

Dr. A.U. Ravi Shankar

Professor

Dept. of Civil Engineering

N.I.T.K SURATHKAL

SRINIVASNAGAR (P.O.)

MANGALORE - 575 025



E-mail: aurshankar@gmail.com

Mob: +91 9886525453

1. Educational Qualification

| Degree | College/ University | Year of Passing | Class |
|-------------------------------------|-------------------------------------|--------------------|---------------------------------|
| Ph.D (Transportation Engg.) | U.O.Roorkee Now IIT Roorkee | 1991 | |
| M.Tech (Highway & Traffic Engg.) | IIT Kharagpur | 1983 | First Class with Distinction |
| B.Tech (Civil Engg.) | R.E.C. Warangal Now NIT Warangal | 1981 | First Class with Distinction |

2. Experience

| Position | Institute | Period | |
|---------------------|---|------------|--------------|
| | | From | To |
| Lecturer | K.R.E.C., Surathkal Now NITK Surathkal | 24-11-1983 | 24-11-1989 |
| Sr. Lecturer | -do- | 24-11-1989 | 09-6-1996 |
| Sl. Grade Lecturer | -do- | 09-6-1996 | 09-4-1997 |
| Assistant Professor | -do- | 09-4-1997 | 09-04-2004 |
| Professor | -do- | 09-04-2004 | Till to date |

3. Ph.D Thesis Title

Capacity Planning of Domestic Airline Passenger Services

Supervisors:

- Dr.S.K.Khanna, I I T Roorkee
- Dr. P.K.Sikdar, I I T Roorkee

4. M.Tech Thesis Title

Resilient Modulus of Subgrade Soils

Supervisor:

- Dr. B.B.Pandey, I I T Kharagpur

5. Professional Memberships

1. Member of Indian Roads Congress (IRC)
2. Life Member of Indian Society for Technical Education (ISTE)
3. Life Member of Indian Geotechnical Society (IGS)
4. Life Member of Institute of Transport Development in India (ITDA)
5. Life member of Institute of Urban Transport (IUT)

6. Research Supervision

- *M.Tech Thesis* - 134 completed
- *P.hD* - 03 (Ongoing) 08(Completed)

(Annexure-I)

7. Research Publications

- *Journals*
 1. National Journal - 27
 2. International Journal - 31
- *Conference/Seminars/Workshops*
 1. National - 46
 2. International - 39

(Annexure-II)

8. Technical Reviewer for Journals and Conferences

- International Journal for Pavement and Engineering
- Road Materials and Pavement Design
- Journals published by Indian Roads Congress
- GeoShanghai - 2014, International Conference
- Colloquium on System for Transportation Engineering and Management, NIT Calicut

9. Honors and Awards Received

1. *Khosla Research Award* for the research paper entitled “Productivity Analysis of Airline Industry With Reference To Indian Airlines”, jointly authored by Dr. P.K. Sikdar and Dr. S.K. Khanna. November 24, 1990
2. *Gold Medal for the best paper* presentation on “Optimal Route Frequency Planning Of Domestic Airline Network” National Conference on Signals, Data and Systems Modeling, Simulation and Analysis, Anjuman Engg. College, Bhatkal, Karnataka, November 28-30, 1995
3. *Nirman Nirvahane Puraskar 2011* by Association of Consulting Civil Engineers (India), Bangalore Centre for the best *M.Tech Thesis in the Field of Construction Technology and Management*.
4. *Eminent Civil Engineer* by Association of Consulting Civil Engineers for the Year 2012
5. *Manjunatha, B.M. and Ravi Shankar, A.U.,* “Effect of Size of Coarse Aggragate and Combined Grading of Coarse and Fine Aggragates on Pavement Quality

Concrete” Selected for the award of Bihar PWD Medal, presented at 76th annual Session of Indian Roads Congress, Indore(M.P) on December 19, 2015.

10. Foreign Visits

1. Kyoto University Visiting professor June 2006
2. Asian Institute of Technology, Bangkok 2012
3. Wollongon University 2012
4. Tonji University, China 2013
5. Kumamoto University, Japan 2013
6. Saga University 2013

11. Other Achievements

1. **Coordinator**, Project: “Strengthening of PG teaching and Research Facility for Transportation Systems Engineering” under *DST’s FIST- 2005*. Grant amount *Rs. 30 lakh*.
2. **Coordinator**, State Technical Agency (STA)-Karnataka, for *Pradhan Mantry Gram Sadak Yojna (PMGSY)*
3. **Technical Committee Member** of “Guidelines for the Design and Construction of Cement Concrete Pavement for Rural Roads” *IRC: SP: 62-2004*, Indian Roads Congress, New Delhi.
4. **Technical Committee Member** of “Guidelines for the use of Interlocking Concrete Blocks Pavements”, *IRC: SP: 63-2004*, Indian Roads Congress, New Delhi.
5. **Technical Committee Member** of “Guidelines for the Design of Plain Jointed Rigid Pavements for Highways”, *IRC: 58-2002*, Indian Roads Congress, New Delhi.
6. **Technical Committee Member** of “Guidelines for the Design of Plain Jointed Rigid Pavements for Rural Roads”, *IRC 59-2002*, Indian Roads Congress, New Delhi.
7. Developed **Transportation Engineering Laboratory** (Sponsored by MHRD)
8. Formulated syllabus for the *new Post Graduation Course on Transportation Systems Engineering*
9. **Member**, National Accreditation Board (NBA).
10. **Former Member**, Board of Governors, NITK, Surathkal (year 2005-2006).

12. Conferences /Seminars/Meetings Attended

- Total number of Courses/Workshops attended : **16**
(Annexure-III)

13. Summer and Winter Schools Attended

- Total number : **16**
(Annexure-IV)

14. Courses Conducted

- Total number of Courses/Workshops conducted : **27**

(Annexure-V)

15. Special Lecture Delivered

- Total number of Special lecture delivered : **26**

(Annexure-VI)

16. Administrative Jobs Undertaken

1. NSS officer in the year 1985
2. Joint Secretary of KRECTA 1986
3. Secretary of KREC Consumers' co-operative society Ltd., (1989-99)
4. Maintenance warden of KREC Hostels (1996-99)
5. Board of Directors of Students co-operative society (1998)
6. Vice chairman of KREC English Medium High School (1999-2001)
7. Chairman Staff Club 2002
8. Time Table in charge for UG/PG curriculum of Civil Engg. Dept (Since 2000)
9. Civil Engg. Dept. Computer Center in charge (Since 1991)
10. Student Counselor for First Year Students (Since 1999)
11. Estate Works Officer, NITK Surathkal, 2007-2010
12. Professor and Head, Civil Engineering dept., 2010-2013

17. Consultancy Activities

1. Testing of Pavement Materials for Zilla Panchayat Engineering Divisions of Karnataka, PWD, NMPT, Mangalore Airport etc.
2. Design of Flexible and Rigid Pavements for Zilla Panchayat Engineering Divisions of Karnataka State
3. Traffic Management studies for Gujrath Ambhja Cements, L&T, at Mangalore, Udupi and Karwar
4. Design of Concrete Pavement from Airport to KPT Junction at Mangalore
5. Design of Concrete Road Near Urva Stores, Mangalore
6. Design of Concrete Road at MRPL, IOCL Oil Filling Station
7. Design of Concrete Road at Vittala Bus Stand in D.K. Dist.
8. Involved in surveying pipeline layout for Bhadravathi Paper Mills Ltd.
9. Involved in Design of Contraction, Expansion and Longitudinal joints for New Runway which is coming up in Mangalore
10. Involved in Mix Design for existing Runway at Mangalore (Flexible).
11. Involved in Mix Design of Lakshadeep Airport

Annexure – I

(a) Details of B.Tech Thesis Guidance

| Sl. No. | Title of the Project | Name of the Candidate | Year of Completion |
|---------|---|--|--------------------|
| 1. | Analysis of flexible Pavements using KENPAVE Software | Kamna Meena, P Shilpa, Seema Shet, Surabhi M | 2015 |
| 2 | Design of Stone Matrix Asphalt Using Loose Cellulose Fibres | Akshay Bansal, Harsha Kumar, Karan Sheron, Sachin Jha | 2015 |
| 3 | Review of Report on Study of Accident Black Spots in India | i) Vivek Yadav ii) Sanam Lakhwara | 2014 |
| 4 | Comparison of Stone Matrix asphalt Using Cellulose Fiber | i) Vidya K C ii) Ardra C P iii) Bigina P B iv) Shobhitha N | 2014 |
| 5 | Design of Stone Matrix Asphalt using Waste Plastic | i) Arun Thayat ii) Nizam Mohiyudheen iii) Puzhankara Gopika Nandan iv) Rahul Chand AR | 2014 |
| 6 | Analysis of Flexible Pavement Using KENPAVE Software | i) Srivasta B S ii) Mallinath Biradar | 2014 |
| 7. | Analysis of Rigid Pavement Using MATLAB | Sachin Vishwanath Shetty V Shishir Akhil S Nath Rahul Sharma Ahmed Faisal Moosa | 2013 |
| 8. | Design and Coordination of Traffic Signals | Nalubega Catherine Prabash Sharma Pratheek Shukla Swetha P Pai Tata Pragna | 2013 |

