poster Award**)
41. Aarsha S Hari, Shaheem S and **B.G. Sreedevi**, “**Mass Rapid Transit Options for Thiruvananthapuram and Kozhikode Cities In Kerala**”, 28<sup>th</sup> Kerala Science Congress held at University of Calicut Campus, Thennipalam, Malappuram District on 28<sup>th</sup> – 30<sup>th</sup> of January 2016. Pp 937-944.
42. Subin B and **B.G. Sreedevi**, “**Need for Bicycle Infrastructure Facilities, A Case Study of Kollam- Alappuzha Stretch of National Highway-66**”, 28<sup>th</sup> Kerala Science Congress, University of Calicut Campus, Thennipalam, Malappuram District on 28<sup>th</sup> – 30<sup>th</sup> of January 2016. Pp 1233-1236.
43. P. Kalairasan and **B.G. Sreedevi**, “**Estimation of Carbon Credit for National Waterways**”, 28<sup>th</sup> Kerala Science Congress, University of Calicut Campus, Thennipalam, Malappuram District on 28 – 30 January 2016. Pp 2598-2608.
44. Soorya Ann Koshy, S.N. Sachdeva and **B.G. Sreedevi**, “**Characterization of Open Graded Friction Course Mixes containing Natural Rubber Modified Bitumen and Cellulose Fibers**”, Proceedings of National Conference on Recent Advances in Civil Engineering (RACE 2016), SVNIT, Surat, 5-6 March 2016.
45. Salini U, **Sreedevi. B G**, Remjish R S, Anoop T V, “ **Use of Coir Fibre in Stone Matrix Asphalt for Pavement Construction**”, 6 th Asian Regional conference on Geosynthetics, New Delhi, 8-11, November, 2016.
46. Sachdeva, **B G Sreedevi** and Soorya Ann Koshy, “**Clogging behavior of OGFC mixes**”, 29 th Research world international conference ,Las Vegas, USA, 16-17, March,2017 (**The paper got the research world Excellent paper Award**)
47. Salini P.N., T.Ramakrishnan and **Dr.B G Sreedevi**, “**Feasibility of Long Haul Bus Terminal (LHBT) on Chala Bypass in Thiruvananthapuram City**” ‘National Conference on Technological Advancements in Civil & Mechanical Engineering (NCTACME'17), KMEA Engineering College, Aluva, 17 -18, March 2017