(b) Details of M.Tech Thesis Guidance

| Sl. No. | Title of the Project | Name of the Candidate | Year of Completion |
|---------|--|-----------------------|--------------------|
| 1. | Ground Improvement in Shedi Soil with Geogrid Inclusions- A Laboratory Study | Naganna B.S | 1993 |
| 2. | Behaviour of Geogrid Reinforced Shedi Soil Subgrade – A Laboratory Study | Jagadesh C.B | 1994 |
| 3. | Strength Behaviour of Reinforced Shedi Soil Subgrade | Balasubrahmanyam K | 1995 |
| 4. | Strength Behaviour of Geogrid Reinforced Shedi Soil Aggregate System | Mallikharjun, G.M. | 1996 |
| 5. | Response of Reinforced Shedi Soil Subgrade and Aggregate System to Traffic Loads | Srinivasa Murthy, K | 1997 |
| 6. | Effects of Contaminants on Engineering Behaviour of Shedi Soil | Rajeev Kumar, P. | 1998 |
| 7. | Evaluation of Pavement Thickness for Different Grades of Concrete | Praveen Kumar Shetty | 1999 |
| 8. | Evaluation of Rigid Pavement Thickness for Different Grades of Concrete using Plain Steel Fibres | Satish Babu, K | 1999 |
| 9. | Mix Design for Rigid Pavement using Fly Ash | Rajendra Prasad, K.B. | 2000. |

| | | | |
|-----|--|-----------------------|------|
| 10. | Strength Behaviour of Lime-Pond Ash Soil Subgrade | Phani Kumar, M.V.S. | 2000 |
| 11. | Suitability of Lime-Pond Ash Stabilized Shedi Soil Pavement layers- An experimental Study | Venkata Raja, G | 2001 |
| 12. | Concrete Mix Design for Rigid Pavements Replacing Fine Aggregate with Pond Ash | Srinivas, K | 2001 |
| 13. | Analysis of Multi Layered Flexible Pavement by Finite Element Method | Madan Mohan, B | 2002 |
| 14. | An Experimental Study of Flexible Pavement with Reinforced Subgrade | Nagabhushan Das, R.V. | 2002 |
| 15. | Nonlinear Analysis of Multilayered Flexible Pavement by Finite Element Method | Naveena, P.C. | 2003 |
| 16. | Study on Load Settlement Characteristics of Clayey Soil Stabilized using Lime and Pond Ash | Srinivas Reddy P | 2003 |
| 17. | Development of Granular Sub-base Material using Locally Available Materials for Rural Roads | Anil Kumar, G | 2004 |
| 18. | Study of Permeability and Strength Characteristics of Granular Sub-base Material Developed using Locally Available Materials | Satya Priya Behra | 2005 |
| 19. | Geotechnical Investigation of Shedi Soil blended with Pond Ash, lime and Coir. | Prashant S Kudari | 2005 |
| 20. | Study of Geotechnical Properties of Lateritic soil blended with Pond Ash and Cement | Kashinath | 2005 |
| 21. | Studies on Bio-enzyme Stabilized Lateritic Soil as a Highway Material | Harsha Kumar Rai K.M. | 2006 |
| 22. | Computational Approach for Pavement Analysis Based on Rainfall Intensity Criteria | Anju Isack | 2006 |
| 23. | Development of GSB Material | Roopa Shree | 2006 |
| 24. | FEM Analysis & Design of Rigid and Flexible Pavements | N. Shashanka Reddy | 2007 |
| 25. | Experimental Investigation of Blast Furness Slag for Rigid Pavements | Vijay Pattansetty | 2007 |
| 26. | Performance studies of Stone Matrix Asphalt using waste Plastics as modifier | Vishwanatha N | 2007 |
| 27. | Utilization of waste Plastic in Bituminous Concrete Mixes | Surendra Raj Bista | 2007 |
| 28. | Experimental Investigation On Steel Fiber Reinforced Fly Ash Concrete(Sfrc) For Rigid Pavements | Abhishek Patil | 2008 |
| 29. | Refusal Density Approach For High Volume Roads | Dayananda Math | 2008 |
| 30. | Study On Geotechnical Properties Laterite And Black Cotton Soils With Bioenzyme As Stabilizer | Gireesh B.G | 2008 |
| 31. | Evaluation Of Stresses And Strains In Flexible Pavement By Using Kenpave Computer Programming | Kavitha A.V | 2008 |
| 32. | Consistency Evaluation Of Two Lane Rural Highways Based On Speeds And Alignment Indices | Manjunath S | 2008 |
| 33. | Capacity Planning Of Domestic Airlines Passenger Services | Marta Florence J | 2008 |
| 34. | Refusal Density Approach For High Volume Roads | Dayananda Math | 2008 |
| 35. | Pavement Management And Deterioration Models | Shaibaz Banu Maniyar | 2008 |

| | | | |
|-----|---|------------------------|------|
| 36. | Experimental Studies on Steel Fiber Reinforced Concrete For Rigid Pavements | Shivarama M.S. | 2008 |
| 38. | Laboratory Investigation of Shedi Soil Stabilized with Pond Ash and Lime | Suresh Praveen Kumar P | 2008 |
| 39. | Laboratory Investigation on Shedi Soil Blended with Sand and Coir as a Pavement Material | Prakash Bhat H | 2008 |
| 40. | Laboratory Investigation on Bio-Enzyme Stabilized Black Cotton Soil as a Pavement Material. | Sreeshail Yakkundimath | 2009 |
| 41. | Utilization of Waste Plastics in Semi Dense Bituminous concrete Mixes | Durgaprasad Salian | 2009 |
| 42. | Resilient Modulus of Suddha and Red Soils | Indrani K.M | 2009 |
| 43. | Bioenzyme Stabilized Lateritic and Shedi soils | Ganesha Chatarda | 2009 |
| 44. | Demand and Productivity Analysis of Indian Airlines Domestic Passenger Services | Telu Jyosthna | 2009 |
| 45. | Performance studies on Bituminous Concrete mixes using Waste Plastic. | Koushik K | 2009 |
| 46. | Design Consistency Evaluation of Crest Vertical Curves On Rural Highways | Ashwin V.P | 2009 |
| 47. | Design Consistency Evaluation of Horizontal Curves On Rural Highways | Vinay B.M | 2009 |
| 48. | Consistency Evaluation of Rural Highways using Alignment Indices | Srinivaslu Gunti | 2009 |
| 49. | Prediction of Thermal Stresses in Concrete Pavements | Akshaya Kumar K | 2009 |
| 50. | Experimental Investigation on Fatigue Behaviour of concrete with Steel Fibers and Fly ash | Girish M.G | 2009 |
| 51. | Analysis of Rigid Pavements using KENPAVE and EverFE software | Abhilash B.R. | 2009 |
| 52. | Enzyme stabilized soils for flexible pavements. | Sukumara.M | 2010 |
| 53. | Performance and Fatigue behaviour of stone matrix asphalt using waste plastics as modifier. | Paparaju Uppara | 2010 |
| 54. | Porous concrete for rigid pavements | Amarendra Keerthi. | 2010 |
| 55. | Design of Gravel roads | Meghana | 2010 |
| 56. | Performance and Fatigue behaviour of Semi dense Bituminous Concrete using waste plastics as modifier. | Abhishek | 2010 |
| 57. | Travel Demand Forecasting For Estimating the Ridership on A Metro: A Case Study of Jaipur | Sunil K.S | 2010 |
| 58. | Enzyme Stabilized Soils For Flexible Pavements | Sukumara.M | 2010 |
| 59. | Load deformation behaviour of coir stabilized soil | Sachit Pai(GTE) | 2010 |
| 60. | Application of Geopolymer Concrete for Pavements | Ajith B T (CTM) | 2010 |
| 61. | Fatigue Behaviour of Sudda Soil | | 2010 |
| 62. | Effect of Aggregate Gradation on Concrete | Manjunath(CTM) | 2010 |
| 63. | Studies on Soils Treated with a Cementitious Stabilizer for use in Pavement Subgrade | Sharath P | 2010 |
| 64. | Fatigue behavior of chemically treated bituminous concrete mixes. | Lekha B.M | 2011 |