48. Salini P.N., Anish Kini B., Shaheem S. & **Dr.B.G.Sreedevi**, “**Potential of Sustainable Options for Last Mile Connectivity to Work centre Campuses**”, Fourth Conference on “Transportation Systems Engineering and Management” (CTSEM 2017), Anna University, Chennai, 12-13, May, 2017
49. Sabitha N M , **B G Sreedevi** and Salini U, “**Canal bank breaching vulnerability analysis in Alappuzha and Kuttanad regions**”, Proceedings of 29<sup>th</sup> Kerala Science Congress, held during 28-30 January 2017, at Mar Thoma College, Thiruvalla
50. Sabitha N M and **B G Sreedevi**, “**Management of Inland Waterways for Tourism and Passenger Transport in Kochi Region**” Proceedings of 21<sup>st</sup> International Conference on Hydraulics, Water Resources and Coastal Engineering (HYDRO 2016) organised by CWPRS, Pune from 8<sup>th</sup> to 10<sup>th</sup> December 2016.
51. Sabitha N M and **B G Sreedevi**, “**Renovation of Inland Waterways for Tourism and Passenger Transport- A case study of Kadambayar River in Kochi**”, Proceedings of Kerala Environment Congress 2016, Organised by Centre for Environment and Development, on 28<sup>th</sup> and 29<sup>th</sup> November 2016 at EMC, Thiruvananthapuram.
52. Kalaiarasan P, **Sreedevi B G** and Sabitha N M, “**Environmental Impact of Revival of TS Canal - Case Study of Kovalam-Akkulam Stretch**”, Proceedings of international symposium on Integrated Water Resources Management (IWRM 2014), February 19-21, 2014
53. Sabitha N M and **B G Sreedevi**, “**Inland Water Transportation in Urban Area – A Case Study of Waterways in Kochi City**”, Proceedings of 13<sup>th</sup> National Conference on Technological Trends, (NCTT 2012) August 10-11, 2012, pp 1375-1383, Vol 2.
54. Sabitha N M and **B G Sreedevi**, “**Improvement of connectivity between Kochi Seaport and Airport through Inland waterways**”, Proceedings of 11<sup>th</sup> National and 1<sup>st</sup> International Conference on Technological Trends, (ICTT 2010), Nov 25-27, 2010, pp 454-460.
55. Sabitha N M and **B G Sreedevi**, “**Management of Inland Waterways in Kochi City**”, Proceedings of Fourth CUSAT National Conference on Recent Advances in Civil Engineering,(RACE 2010), Sept 16-18, 2010, pp 267-274.
56. Sabitha N M and **B G Sreedevi**, “**Planning of Inter-Modal Transport - A case study of Inland Waterways in Kochi City**”, Proceedings of 22<sup>nd</sup> Kerala Science Congress, Peechi, Thrissur from 28 - 31 January 2010, pp 457 - 458.
57. Sabitha N M, **Dr. B G Sreedevi**, Sanjaya Kumar V S, ‘**Feasibility Analysis of waterway development- A case study of canals in Thrissur, Kerala**’, 4<sup>th</sup> International conference on Materials Mechanics and Management, organized by College of Engineering, Thiruvananthapuram, April, 2017.

58. Sabitha N M, **B G Sreedevi** & V S Sanjay Kumar, “**The role of waterways in sustainable urban transport - a case study of Puthenthodu canal in Thrissur, Kerala**”, Proceedings of the 4<sup>th</sup> Conference on Transportation Systems Engineering and Management (CTSEM 2017), 12<sup>th</sup> and 13<sup>th</sup> May 2017, Anna University, Chennai
59. Ebin Sam & **Dr. B G Sreedevi**, ‘**Identification and prioritization of accident black spots in Ernakulam District**’, IRF Middle East and North Africa Regional Congress and Exhibition, October 29-31, 2017, Dubai, UAE.
60. Salini P. N., Anish Kini B., **Dr B.G.Sreedevi**, Shaheem S, “**Sustainable Public Transit System for Last Mile Connectivity to Major Work Centres and the Mode Choice of Employees,**” International Road Federation (IRF) World Road Meeting 2017 Delhi, 14- 17, November, 2017
61. R Chandra Prathap, Wilson K C, Sanjay Kumar V S and **Dr. B G Sreedevi**, ‘**Impact of Vizhinjam Deep water International Multipurpose port on traffic and transportation system.**’, Proc. 5 th Colloquim on Transportation Systems Engineering and Management. (CTSEM, 2018), May 17-19, 2018

Indicative List of publications in Seminar/workshop proceedings

**Annexure 6**

## List of popular/ invited technical articles

1. '*Properties of Soil for Engineering Application*' Compendium of National Workshop on 'Managing Land Quality for Sustainable Agriculture 24-26 Jan. 2005.
2. 'Soil Resource Data for Engineering Interpretation' Proc. of National Workshop on Soil Resource Mgt. Thiruvananthapuram. 22-24 Dec. 2006 pp 132-146.
3. Popular Article on Use of Waste Plastic for road construction, (Malayalam), Vyavasaya Keralam Magazine, Govt. of Kerala, March, 2008.
4. Popular article on Inland water transport, (Malayalam), Vyavasaya Keralam Magazine, Govt. of Kerala, April, 2008.
5. 'Ini Theliyatte green signal' article on road safety/ Janapadham, Published by PRD, Govt. of Kerala, 2011.
6. Road Safety – Remedial measures (Malayalam) , ACTS, 12<sup>th</sup> issue – 2013.
7. Role of R&D Institutions in Kerala – SPATO Special 2013.
8. Mass Transport system for Trivandrum, Kerala calling, Published by PRD, Govt. of Kerala, 2013.
9. Roadukal Nadinte Jeevanadikal' published in JANAPADAM, Published by PRD, Govt. of Kerala, 2014
10. Article on Flexible Pavement, Malayala Manorama in the feature 'Notam', 2014
11. 'Orungam Subha Yatraku' Article on flexible pavement, Rajaveedhi; Published by PWD, 2014
12. Article on Road construction practices, Malayala Manorama in the feature 'Notam', November,17
13. Chapter on 'Transportation' in Children's Book of Encyclopedia published by Language Institute, Govt. of Kerala.,2010