| | | | |
|-----|--|---------------------------------|------|
| 65. | Analysis of Flexible and Rigid Pavements for the conventional and stabilized materials. | Lekshmi Suku | 2011 |
| 66. | Performance of SMA using Waste Plastics (Dry mixing) using Superpave Gyrotory compactor. | Goutham Sarang | 2011 |
| 67. | Development of congestion cost equations for high speed corridors | Deepa.c | 2011 |
| 68. | Experimental Investigations on the properties of Porous Friction Course for Flexible Pavements. | GMVS Sai Kumar | 2011 |
| 69. | Effect of gyrotory compaction and refusal density on Bituminous Concrete. | Mousmi B.K | 2011 |
| 70. | Design and Analysis of White Topping | Muneera.CP | 2011 |
| 71. | Fatigue behavior of SMA mix using Zycosoil as Stabilizing material | Mehanaz | 2011 |
| 72. | Development of Steady State Fuel Consumption Model for Different Vehicle Types on High Speed Corridors | Sunil Kumar J C | 2011 |
| 73. | Evaluation of Elastic Properties of Bitumen with Different Modifiers. | Dhanya U.K | 2011 |
| 74. | Rail Defects in Railways and their Remedial Actions | Mohammad Daddow | 2011 |
| 75. | Comprehensive Study of Thermal Power Plant | Shilpa.J (CTM) | 2011 |
| 76. | Enterprise Resource Planning- Business Process Analysis and IT Requirement Identification | Namrata Lolge (CTM) | 2011 |
| 77. | Risk Management in Highway Sector for BOT project – A Gujarat Scenario | Sahal Puthawala (CTM) | 2011 |
| 78. | Study on behavior of Pavement Quality Concrete using 40 mm & downsize aggregates at different conditions | Rajanna. H (CTM) | 2011 |
| 79. | Life cycle cost analysis of Pavements | Azharudhin P M (CTM) | 2011 |
| 80. | Assessment of compaction on life cycle cost of road project using HDM-4 | Achutha. S (CTM) | 2011 |
| 81. | Role of shear keys in cantilever retaining wall | Nisha Sarath (GTE) | 2011 |
| 82. | Feasibility of coastal road from Thane to Navi Mumbai | Sagar P. Kariya (TSE) | 2012 |
| 83. | Restructuring Procedures in Indian Construction Industry To Avoid Disputes Through Case Studies | Anupama Sugathan (CTM) | 2012 |
| 84. | Alternative Dispute Resolution Methods In Construction Industry – An Assessment of Indian Situation Through Case Studies | Sherin Elizabeth Varghese (CTM) | 2012 |
| 85. | Experimental investigations on blended laterite soil for gravels roads and analysis /design using KENPAVE Software | Nitendra Palankar (TSE) | 2012 |
| 86. | Performance of Stone Mastic Asphalt using PMB 40 and PMB 70 | KrishnaG (TSE) | 2012 |
| 87. | Performance of Stone Matrix Asphalt using Crumb Rubber Bitumen and Modified Aggregates | Monisha M(TSE) | 2012 |
| 88. | Travel Time Reliability Based Route Choice Modelling For An Urban Road Network | Divia N.S (TSE) | 2012 |
| 89. | Pedestrians Road Crossing Behavioral Analysis At An Intersection of Delhi | Nisha.G (TSE) | 2012 |
| 90. | Mix Design of Pervious Concrete – An experimental Study Using Crushed Stone and River Sand as Fine Aggregate | Sasikumar.G (TSE) | 2012 |
| 91. | Intercity Passenger Travel Demand Modelling and Mode Choice Analysis for Mysore- Mangalore City Pair | Pramod K C | 2012 |

| | | | |
|-----|---|------------------------------|------|
| 92 | Evaluation of Flexible Pavement By KENPAVE for the Blended Soils | Lokayath Kanthi | 2012 |
| 93 | Study on Temperature Susceptibility and Aging Behaviour of Paving Grade Bitumen with Different Filler Material | Bharath R Mallya | 2012 |
| 94 | Intercity Passenger Travel Demand Modelling and Scheduling of Busses | Vijay Kumar V | 2012 |
| 95 | Performance Study of Bituminous Concrete Using Treated Aggregates | Pavan Prakash Patil | 2012 |
| 96 | Analysis of Rigid Pavements for Different Subgrade Support | Akhila C Nair | 2013 |
| 97 | Performance Evaluation of North West Karnataka Road Transport Corporation Using Rati Analysis, Benchmarking and Data Envelopment Analysis | Batan Debbarma | 2013 |
| 98 | Investigation of the Effect of Anti Stripping Additives on the Moisture Sensivity of Hot Mix Asphaltic Concrete | Calvin Adesimi Carlton Carew | 2013 |
| 99 | Laboratory Investigation on Enzyme Treated Black Cotton Soil | Chatali Nare | 2013 |
| 100 | Laboratory Investigation of Stone Matrix Asphalt Mix with Varying Filler Content with Rubber Modified Binder | Deshmuk Ranjit Mohan Rao | 2013 |
| 101 | Experimental Study on Mechanical Properties and Fatigue Behaviour of Flyash-GGBS Based Geopolymer Concrete under Ambient Curing Condition Incorporating Dredged Sand as Fine Aggregates for Rigid Pavements | Jayakesh K | 2013 |
| 102 | Experimental Study on Lateritic Soil and Soil with Aggregates Using RBI Grade 81 | Lekshmy V V | 2013 |
| 103 | Travel Time Estimation and Prediction Using Data Fusion | Mohamed Badhrudeen | 2013 |
| 104 | Laboratory Investigation of Reclaimed Aggregates for Bituminous Concrete Mix | Mahesh H M | 2013 |
| 105 | Experimental Study on Mechanical Properties of Flyash-GGBS Based Geopolymer Concrete under Ambient Curing Condition for Rigid Pavements | Marsh M Bandi | 2013 |
| 106 | Laboratory investigation of Lateritic Soil Treated with Terrabind | Musinda Anil Kumar | 2013 |
| 107 | Experimental Investigation on Fly Ash and Ground Granulated Blast Furnace Slag Concrete for Rigid Pavements | Roshan Rai | 2013 |
| 108 | Performance Evaluation of Karnataka State Road Trnasprt Corporation Using Ratio Analysis, Bench Marking and Data Envelopment Analysis | Sadananda M.N | 2013 |
| 109 | Experimental Investigation on Stone Matrix Asphalt Mixes with Chinese Gradation Using Crumb Rubber Modified Bitumen and Treated Aggregates | Sumayya Nazinin P H | 2013 |
| 110 | Experimental Investigation on Block Cotton Soil Treated with Terrabind Chemical and Fly Ash | Vijetha R V | 2013 |
| 111 | Experimental Investigation on Bituminous Concrete by Varying Mixing and Compaction Temperatures with Crumb Rubber Modified Bitumen as Binder | Yatish R G | 2013 |
| 112 | Experimental Investigations on the Effects of Polymer Modified Bitumen on Stone Matrix Asphalt with Chinese Gradation | Geethu J S | 2013 |
| 113 | Standard Operating Procedures for Projects | Sahitya Manjushree S P(CTM) | 2013 |
| 114 | Scheduling of a Construction Project Using Line-of-Balance(LOB) Scheduling Technique | Shridhar Mujumdar(CTM) | 2013 |
| 115 | Theory of Construction Procurement: Technology Perspective | Karthik Shetty K(CTM) | 2014 |

| | | | |
|-----|--|---------------------------------|------|
| 116 | Laboratory Investigation of High Modulus Bituminous Mixers | Ananth Gupta | 2014 |
| 117 | Project Duration Forecasting By Comparison of Earned Value Management Methods to Earned Schedule | Deepak Prasad J(CTM) | 2014 |
| 118 | Requirements and Barriers For Implementation of TQM In Indian Construction Industry | Subash N B(CTM) | 2014 |
| 119 | Simulation of Indian Urban Traffic Scenarios by using VISSIM | P. Jenitta | 2014 |
| 120 | Laboratory Investigation on Modified Laterite Soil using Cement and Coir | Avinash | 2014 |
| 121 | Experimental Investigation on Stone Matrix Asphalt with sisal fiber | Bonela Someswara Rao | 2014 |
| 122 | Experimental Investigation on Stone Matrix Asphalt with coconut coir | Patnala Venkatesh | 2014 |
| 123 | Laboratory Investigation on Laterite soil with coconut coir, RBI grade 81 and Aggregate | Saswati Das | 2014 |
| 124 | Laboratory Investigation of Black Cotton Soil using coir and Lime | Satish Karisheki | 2014 |
| 125 | Efficient Material Delivery and Site management using Lean Principles | Vijaya Kumar V (CTM) | 2014 |
| 126 | Parking Demand Assessment for Light Rail Transit Stations in Thiruvananthapuram City | Tinu Raj | 2015 |
| 127 | Assessment of safety of Roads in Kerala state Using IRAP Model | Swathi S | 2015 |
| 128 | Study On The Influence Of Geometric Design Elements on Road Safety | Aparna G | 2015 |
| 129 | Application of Response Surface Methodology for Optimization of Alkali Activated Concrete Mixes | Gounipalli Vinod Kumar | 2015 |
| 130 | Evaluation of Moisture Resistance and Fatigue Behavior of Stone Matrix Asphalt (SMA) Mixtures Prepared with Different Binders and Additives Using Two Aggregate Gradations | T Ramesh | 2015 |
| 131 | Suitability of Locally Available River Sand and Soil as Base and Sub Base Material and Laboratory Investigation of lateritic Soil Treated with Terrasil and Cement as Pavement Material. | Rahul Saini | 2015 |
| 132 | Delay Analysis of a High Rise Building using MS Project | P Kalyan (CTM) | 2015 |
| 133 | Cost Analysis and Effectiveness of Aluminum Formwork over Conventional Formwork | Naveen Prabhakar Attigiri (CTM) | 2015 |
| 134 | Laboratory Investigation on lateritic soil with cement, RBI grade 81 and Aggregates for Flexible Pavements | Aswathi K V | 2015 |

*CTM:Construction Technology and Management

(b) Ph.D. Research Supervision

| S.No | Name of Student | Reg. Year and Status (FT/PT) | Thesis Title | Other Supervisor(s) (if any), Name & Department | Complete d/ Ongoing |
|------|-------------------|------------------------------|--|---|---------------------|
| 1. | Suresha S.N. | Part Time | Studies on Porous Friction Course Mixes for Pavements | Dr. Varghese George | awarded |
| 2 | Ramesh M.I | Part Time | Performance Studies on Enzyme Stabilized Soils | Dr. N.B.S. Rao | awarded |
| 3. | Chandrashekhar. A | Full Time | Fibre reinforced fly ash concrete for pavements | Nil | awarded |
| 4. | Sowmya N. J | Part Time | Consistency Evaluation of Rural Roads | Nil | awarded |
| 5. | Ramakrishna Hegde | Part Time | Investigations on Accelerated Consolidation of Coir-Reinforced Laterite, Shedi and Blended Soils with Vertical Sand Drains for Pavement Foundation Columns in Soft and Layered Soils | Dr. Varghese George | awarded |
| 6. | Lekha B.M | Full Time | Performance studies on pavements using chemically stabilized soils | Nil | awarded |
| 7. | Goutham Sarang | Full Time | Experimental Investigation of Stone Matrix Asphalt Mixtures | Nil | submitted |
| 8. | Nitendra Palankar | Full Time | Performance of Alkali Activated Concrete Mixes with Steel Slag as Coarse Aggregates for Rigid Pavements | Nil | submitted |
| 9. | Manjunath B.M | Part Time | Alkali Activated Concrete Systems Using Dredged Marine Sand and Higher Size Coarse Aggregate for Pavement Applications | Dr. M.C. Narasimhan | Ongoing |
| 10. | Durga Prashanth | Part Time | Performance Evaluation of Reclaimed Asphalt Pavement Materials in Asphalt Mixes | Nil | Ongoing |
| 11 | Priyanka | Full Time | Development of Perpetual Pavements with Superpave, Rich Binder and Treated Aggregate Base Mixtures | Nil | Ongoing |

National Journals

1. **Ravi Shankar, A.U.** and Srinivas Reddy, P., “Study on Load Settlement Characteristics of Clayey Soil Stabilised Using Lime and Pond Ash”, *Indian Highways, Vol. 32, No. 11, November 2004*, Indian Roads Congress, New Delhi.
2. **Ravi Shankar, A.U.** and Nagabhushan Das, R.V., “Study on Load Settlement Behaviour of Water Bound Macadam Pavement with Reinforcement”, *Highway Research Bulletin, No. 71, December 2004*, Indian Roads Congress, New Delhi.
3. **Ravi Shankar, A.U.**, Naveen, P.C. and Krishnamurthy, “Nonlinear Analysis of Multilayered Flexible Pavement by Finite Element Method”, *Highway Research Bulletin, No. 73, October, 2005*, Indian Roads Congress, New Delhi.
4. **Ravi Shankar, A.U.**, H. V. Venkata Krishna, and Suresha S.N. “Concrete Mix Design Aspects using Fly Ash for Rigid Pavements.” *Indian Highways, Vol.33, No.12, December 2005*, Indian Roads Congress, New Delhi, p. 5-21.
5. **Ravi Shankar, A.U.**, H. V. Venkata Krishna, and Suresha S.N. “Mix Design Aspects of Steel Fibre Reinforced Concrete (SFRC), Pavement Design.” *Indian Highways, Vol.34, No. 5, May 2006*, Indian Roads Congress, New Delhi, p.43-50.
6. **Ravi Shankar, A.U.**, Suresha S. N., and Phanikumar M. V. S. “Strength Behaviour of Shedi Soil-Lime-Pond Ash Mixes- An Experimental Study,” *Highway Research Bulletin, No. 74, April 2006*. Indian Roads Congress, New Delhi,p.1-7.
7. **Ravi Shankar, A.U.**, Suresha S.N., and Anil Kumar G. “An Approach to Develop Granular Sub Base Mixes using Locally Available Materials”, *Highway Research Bulletin, No.75, October 2006.*, Indian Roads Congress, New Delhi.
8. **Ravi Shankar, A.U.**, Nageshwara Rao, Ch., Rajeeva, S.V., Chandrashekhar, A. and Bharatesh, “Fly Ash and Rice Husk Ash concrete for Rigid Pavements”, *Indian Highways, Vol. 35 No. 8., August 2007*, Indian Roads Congress, New Delhi.
9. Suresha S.N., Varghese, G., **Ravi Shankar, A.U.** “Investigation of Porous Friction Courses (PFC) and Mixes: A Brief Overview.” *Indian Highways, Vol.35, No7, July 2007.*, Indian Roads Congress, New Delhi.
10. **Ravi Shankar, A.U.**, Suresha, S.N. and Kashinath “Study of Geotechnical Properties of Lateritic Soil Blended with Pondash and Cement,”*Indian Highways, Vol. 36, No. 6, June 2008*, Indian Roads Congress, New Delhi.
11. Suresha S.N., **Ravi Shankar, A.U.**, and Varghese, G. “Design charts for drainage capacities of granular sub-bases.” *Journal of Indian Roads Congress*, Vol. 70-1, pp. 89-99.
12. **Ravi Shankar, A.U.**, Harsha Kumar Rai., Ramesh, M.I. “Bio-Enzyme Stabilized Lateritic Soil as a Highway Material”, *Journal of Indian Roads Congress*, Vol. 70-2, No. 553, pp.143-153, July-Sept. 2009
13. **Ravi Shankar, A.U.** and Vishwanath, H. and Koushik, K” Performance Studies Of Stone Matrix Asphalt (SMA)) Using Waste Plastics as Modifier (Dry Process)”, *Journal of Highway Research*, Vol.2 ,No.2, pp.63-77, July-December 2009

14. **Ravi Shankar, A.U.** and Durga Prasad, S and Koushik, K.” Utilization of Waste Plastics in Semidense Bituminous Concrete by Dry Mixing”, **Journal of Highway Research**, Vol.2, No.2, pp.23-37, July-December 2009.
15. Chandrashekhar, A. **Ravi Shankar, A.U.**and Abhishek Patil.: Potential Utilization of Fly Ash in SFRC Pavement”, **Civil Engineering and Construction Review Journal**, pp.110-117, January 2010.
16. Chandrashekhar, A. **Ravi Shankar, A.U.**, and Girish, M.G., “Fatigue Behaviour of Steel Fibre Reinforced Concrete (SFRC) with Fly Ash”, **Highway Research Journal**, Vol 3. No. 2, pp.9-22, July-December 2010.
17. **Ravi Shankar, A.U.** and Dayanand Math.,” Refusal Density Approach For High Volume Roads, Indian Roads Congress, **Indian highways** , Vol 38, No.9, pp 13-20
18. **Ravi Shankar, A.U.**, Chandrashekar, A. and Prakash Bhat, H. “Laboratory Investigation on Lithomargic Clay Blended with Sand and Coir as a Pavement Material”, **Indian Highways**, Indian Roads Congress, Vol. 40, No.2, pp.21-32, February 2012.
19. **Ravi Shankar, A.U.**, Prashant S. K, Chandrashekar, A, “Geotechnical Investigation of Shedi Soil Blended with Pond Ash, Lime and Coir”, **Indian Highways, Vol.41, No.1, Jan 2013.**
20. **Ravi Shankar, A.U.**, Sowmya, N.J. and Anjaneyulu, M.V.L.R, “Consistency Evaluation of Horizontal Curves on Rural Highways”, **Journal of the Indian Roads Congress**, Vo. 73 (4), 91 – 99, April- June 2013.
21. **Ravi Shankar, A.U.**, Koushik, K. and Sarang, G. “Performance Studies on Bituminous Concrete Mixes Using Waste Plastics”, **Highway Research Journal**, Vol. 6, No. 1, January – June 2013.
22. **Ravi Shankar, A.U.**, Lekha B. M., Goutham Sarang., and P. Abhishek. (2014). "Performance and Fatigue behavior of Semi Dense Bituminous Concrete using Waste Plastics as modifier. **Indian Highways**, Vol.42, No.7, pp. 23-32. July2014.
23. Manjunath, S.B. and **Ravi Shankar, A.U.**(2014).” Effect of Size of Coarse Aggregate and the Combined Grading of Coarse and Fine Aggregate on Pavement Quality Concrete”, **Highway Research Journal**, Indian Roads Congress, Vol. 7, No.1, January-June 2014.
24. **Ravi Shankar, A.U.** and Nitendra, P.” A Study on Effect of Subgrade Reaction on Rigid Pavements Design”, **Journal of the Indian Roads Congress**, vol. 75-2, pp.14-19, July-Sept. 2014.
25. Sowmya, N.J., **Ravi Shankar, A.U.**, Anjaneyulu, M.V.L.R.(2014) “Consistency Evaluation of Vertical Curves on Rural Highways”, **Highway Research Journal**, Indian Roads Congress, Vol.7, No.2, July-December 2014.
26. **Ravi Shankar, A.U.** and Nitendra, P.(2015)”A Study on Porous Concrete Mixes for Rigid Pavements, **Indian Highways**, Indian roads Congress, Vol. 43, No. 6, pp.28-32, June 2015
27. Nitendra, P., **Ravi Shankar, A.U** Mithun,B.M (2015) “Performance and Fatigue Behaviour of Alkali Activated Slag Concrete with Steel as Coarse Aggregate for Concrete Pavement”, **Indian Roads Congress**, Vol., No., pp.(Accepted)