**List of Research Projects completed as lead Researcher**

1. Study on Road Construction materials in Kerala (2007-10)
2. Study on Overloading of Trucks and its effect on Pavement Deterioration (2006-07)
3. Study on the use of Waste Plastic for Road Construction in Kerala (2006-12)
4. Study on the use of Coir Waste for Road Construction in Kerala (2006-07)
5. Impact of Digging by Public Utility Departments on Urban Roads (2005-06)
6. GIS application for Data Management of Bridges- A Pilot Study (2005-06)
7. Study on the Navigability of Feeder Canals to NW 3 in Alappuzha Region (2005-06)
8. Pavement Maintenance Management System for selected Roads in Kerala (2004-10)
9. Development of a Model GIS for Canals- A Pilot Study (2004-05)
10. Study on Integrated Development of Kottappuram-Chettuva Stretch of West Coast Canal (2004-06)
11. Inception study for the development of a ring road for Thiruvananthapuram (2003)
12. Study on alternate pavement options for Kerala (2002)
13. Development of a Bridge Maintenance Management System (2001)
14. Environment Impact Assessment of development of NW 3 in Kerala (2001)
15. Study of road construction materials and equipments in Kerala (1997-2000)
16. Preparation of a Bridge Information System (BIS) and inventory of bridges in Thiruvananthapuram division (1998). (This was updated in 2004 in GIS platform)
17. Environment impact assessment of Hill Roads-A case study of Wayanad district (1996)

List of Research Projects completed as lead Researcher



### Selected List of Sponsored Projects

1. Collection of Bi-annual Traffic Census Data on National Highways in Kerala (2006, 07)
2. Preparation of influence area of tourist centres in Kerala (2007-08)
3. Study on Ambient Air Quality Monitoring and its contribution to climate change in Kerala (2007-2011)
4. Traffic Studies and Engineering Surveys for Modernization of Interstate Checkpost at Walayar in Kerala (2006)
5. Development of Water ways in Cochin for Tourism and Transport (2009)
6. Feasibility study of constructing an elevated road corridor between Aroor and Edapally in Cochin (2009)
7. Traffic studies and engg surveys for Kerala Sustainable Urban Development Project (2005-06)
8. Revival of T S Canal for Inland Navigation and Tourism Promotion in Varkala Region (2005-06)
9. Development of Waterway from Neeleswaram to Ezhimala (2006)
10. Study of Natural Rubber Modified Bitumen for Road Construction in Kerala (2007-09)
11. Preparation of projects for improvement of road connectivity to tourist centres in Kerala (2003-2004)
12. Study on the improvement of approach roads to KINFRA Parks in Kochi (2001-2002)
13. Development of a road corridor between Kottayam and Cherthala (40 kms.) (2000-2003)
14. Finalization of the route for NH 220 in Kerala (2002)
15. Preparation of drawings for four-laning of Kesavadasapuram-Mannanthala section of SH-1 (1999-2000)
16. Preparation of alignment drawings for ROB at rail crossings No. 50 & 49 in Palakkad
17. Traffic improvement schemes for Kozhikode city (1999-2000)
18. Preparation of alignment plan for four laning of beach road in Kozhikode city (2000-2001)
19. Preparation of tourist map for Kerala (1999-2000)
20. Preparation of Tourism Signages for the Inland Water Canals in Kerala (1999-2000)
21. Feasibility of a new underpass link near (Chinnakkada ROB in Kollam Town (1999)
22. Feasibility study for development of Valapattanam-Mahe section of West Coast Canal for navigation (1999)
23. Planting of boundary stones for terminals and widening of IWT canals (1998-99)
24. Land acquisition project for terminals and widening of IWT canal in NW 3 (1997 onwards)
25. Preparation of digital base map and road network development in New Mangalore Port (1998-99)
26. Techno-economic feasibility study and hydrographic survey for the extension of NW 3 up to Kolachal in Tamilnadu (1998 onwards)
27. Techno-economic feasibility study for the extension of NW 3 up to Kovalam in the South and Kasargode in the North (1997-98)