International Journals

1. **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 an International Journal (RMPD)**, 7-3/July-September, pp. 313-330. [Publisher: Hermes Science Publications, France]

2. 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]
3. 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]
4. 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]
5. Suresha S.N., Varghese George, and **Ravi Shankar, A.U.** "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]. 2010.
6. 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]
7. **Ravishankar A.U., Mithanthaya I.R., Bhavanishankar Rao, N. and Ganesh C. (2010).** "Fatigue Behaviour of lateritic soil stabilized with Enzyme" "International Journal for Civil Engineering –Research India Publications, ISSN 0973-4562 Vol. 5 November 15 (2010) pp-2595-2608.
8. Suresha S.N., Varghese, G and **Ravi Shankar, A.U.** (2010-online and in Print) Properties of Cellulose Fibres and Waste Plastic Modified Porous Friction Course Mixes, *The Baltic Journal of Road and Bridge Engineering*, Vol.5, No. 3, pp. 156-163[Publisher: Vilnius Gediminas Technical University, Lithuania]
9. **RaviShankar,A.U.,BhavanishankarRao,N.andMithanthaya, I.R.,(2010)"**Dynamic Behaviour of Regional Soils Under Repeated Load Condition", (CodeA-10-132-1) International journal Civil Engineering, Iran University& Science and Technology, Narmak Tehran
10. Raviraj H.M., **Ravi Shankar, A.U.** and Varghese George (2011)."Traffic Management Proposal for Udipi City", International Journal of Earth Sciences and Engineering, Vol. 4, No.5, pp. 246-252.
11. **Sherin,E.V., Anupama,S., Ravishankar, A.U., Sequeira,A.H., Patil, M.S., (2012)"**Restructuring Procedures In Construction Industry To Avoid Disputes- A Study Through An Arbitral Award", Social Science Research Network, (http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2085463)
12. **Ravi Shankar, A.U.,** Girish M. G. and Chandrashekar, (2012), "Flexural Fatigue Analysis of Steel Fibre Reinforced Concrete" *International Journal of Earth Sciences and Engineering*, Vol 5, No. 5, 1352-1357.
13. **Ravi Shankar, A.U.,** Sowmya, N.J., and Anjaneyulu, M.V.L.R, (2012). "Modelling Operating Speed and Speed Differential on Intermediate Lane Rural Roads" *International Journal of Earth Sciences and Engineering*, Vol 5, No. 5, 1408-1414.
14. **Ravi Shankar, A.U.,** Lekha B. M., Goutham Sarang. (2013). "Fatigue and Engineering Properties of Chemically Stabilized Soil for Pavements". *Indian Geotechnical Journal*, Vol. 43, No. 1, 96–104.
15. Haricharan T S, Vinay Kumar K S, Durga Prashanth L, M.R.Archana, **Ravi Shankar, A.U.(2013)** "Laboratory investigation of expansive soil stabilized with natural inorganic stabilizer", *International Journal of Research in Engineering and Technology*..pp201-204, November 2013.

16. Lekha B. M. and **Ravi Shankar, A.U.,(2014)** “Laboratory Performance of RBI – 81 treated soil as Pavement Material”, International Journal of Civil Engineering Research, Research India Publications, 5 (2), pp 105-110.
17. Goutham Sarang, Mehnaz E and **Ravi Shankar, A U., (2014)**, “Comparison of Stone Matrix Asphalt Mixtures Prepared in Marshall Compaction and Gyratory Compactor”. International Journal of Civil Engineering Research, Research India Publications, 5 (3), pp. 233–240.
18. Lekha B. M., **Ravi Shankar, A.U.,** Goutham Sarang (2014). “Laboratory Investigation on Black Cotton Soil Stabilized with Non Traditional Stabilizer”. IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE), pp 07-13.
19. Goutham Sarang, Lekha B M and **A U Ravi Shankar (2014)**. “Aggregate and Bitumen Modified with Chemicals for Stone Matrix Asphalt Mixtures”. IOSR Journal of Mechanical and Civil Engineering (IOSR-JMCE), pp14-20.
20. Manjunatha, S.B., **Ravi Shankar, A.U.** and Narasimhan M.C.(2014)" Alkali -activated Binder System for Pavement Quality Concrete using Dredged Marine Sand as Fine Aggregate, International Journal of Advanced Structures and Geotechnical Engineering, ISSN 2319-5347, Vol. 03, N0.2
21. Goutham, S., Lekha, B.M. and **Ravi Shankar, A.U. (2014)** “Stone Matrix Asphalt using Aggregates Modified with waste Plastics, Pavement Materials, Structures and Performance GSP 239 **ASCE** Special Publication.
22. Lekha, B.M., Goutham, S. and **Ravi Shankar, A.U. (2015)** “Evaluation of lateritic soil stabilized with Arecanut coir for low volume pavements” Transportation Geotechnics, 2, **Elsevier**, pp 20–29.
23. Goutham, S., Lekha, B.M., Geethu, J.S. and **Ravi Shankar, A.U.(2015)**” Laboratory Performance of Stone Matrix Mixtures with Two Aggregate Gradations, Journal of Modern Transportation, **Springer**, Vol. 23, issue2, , pp. 130-136.
24. Nitendra, P., **Ravi Shankar, A.U.** and Mithun, B.M. (2015) “ Studies on Eco-friendly Concrete Incorporating Industrial Waste as Aggregates”, International Journal of Sustainable Built Environment, **Elsevier**, Vol4, pp.6326-332.
25. Nitendra, P., **Ravi Shankar, A.U.** and Mithun, B.M. (2015)” Investigations on alkali Activated Slag/Fly ash with Steel Slag Coarse Aggregate for Pavement Structures.”, International Journal of Pavement Engineering, Taylor and Francis, **Vol., No**, pp.1-13
26. Shivashankar, R., **Ravi Shankar, A.U.** and Jayamohan, J(2015)” Some Studies on Engineering Properties, Problems, Stabilization and Ground Improvement of Lithomargic Clays, Geotechnical Journal of the SEAGS&AGSSEA, Paper No. 3095 Vol. 46, no.4, December 2015.
27. Mithun, B.M., Narasimhan, M.C., Nitendra,P. and Ravi Shankar, A.U.(2015)”Flexural Fatigue Performance of Alkali Activated Slag Concrete Mixes Incorporating Copper Slag as Fine Aggregate”, Selected Scientific Papers- Journal of Civil Engineering, De Gruyter publishers, Vol.10, Issue1, June.
28. Nitendra, P., **Ravi Shankar, A.U.** and Mithun, B.M. (2015). “Air-Cured Alkali Activated Binders for Concrete Pavements” International Journal of Pavement Research and Technology, Chinese Society of Pavement Engineering, Vol.8, No.4, pp.289-294.
29. Nitendra, P., **Ravi Shankar, A.U.** and Mithun, B.M. (2014). “Experimental Investigation on Air-cured Alkali Activated GGBFS-Fly ash Concrete Mixes” International Journal of Advanced Structures and Geotechnical Engineering, Vol.3, Issue 4, pp.326-332.
30. B M Lekha, Goutham Sarang, **A U Ravi Shankar.** (2015). “Effect of Electrolyte Lignin and Fly Ash in stabilizing Black Cotton soil.” Transportation Infrastructure Geotechnology, **Elsevier**, Vol. 2, No. 2, pp. 87–101.