28. Consultancy services for development of road network in and around Mormugao Port (1997)
29. Preparation of detailed drawings of new alignment connecting NH 17 at km 115/100 and Naval Academy, Ezhimala (1996)
30. Pre-feasibility study of selected PWD roads in Kerala State (1996)
31. Feasibility study for the proposed parallel road to Sahodaran Ayyappan Road at Ernakulam (1996)
32. Feasibility of a rail link between Kozhikode Airport and Shornoor-Mangalore railway line (1996)
33. Four laning and strengthening of Aluva (km 332/140)- Cherthala (Km. 387/500) section of NH 47 (1995)
34. Survey and investigation for aligning Phase II portion of the combined bypass for Thiruvananthapuram-Neyyattinkara on NH-47 from Kovalam to Parassala (1995)
35. Marshall Mix Design for different mixes (SDBC, BC, BM and DBM) and tests on Bitumen, Emulsion and Coarse Aggregates for the LNCPE Synthetic track at Kariavattom.
36. Field density tests and tests on bituminous sample cores extracted from the LNCPE Synthetic track at Kariavattom (2010)
37. Strengthening of NH 47 from Vytilla to Edappally – Overlay Design by Benkelman Beam Method (2010)
38. Feasibility Study on setting up of Monorail between Technocity Pallippuram and Mangalapuram in Trivandrum (2011)
39. Preparation of DPR for Kochulloor – Pallipuram stretch of NH-47 (2012)
40. Estimation of Carbon foot print- Pilot study in Government Secretariat, Thiruvananthapuram.
41. Measurement of air quality and noise level at proposed IISER campus, Vithura in Thiruvananthapuram District
42. Improvement of Kovalam – Akkulam canal stretch in Thiruvananthapuram region for Inland Navigation, Tourism and Recreation purposes
43. Comprehensive Signage Scheme for Major roads & Tourist Centres in Kerala
44. Feasibility study for development of outer ring road between Kodungalloor and Cherthala 2012 -13
45. Development of Pilot Safe Road corridor –Base line data collection and analysis – KSTP -2013 -14
46. Project report for Green field Highway between Nedumbassery, Vyttila Hub and Kundanoor in Kochi- Kochi Metro Rail Corporation – 2012-13
47. Study on existing cross structures along National Waterway III in Kerala, 2012-13
48. Study on extension of NW-3 towards North of Kottappuram & towards South of Kollam, 2012-14
49. Traffic and Transportation studies for selected 31 towns of Kerala (2012 – 13).
50. Ambient Air Quality monitoring for Kerala