31. Goutham Sarang, Lekha B M, Krishna G and **Ravi Shankar A U**. “Comparison of Stone Matrix Asphalt mixtures with Polymer Modified Bitumen and plastic coated aggregates.” Road Materials and Pavement Design. Taylor and Francis (Accepted for Publication)

International Conference

1. Patel, P.K., **Ravi Shankar, A.U.** and Sikdar, P.K., “Road Traffic and Their Associated Problems in India”, Proc. Of International Conference ICORT-89, Tata McGraw Hill, New Delhi, pp.807-12, Dec.1988.
2. **Ravi Shankar, A.U.**, Sikdar, P.K. and Khanna, S.K., “Travel Operational Characteristics of Domestic Airlines in India and Futures”. Proc. Of Mini Workshop on Transport Policy, Planning Commission, May 1989.
3. Narayanaswamy Setty, K.R., **Ravi Shankar, A.U.** and Mahesh Kumar., “Stability of Geogrid Reinforced Road Embankments In Lithomargic Clay”, Proc. Of International Conference on Road and Road Transport problems – ICORT – 95, New Age International Limited (Wiley Eastern) New Delhi, Vol. 1, pp. 112 – 119, Dec.11-14, 1995.
4. **Ravi Shankar, A.U.**, Narayanswamy Setty, K.R., Sikdar, P.K. and Khanna, S.K., “Performance Evaluation of Aircraft in Domestic Network Planning”, Proc. Of International Conference on Road Transport Problems – ICORT – 95, New Age International Limited (Widely Eastern) New Delhi, Vol. 1, pp. 1045 – 1057, Dec. 11-14, 1995.
5. **Ravi Shankar, A.U.**, Narayanswamy Setty, K.R., Sikdar, P.K. and Khana, S.K., “Productivity Analysis And Route Frequency Planning Of Domestic Airline Services”, Proc. Of the second International Conference in Civil Engineering on Computer Applications Research and Practice – ICCE 1996, Bahrain, 1996.
6. **Ravi Shankar, A.U.** and Shrihari, S., “Transportation And Its Effects On Sustainable Development And Safety”, Proc. Of International Conference on Civil Engineering for Sustainable Development, Department of Civil Engineering, University of Roorkee, Feb. 13-15, 1997.
7. **Ravi Shankar, A.U.**, Narayanswamy Setty, K.R., Sikdar, P.K., and Khanna, S.K., “Infrastructure Characteristics and Strategies for Future Development of Airports”, Proc. Of international Symposium on infrastructure of the Future, Bangalore, New Age International (P) Limited, pp. 183-190, Organised by Association of Consulting Civil Engineer (India), Nov. 26 – 29, Bangalore, 1996.
8. **Ravi Shankar, A.U.** and Shivashankar, R., “Improving Soft Shedi Ground For Pavements”, International Conference on Geotechnical Engineering, Saga University, Japan, Sept. 2002.
9. **Ravi Shankar, A.U.**, Suresha S.N., and Anil Kumar G. ”An Approach to Develop Granular Sub Base Mixes using Locally Available Materials,” published in Technical Paper under Theme-IV “Flexible Pavements for Low Volume Roads (Rural Roads)” in the International Seminar on “Innovations in Construction and Maintenance of Flexible Pavements” held at Agra during 2nd to 4th September, 2006.
10. Chandrashekar, A., **Ravi Shankar, A.U.**, “Fatigue Studies on Hybrid Steel Fiber Reinforced Concrete for Rigid Pavements”, The 7th RILEM International Symposium on Fibre Reinforced Concrete: Design and Applications (BEFIB2008), Organized by IIT Madras, 17-19 Sept. 2008. Pro60, pp.1099 to 1108.
11. Mithanthaya, I.R. and **Ravi Shankar, A.U.** “ Stabilization of Lateritic Soil using Bioenzyme”, Second International conference on Advances and Trends in Engineering Materials and their Applications(ATEMA -2008), Organized by Ottawa University,

Canada and Bologna University , Dept. of Civil Engineering, Cescena, Italy, Sept. 1-5, 2008, pp.50-52

12. **Ravi Shankar A.U.**, “Pavement Deterioration Models”, Proceedings of International workshop on Asset Management for Asian Countries”, Organized by International Islamic University, Kaulalumpur, Malaysia, Vol.1, Pp.23-25, Feb 2009
13. Chandrashekhar, A., **Ravi Shankar, A.U.**,” Experimental Studies on Utilization of Waste Materials for Pavement Quality Concrete”, International Conference on Concrete, Structural and Geotechnical Engineering, Organized by BITS Pilani , 25-27 Oct. 2009.
14. Pravallika, G., **Ravi Shankar, A.U.** and Prasad, C.S.R.K.,” Development of Granular Subbase using Marginal Materilas”, Proceedings of International Conference on Developments in Road Transporatation(DRT-2010, Organized by Department of Civil Engineering, NIT Rourkela, October 08-10, 2010.
15. Girisha, M.G., Chandrashekhar, A. and **Ravi Shankar, A.U.** “Fatigue Analysis of Fibre Reinforced Concrete” Proceedings of International Conference on Developments in Road Transportation (DRT-2010, Organized by Department of Civil Engineering, NIT Rourkela, October 08-10, 2010.
16. Hegde, Ramakrishna, George, Varghese, Dwarika Gotamey, and **A.U. Ravishankar** (2011), Settlement Studies on Partially Compacted **Laterite Soil** with and without Coir Reinforcements and Vertical Drains, *Proc. National Conference on Recent Developments in Civil Engineering-2011 (RDCE-2011)*, Belgaum, Organized by Department of Civil Engineering, Manipal institute of Technology, Manipal University, 13-14 Jan, pp. 1-11.
17. Ravi Shankar, A.U. and Mithanthaya, I.R. (2008)”Stabilization of Lateritic Soil using Bio-Enzyme- A Case Study”, Proc. Of International Conference on “ATEMS-08”, Sept. 2008, Bologna University, Casena, Italy.
18. Ravi Shankar, A.U. and Mithanthaya, I.R. (2009)”Fatigue Analysis of Regional Soil Stabilized with Enzyme”, Proc. Of International Conference on Advances in Building Science in 3rd Millenium, Dec. 14-19, 2009, Vellore Institute of Technology, Vellur.
19. Raviraj H. Mulangi, and **Ravishankar, A.U.(2010)**” Speed and Delay Studies for Major Corridors of Dharwad City”, Proc. Conference on Infrastructure, Sustainable Transportation and Urban Planning (CiSTUP- 2010), Bangalore, 18-21st Oct 2010.
20. Chandrasekhar, A. and **Ravi Shankar, A.U.** “Fatigue Strength Studies on Hybrid Steel Fibre Reinforced Concrete for Rigid Pavements”, Proceedings of Seventh RILM International Symposium on Fibre Reinforced Concrete: Design and Applications (Pto60), Department of Civil Engineering, IIT Madras, pp. 1099-1107, Chennai, India.
21. Chandrasekhar, A., **Ravi Shankar, A.U. and Girish, M.G.** “ Fatigue Analysis of Steel Fibre Reinforced Concrete”, Fatigue Strength Studies on Hybrid Steel Fibre Reinforced Concrete, International conference (DRT 2010), Department of Civil engineering, NIT Rourkela, Pp.461-468, 2010.
22. **Ravi Shankar, A.U.**, Mithanthaya, R.I. and Bhavanishankar Rao, N. “Fatigue Behaviour of Lateritic Soil Stabilized with Enzyme and Effectiveness of Flexible Pavement with Stabilized Soil as Sub Base Layer” International Conference on Advance and Trends in Engineering Materials and Their Applications, Aug 01 – 05, 2011, Montrial, Canada.
23. **Ravi Shankar, A.U.**, Sachith Pai and Shivashankar, R. “Load Deformation Behaviour of Coir Mat Treated Soil” *Proc. Of International Conference on Ground Improvement and Ground Control – 2012*, 30 Oct – 2 Nov 2012, Wollogong, Australia, Published by Research and Publishing, Singapore, Vol 2, 1571-1576.
24. Manjunath S.B, **Ravishankar A.U** and Narasimhan M.C., “Alkali-activated binder systems for pavement quality concrete”, VIII CUTSE International Conference, Miri, Sarawak, Malaysia,3-4, Dec 2013.