### Student Projects Guided

1. ‘ A Study on the performance of flexible pavements in high flood area’ , M Tech Thesis, Cochin University of Science and Technology, (2016-17)
2. ‘Study on Open Graded Friction Courses’, M Tech Thesis, National Institute of Technology, Kurukshetra, (2015-16)
3. ‘Study on the influence of sub grade soil on the strength of in service flexible pavements’, M Tech Thesis, Cochin University of Science and Technology, (2014- 15)
4. ‘Study on the effect of Geometric Parameters on Road Safety – A Case Study on newly upgraded Highways in Kerala, ’ M Tech Thesis, National Institute of Technology, Karnataka, Surathkal , (2014-15)
5. ‘Utilization of Jarofix and other waste material for road construction’, M Tech Thesis, NIT –Kurukshetra , (2014-15)
6. ‘Development of Pavement Roughness Model and Maintenance Priority Index for State Highway-1’, M Tech Thesis, RIT, Kottayam, (2014). **(Secured Best paper and Best poster awards in seminar presentations)**
7. 'Evaluation of Elastic Properties of Bitumen with Modifiers”, M Tech Thesis, RIT Kottayam, (2014).
8. ‘A Study on Pavement Performance & Overlay Design using HDM-4’, M Tech, RIT, Kottayam, (2013).
9. ‘Pavement Performance Modeling using Fuzzy Logic’, M Tech, RIT, Kottayam, (2013).
10. ‘Development of GIS based Intelligent Network Level Road Maintenance & Rehabilitation System’, M Sc Geoinformatics, Gandhigram Rural Institute, Gandhigram, (2012-13).
11. ‘Evaluation of Rubberized Roads in Kerala’, B.Tech, College of Engineering, Thiruvananthapuram (2005-06).
12. ‘Performance Evaluation of Road Constructed under KSTP’, B Tech (2005-06)
13. ‘GIS based Tourist Infrastructure Information of Varkala Region in Kerala’, M Sc Geoinformatics, Gandhigram Rural Institute, Gandhigram , (2005-06).
14. ‘A Model GIS for Roads Infrastructure Data Management’, M Sc Geo Informatics, Gandhigram Rural Institute, Gandhigram , (2005-06)

15. 'Comparative Study between Polymer Modified Bitumen & Ordinary Bitumen' B Tech, TKM College of Engg, (2007)
16. 'Study of Natural Rubber Modified Bitumen', B Tech, RIT, Kottayam (2005-06)
17. 'Study on the Revival of Varkala Tunnels along T S Canal for Navigation' B Tech, CUSAT, Kochi, (2005-06)
18. 'GIS based Tourism Information System for backwater area between Kollam and Ernakulam Districts in Kerala', M Sc (Geoinformatics), Gandhi Gram Rural Institute Gandhigram , (2005-06).
19. 'Development of Thiruvallam Junction' B Tech, Sarabhai Institute of Science and Technology, Vellanad, (2013-14)
20. 'GIS as a decision support system in urban traffic infrastructure development' , M Sc (Geoinformatics), Gandhi Gram Rural Institute, (2005-06)
21. 'Design of RCC Bridge across Kodur River for Kottayam-Cherthala Tourist Corridor' B Tech Project, College of Engg. Tvpm ,(2003-04)
22. 'Field Studies and Pavement Design for Kottayam-Cherthala Tourist Corridor' B Tech Project, Govt. Engineering. College, Kottayam, (2003-04).

### Media Presentations

1. All India Radio - Talk on Road Safety Scenario in Kerala, 8<sup>th</sup> Jan, 2011.
2. Doordarsan – Discussion on Railway Budget 2011-12, 25<sup>th</sup> Feb, 2011.
3. Malayalam Communications - “Vattamesa”, Panel Discussion on Roads, 14<sup>th</sup> July, 2011.
4. Asianet - ‘Nammal Thammil’ programme on Road Safety, October, 2011.
5. All India Radio - Panel Discussion on Road Safety, 08<sup>th</sup> December, 2011
6. Doordarsan - “Koottukari” Phone in programme on Road safety, 11<sup>th</sup> Jan, 2012
7. Amrita TV - Discussion on Railway Budget, 15<sup>th</sup> March, 2012
8. Manorama News Channel - Discussion on Road safety, 09<sup>th</sup> April, 2012
9. Manorama News Channel - ‘Nattukoottam’ program on Kazhakoottam Development - Panelist, February, 2012.
10. Doordarsan - ‘Samvadam’, discussion on Metro Project, 24<sup>th</sup> October, 2012.
11. Kairali Channel - Discussion on Road safety, 28<sup>th</sup> December, 2012
12. Doordarsan -Pre and post budget discussion on Railway budget, 25<sup>th</sup> and 26<sup>th</sup> Feb, 2013.
13. Doordarsan ‘Veetuvishesham’ – phone –in programme, 4<sup>th</sup> March, 2013.
14. Doordarsan – Brand Kerala – Discussion on NATPAC, 10<sup>th</sup> May, 2013.
15. All India Radio – Talk on Safety of School Students, 22<sup>nd</sup> May, 2013.
16. Manorama News Channel - Discussion on “Seat belt”, 13<sup>th</sup> June, 2014
17. Amrita TV - Discussion on Railway Budget, 8<sup>th</sup> July, 2014
18. Kerala Vision Channel , ‘Road Development’, 8<sup>th</sup> August, 2014
19. Doordarsan - ‘Draft new Motor Vehicles Act’, Phone-In Programme, 14<sup>th</sup> Sept., 2014
20. Media One - ‘Draft new Motor Vehicles Act’, Discussion, 14<sup>th</sup> September, 2014
21. Manorama I - ‘Comprehensive Mobility Plan’, 30<sup>th</sup> , September, 2014
22. Media Plus - ‘Road Development in Kerala’, Discussion, 6<sup>th</sup> October, 2014
23. Asianet Plus - , ‘Road Infrastructure Development’ Discussion, 20<sup>th</sup> Oct. 2014
24. All India Radio –Discussion on Budget, 23<sup>rd</sup> Feb.2015
25. Amrita TV - Discussion on Railway Budget, 26<sup>th</sup> Feb. 2015
26. All India Radio - Talk on Road Safety, 22<sup>nd</sup> May, 2015
27. All India Radio - Talk on Light Metro, 23<sup>rd</sup> May, 2015
28. F M Radio, Talk on road safety, 6<sup>th</sup> Aug, 2015.
29. All India Radio, Kozhikkode, Talk on Comprehensive Mobility Plan, 11<sup>th</sup> Aug, 2015
30. Mathrubhoomi Channel- Panel discussion on ‘Trivandrum- the Way Forward’, 9<sup>th</sup> December 2015.
31. Mathrubhoomi Channel- ‘Akam Puram’ program, Panel discussion on vehicle pollution, 9<sup>th</sup> December 2015.
32. Manorama Channel- Counter Point- ‘Traffic Policies at Delhi’, 11<sup>th</sup> December, 2015.
33. Doordarsan – Samvadam- Discussion on Energy Conservation, 12<sup>th</sup> December 2015.