25. Manjunatha S.B., **Ravishankar A.U.**, and Narasimhan M.C., “Alkali-activated binder systems for pavement quality concrete using Dredged marine sand as fine aggregate”, Minomata International Symposium on Environment and Energy Technology (Mission 2013), Kumamoto, Japan, 4-6, Dec 2013.
26. Goutham Sarang, Mehnaz E and **Ravi Shankar, A U.**, “Comparison of Stone Matrix Asphalt Mixtures Prepared in Marshall Compaction and Gyrotory Compactor” International Conference on “Sustainable Innovative Techniques In Civil and Environmental Engineering” (SITCEE - 2014) by “Krishi Sanskriti” at JNU, New Delhi on 4th and 5th January, 2014.
27. Lekha B. M. and **Ravi Shankar, A.U.**, “Laboratory Performance of RBI – 81 treated soil as Pavement Material”, International Conference on “Sustainable Innovative Techniques In Civil and Environmental Engineering” (SITCEE - 2014) by “Krishi Sanskriti” at JNU, New Delhi on 4th and 5th January, 2014.
28. Lekha B. M, Goutham Sarang, Chaitali N and **Ravi Shankar A. U.** “Laboratory investigation on black cotton soil stabilized with non traditional stabilizer”, International Conference on Innovations in Civil Engineering, SCMS School of Engineering and Technology, Ernakulam, Kerala, May 2014.
29. Goutham Sarang, Lekha B M and **A U Ravi Shankar** “Aggregate and Bitumen Modified with Chemicals for Stone Matrix Asphalt Mixtures”, International Conference on Innovations in Civil Engineering, SCMS School of Engineering and Technology, Ernakulam, Kerala, May 2014.
30. Goutham Sarang, Lekha B. M. and **Ravi Shankar, A.U.** “Stone Matrix Asphalt using aggregates modified with waste plastics” *GeoShanghai – 2014, International Conference on Geotechnical Engineering*, ASCE, May 26-26, 2014, Shanghai, China.
31. Goutham Sarang, Lekha B. M., Monisha M and **Ravi Shankar, A.U.**, “SMA mixtures with modified asphalt and treated aggregates”, *Second T&DI Congress*, ASCE, June 8-11, 2014 in Orlando, FL
32. Shivashankar, R., **Ravi Shankar, A.U.** and Jayamohan, J.” Studies on Engineering Properties of Lithomargic Clays of Coastal Karnataka in India”, 9th International Symposium on Lowland Technology, September 29 to October 1, 2014 in Saga, Japan
33. Nitendra, P., **Ravi Shankar, A.U.** and Mithun, B.M” Performance of Air-cured alkali activated GGBFS-Fly Ash Concrete Mixtures”, 3rd World Conference on Applied Sciences, Engineering and Technology, 27-29 September 2014, Kathmandu, Nepal.
34. Durga Prashanth, L., **Ravi Shankar, A.U.**, Trupti, K. and ”Laboratory Evaluation of Stone Mastic Asphalt Mixtures Containing Reclaimed Asphalt Pavement Materials”, International conference on Sustainable Civil Infrastructure(ICSCI-2014), Organised by ASCE India Section, IIT Hyderabad October 17 -18, 2014.
35. Nitendra, P. and **Ravi Shankar, A.U.**” Effect of Modulus of Sbgrade Reaction and Panel Size on Whitetopping”, International conference on Sustainable Civil Infrastructure (ICSCI-2014), Organised by ASCE India Section, IIT Hyderabad October 17 -18, 2014.
36. Goutham Sarang, Lekha B M, Ramesh Tejavath and **Ravi Shankar A U.** “Laboratory performance comparison of Stone Matrix Asphalt mixtures with Polymer Modified Bitumen and cellulose fiber stabilizer.” International Conference on Transportation and Development 2016, Conducted by ASCE, Texas, USA (Abstract Accepted).
37. Lekha B M, Goutham Sarang and **Ravi Shankar A U.** “Laboratory performance of lateritic soil and soil-aggregate mixture with RBI grade 81.” 8th International Conference on Maintenance and Rehabilitation of Pavements (MAIREPAV8) 2016, Singapore (Abstract Accepted).
38. Goutham Sarang, Lekha B M, Priyanka B A and **Ravi Shankar A U.** “Stone Matrix Asphalt mixtures with sisal fiber and Crumb Rubber Modified Binder.” International

Conference on Sustainable Asphalt Pavement for Developing Countries (ICONSAP) 2016, Conducted by Centre for Road Research Institute (CRRI), New Delhi, India. (Abstract Accepted).

39. Priyanka B A, Lekha B M, Goutham Sarang and **Ravi Shankar A U**. “Development of Perpetual Pavements with Cement Treated Base and Rich Bottom Layer using KENPAVE analysis.” International Conference on Sustainable Asphalt Pavement for Developing Countries (ICONSAP) 2016, Conducted by CRRI, New Delhi, India. (Abstract Accepted).

National Conference

1. Khanna, S.K., Sikdar, P.K., Mehndiratta, H.C., Mahendru, A.K., Satishchandra and **Ravi Shankar, A.U.**, “Transportation Models – A Base Paper”, Proc. Workshop on Transport Planning in Developing Countries, Centre for Transport Engg., University of Roorkee, April 4, 1987, New Delhi.
2. **Ravi Shankar, A.U.**, Sikdar, P.K. and Khanna, S.K., “Domestic Air Travel Demands In India and Strategies for Future”, Proc. Of National Conference in Transportation System Studies: Analysis and Policies (Eds. S.L. Dhingra and S.G. Orpe), Tata McGraw Hill, New Delhi, pp. 188-97, Dec. 1988.
3. **Ravi Shankar, A.U.**, Sikdar, P.K. and Khanna, S.K., “Productivity Analysis of Airline Industry with Reference to Indian Airlines”, Proc. Of the second C.I.T. National Conference on Emerging Issues in Transport Sector, New Delhi, September 14 – 16, Vol.1., 1989.
4. Kumar, V., Umrigar, F.S., **Ravi Shankar, A.U.**, Chandra, S., Mehndiratta, H.C. and Sikdar, P.K., “Control of Vehicles, Insurance and Authority of States and Centre”, Proc. of National Seminar MOVE SAFE 89, selected papers, Transportation Engineering Section, Civil Engineering Department, University of Roorkee, pp. 67-72, 1989.
5. **Ravi Shankar, A.U.**, Sikdar, P.K. and Khanna, S.K., “Travel Characteristics and Demand Analysis of Domestic Airlines in India.” Proc. Of National Conference on transportation Systems Studies: Analysis and Policy, NCOTSS – 93, Department of Commerce & Management Studies, Andhra University, Visakhapatnam, 1993.
6. **Ravi Shankar A.U.**, Narayanaswamy Setty, K.R.,m Sikdar, P.K. and Khanna, S.K., “Optimal Route Frequency Planning of Domestic Airline Network”, Proc. Of National Conference on Signals, Data and Systems Modelling Simulataion and Analysis, Anjuman Engineering College, Bhatkal, Nov. 20-30, 1995.
7. Narayaswamy Setty, K.R., **Ravi Shankar, A.U.** and Naganna, B.S. and Jagadish, “Behaviour of Geogrid Reinforced Lithomargic Clays – A Laboratory Study”, Proc. Of National Seminar on Emerging Trends in Highway Engineering. Jnanabharathi, Bangalore University, Vol. 1, pp. 359-362, 10-11 March 1995.
8. Narayanaswamy Setty, K.R., **Ravi Shankar, A.U.** and Hegde, R., “Behaviour of Geogrid Reinforced Lithomargic Clay Embankment – A Model Study”, Proc. Of Indian Geotechnical Conference – 95, Bangalore University, Jnanabharathi Campus, Vol. 1., pp. 359-362, 1995.
9. **Ravi Shankar, A.U.**, Narayanaswamy Setty, K.R., Sikdar, P.K. and Khanna, S.K., “Demand Analysis For Domestic Airline Passenger Traffic”, Proc. Of International Symposium on Infrastructure of the Future, New Age International (P) Limited, pp. 68-74, Organised by Association of Consulting Civil Engineers (India), Nov. 26-29, Bangalore, 1996.

10. Narayanaswamy Setty, K.R., **Ravi Shankar, A.U.** and Patil, V.R., “Characterisation of Geotextile Reinforced Black Cotton Soil”. Proc. Of National Conference on New Paradigms in Civil Engineering Practices, Department of Civil Engineering, Anjuman Engineering College, Bhatkal, Dec. 1-2, 1996.
11. **Ravi Shankar, A.U.**, Narayanaswamy Setty, K.R. and Sikdar, P.K., “Indian Airlines Travels Characteristics and Productivity Analysis For Domestic Sector”, Proc. Of Fourth National Conference on Transportation Systems Studies, Organised by Department of Economics, University of Bombay, Mumbai, Dec. 9-11, 1996.
12. Narayanaswamy Setty, K.R., **Ravi Shankar, A.U.**, and Monohar, C. “Under-Reamed Piles In Shedi Soil”, Proc. Of Indian Geotechnical Conference, Vol. 1, pp.286-289, Dec. 11-14, Anna University, Madras. 1996.
13. Narayanaswamy Setty, K.R., **Ravi Shankar, A.U.** and Ramakrishna, R., “Behaviour Of Under-Reamed Piles In Beach Sand”, Indian Geotechnical Conference, Organised by Dept. of Applied Mechanics, M.S. University Baroda, 17-20th Dec. 1997.
14. Narayanaswamy Setty, K.R., **Ravi Shankar, A.U.** and Modi, M.T., “Behaviour Of Pile Groups Under Uplift Loads In Shedi Soil”, Second IISc-National Seminar on Geotechnical Engineering, 24th and 25th July 1997.
15. **Ravi Shankar, A.U.**, Shrihari, S. And Narayanaswamy Setty, K.R., and Srinivasa Murthy, K., “Behaviour of Water Bound Macadam and Wet Mix Macadam Pavement with Reinforced Lithomargic Clay Soil Subgrade – A Model Study”, Proc. Of Indian Geotechnical Conference 98, Department of Civil Engineering, Indian Institute of Technology, New Delhi, Dec.1998.
16. **Ravi Shankar, A.U.**, Shrihari, S. and Narayanaswamy Setty, K.R. and Jayaprakash, K.N., “Pullout Capacity Of Inclined Plate Anchors In Shedi Soil – An Experimental Study”, Proc. Of Indian Geotechnical Conference 99, Department of Civil Engineering, Jadavpur University, Calcutta, Dec. 1999.
17. Narayanaswamy Setty, K.R., **Ravi Shankar, A.U.** and Narasimha Reddy, G.V., Uplift Behaviour Of Granular Pile Anchors In Expansive Soils”, Proc. Of Indian Geotechnical Conference 2000, Department of Civil Engineering, Indian Institute of Technology, Powai, Mumbai, Dec. 2000.
18. **Ravi Shankar, A.U.** and Madan Mohan, B., “Finite Element Techniques For Flexible Pavement Design” Proc. Of Indian Geotechnical Conference 2002, Dept. of Civil Engg., M.R.E.C. Allahabad, Dec 2002.
19. **Ravi Shankar, A.U.** and Mallikharjuna, G.M., “Behaviour of Geogrid Reinforced Shedi Soil Subgrade and W.B.M System”, National Conference on Road Transportation in India: Emerging Trends and Techniques, Sept 12-13., Department of Civil Engineering, IIT Kharagpur, September 12-13, 2002.
20. **Ravi Shankar, A.U.**, Yaji, R.K. and Rajeev Kumar, P. “Effects Of Contaminants On Engineering Behaviour Of Shedi Soil”, Proc. Of Indian Geotechnical Conference 2003, Department of Civil Engineering, Indian Institute of Technology, Roorkee, Dec 2003.
21. **Ravi Shankar, A.U.** “Coir Stablised Laterite Soil For Pavements” Proc. Of Indian Geotechnical Conference 2004, Department of Civil Engineering, National Institute of Technology, Warangal, Dec 2004.
22. Ch. Nageshwar Rao, S. N. Suresha, and **Ravi Shankar, A.U.**, “Current Practice In Highway Embankment And Subgrade Construction,” Proc. Of National Level Workshop on Recent Construction Practices on Expansive Soils, Embankments and Highways, Department of Civil Engineering, Vijayanagar Engineering College, April 2005.
23. Suresha S.N., and **Ravi Shankar, A.U.** “Current Highway Infrastructure Development Activity and Practice in Environmental Impact Assessment of Highway Projects.” Proceeding of National Conference on “Synergic Solutions For Sustainable Development