34. Manorama Channel- discussion on vehicle pollution, 9<sup>th</sup> December 2015.
35. All India Radio, Kozhikkode- Discussion on ‘Increasing Accidents in the state’, 20<sup>th</sup> December, 2015.
36. Meeting of Trivandrum Chamber of Commerce & SBT to facilitate Vizhinjam Port MD, 22<sup>nd</sup> December, 2015.
37. All India Radio, Kozhikkode- Discussion on ‘Two Wheeler Accidents’, 29<sup>th</sup> December, 2015.
38. Manorama Channel- News Hour- ‘Discussion on vehicular pollution’, 1<sup>st</sup> January, 2016.
39. All India Radio, Trivandrum- Panel discussion on Road Safety in connection with Road Safety Week, 8<sup>th</sup> January, 2016.
40. Doordarsan - Discussion on Road Safety in connection with Road Safety Week, 8<sup>th</sup> January, 2016.
41. All India Radio, Trivandrum- Discussion on Road Safety, 12<sup>th</sup> January, 2016.
42. Doordarsan – ‘Vartha Keralam- Live’- Program on Road Safety in Kerala, 14<sup>th</sup> January, 2016.
43. Times now channel- program on road safety initiatives of NATPAC.
44. Amrita Channel- Discussion on Railway Budget 2016, February 25, 2016.
45. Dooradarshan- Varthamanakaalam- ‘Discussion On vehicle alteration and its effects.’, March 3, 2016
46. All India Radio, ‘Opinion on Making Helmet Compulsory’, 30<sup>th</sup> March, 2016.
47. Dooradarshan- Varthamanakaalam- ‘Discussion on GoI’s Road Safety.’, April 1, 2016.
48. Amrita TV- ‘Malayali Durbar’ - Program on Road Safety, April 2, 2016.
49. Asianet- ‘Discussion on Development Agenda’, April 15, 2016.
50. Dooradarshan- Varthamanakaalam- ‘Discussion on Road Safety of School Children’, June 2, 2016.
51. All India Radio, Thrissur, ‘Programme on Road Safety – Two Wheeler Accidents’, 17<sup>th</sup> Aug, 2016.
52. All India Radio, Trivandrum, ‘Vartha Tharangini – Programme on Road Safety’, 22<sup>nd</sup> Aug, 2016.
53. Manorama Channel, ‘Discussion on Kochi Metro’, 10 th May, 2017
54. All India Radio, Comment on License suspension and road safety, 29 th May ,2017.
55. Doordarsan, ‘Samvadam, Discussion on Kochi Metro’ 16 th June, 2017
56. Doordarsan, ‘Varthamanakalam, Discussion on Light Metro’ 19 th June, 2017
57. All India Radio, Discussion on the ‘Effect of rain on road safety’, 28 th June, 2017
58. Asianet program on Inland Waterway development, October, 2017
59. Asianet program on Coastal Highway Development, October, 2017
60. Asianet program on Hill Highway Development, October, 2017

61. All India Radio, Discussion on waterway development, 6 th September, 2017
62. Doordarsan, 'Varthamanakalam', Discussion on Coastal Highway and Hill Highway Development, 12 th September, 2017
63. Asianet program on KSTP roads, 12 th October, 2017
64. All India Radio, Comment on Accident abatement measures for Kerala, 28<sup>th</sup> November, 2017.
65. Doordarsan, 'Varthamanakalam', Discussion on Road and waterway development, 22 nd, May, 2018
66. All India Radio, 'Prabhathabheri' Opinion on Parking issues and solutions for cities, 11 th June, 2018
67. Doordarsan, 'Varthamanakalam', Discussion on Students and Road Safety, 12 th June, 2018.
68. Manorama Channel, 'Samvadam', Discussion on night driving, 25 th September, 2018
69. Asianet, Discussion on Road safety, 2 nd October, 2018
70. Doordarsan, Discussion on Road Safety, 3 rd October, 2018

**Awards & Recognition of NATPAC during my tenure as director**

**1. Exhibitions**

1. **2<sup>nd</sup> Prize**, International Level Science, Technology & Cultural Exhibition – MEDHA, 2012 held at Kothamangalam .
2. **First position in general category**, Swadeshi Science Congress, organized by Swadeshi Science Movement-Kerala at Ernakulam, 2015
3. **First position in general category** Swadeshi Science Congress, organized by Swadeshi Science Movement-Kerala at Kasaragod, 2016
4. **1<sup>st</sup>Prize** ,Science Exhibition, CETEX, 2015 at Thiruvananthapuram
5. **1<sup>st</sup>Prize**, Science Exhibition, DAKSHA, 2015 at Thiruvananthapuram
6. **III<sup>rd</sup>prize**, Exhibition in connection with Kerala Science Congress, Alappuzha, 2015.
7. **Best pavilion** on Road Safety as part of CV Raman Science Exhibition held at Thiruvananthapuram., 2016
8. **I st prize**, Exhibition in connection with Kerala Science Congress, Thiruvalla, January, 2017.

**2. Recognition**

- a. Certificate of Appreciation from Maruthi Suzuki Ltd. under public category of the Road Safety Mission 2015 awards.