- Prescription For Prosperity.” Organized by Department of Civil Engineering, NITK, Surathkal, Mangalore – 575 025, INDIA, vol.1, pp.13-19 Dec.28 – 30, 2005.
24. **Ravi Shankar, A.U.**, Nageshwara Rao, Ch., and Kashinath., “Study Of Geotechnical Properties Of Lateritic Soil Blended With Pondash And Cement,” Proceedings of National conference on Corrective Engineering Practices in Troublesome Soils(CONCEPTS), Organised by Dept. of Civil Engineering, JNTU College of Engineering, Kakinada, 8th and 9th July 2006.
 25. **Suresha., S.N. and Ravi Shankar, A.U.**, “Road Development Activity and Techno-Economic Evaluation of Highway Projects”, Proceedings of National Seminar on ROADS-2007, Vol.1, pp.27-33, Organised by The Institution of Engineers, Belgaum Local Centre, Karnataka, March 1-2, 2007.
 26. **Ravishankar, A.U.** “Economic Evaluation of Highway Schemes” Proceedings of National Seminar on ROADS-2007, Vol.1, pp.50-57, Organised by The Institution of Engineers, Belgaum Local Centre, Karnataka, March 1-2, 2007.
 27. **Ravi Shankar, A.U.**”Construction of PMGSY Roads”, Proceedings of National Seminar on ROADS-2007, Vol.1, pp.351-360, Organised by The Institution of Engineers, Belgaum Local Centre, Karnataka, March 1-2, 2007.
 28. Mithinthaya, R. and **Ravi Shankar, A.U.**”Bio-Enzyme Stabilized Lateritic Soil as a Highway Material”, Proceedings of National Seminar on ROADS-2007, Vol.1, pp.119-136, Organised by The Institution of Engineers, Belgaum Local Centre, Karnataka, March 1-2, 2007.
 29. Suresha, S.N., **Ravishankar, A.U.** and Varghese George., “Ecological Benefits of Porous Friction Course (PFC) Pavements”, Proceedings of National Seminar on ROADS-2007, Vol.1, pp.433-439, Organised by The Institution of Engineers, Belgaum Local Centre, Karnataka, March 1-2, 2007.
 30. Suresha S.N., and **Ravi Shankar, A.U.** “Permeability characteristics of GSB mixes developed using marginal and waste materials.” Presented in the *National Conference and Exposition on Rural Roads*, held at New Delhi, India, 22nd -24th May, 2007, pp.144-153.
 31. Mithinthaya, R. and **Ravi Shankar, A.U.** “Enzyme Stabilized Lateritic Soil as sub base material for coastal Roads” Presented in “Fourth National Conference on Harbour and Ocean Engineering “(INCHOE-2007) held at NITK Surathkal from 12th Dec. to 14th Dec.2007.
 32. Mithinthaya, R. and **Ravi Shankar, A.U.** “Influence of Bio Enzyme as stabilizer on properties of Lateritic Soil” Presented in 2nd National Semiar FACE '08 (Focusing on Advances in Civil Engineering)) held at TKM College of Engineering, Kollam Kerala held from Feb. 21st to Feb.23rd,2008.
 33. Soumya, N.J and **Ravi Shankar, A.U.**”Speed Prediction Models for Two-Lane Rural Roads”, Proc. of National Conference on Recent Advances in Civil Engineering Research on Feb. 26, 2011, Dept. of Civil Engineering, Karpagam University, Coimbatore.
 34. Raviraj, H.M., **Ravi Shankar, A.U.** and Varghese G. “Traffic Management Proposal for Udupi City”, IES 2011, Kumamoto University, Japan 03-05 March, 2011.
 35. Raviraj, H.M., Ravi Shankar, A.U.” Traffic Management to Improve Level of Service for a CBD of Udupi City”, SUTRIMS 11, S.V.N.I.T., Surath, Gujrat, pp. 334-341, 08-11 July 2011
 36. Nisha G., Mukti A, and **Ravishankar, A.U.** “Behavioural Analysis of Pedestrians while Crossing the Road at Intersection”, Presented in National Conference on “Urban Mobility-Challenges, Solutions and Prospectus”, Dept. of Civil Engineering, IIT Madras, Chennai, July 13-14 2012.

37. Shivashankar, R., Jeyalekshmi, B.R., Sitaram Nayak. And **Ravi Shankar A.U.**” Geosynthetics for Ground Improvement and Stability of Slopes”, Two Day workshop on Application of Optimization Techniques for Stability Analysis and Recent Methods for Stabilization of Slopes, Organised by NMAMIT Nitte, 30th and 31st July 2012.
38. Chaitali. B. N., Lekha. B. M. And **Shankar. A. U. R** “Study on Performance of Chemically Stabilized Black Cotton Soil” National Conference on Recent Advances in Civil Engineering – RACE 2013, KLECET, Belgaum.
39. Lekha, B.M, Goutham Sarang and **Ravi Shankar, A.U.** “Stabilization of Lithomargic Clay Using RBI 81 For Pavement Construction”, 2nd National Conference on “Recent Advances in Civil Engineering (RACE – 2013), Saintgits College of Engineering, Kottayam, Kerala, 6th and 7th September 2013.
40. Lekha, B.M, Goutham Sarang and **Ravi Shankar, A.U.** “Laboratory investigation of soil stabilized with nano chemical”, Proceedings of Indian Geotechnical Conference IGC – 2013, December 22-24, 2013, Roorkee, India.
41. Goutham Sarang, Lekha B M and **Ravi Shankar A U.** “Comparison of bituminous mixtures prepared in Marshall compaction and gyratory compactor.” Colloquium on Transportation Systems Engineering and Management, NIT Calicut, Kerala, India, May 12-13, 2014.
42. Lekha B M, Goutham Sarang and **Ravi Shankar A U.** “Laboratory performance of Black Cotton Soil stabilized with Terrasil as a pavement material.” Colloquium on Transportation Systems Engineering and Management, NIT Calicut, Kerala, India, May 12-13, 2014.
43. **Ravi Shankar A U,** Lekha B M and Goutham S. “Properties and performance of blended Lateritic Soil for gravel roads.” Indian Geotechnical Conference – 2014, by IGS, Kakinada, India, December 18-20, 2014.
44. Goutham Sarang, Lekha B M, Pavan Patil and **Ravi Shankar A U.** “Experimental evaluation of Bituminous Concrete using chemically treated aggregates.” 2nd Conference on Transportation Systems Engineering and Management, NIT Tiruchirappalli, Tamil Nadu, India, May 1-2, 2015.
45. Priyanka B A, Lekha B M, Goutham Sarang and **Ravi Shankar A U.** “KENPAVE analysis for low volume roads with reduced resilient modulus values.” 2nd Conference on Transportation Systems Engineering and Management, NIT Tiruchirappalli, Tamil Nadu, India, May 1-2, 2015.
46. Lekha B M, Goutham Sarang and **Ravi Shankar A U.** “Effect of RBI 81 on laterite soil as a pavement material.” 53rd Indian Geotechnical Conference 2015, Conducted by IGS, Pune, India. December 17-19, 2015.

Annexure – III

Conferences /Seminars / Meetings Attended

(2004 onwards)

1. Regional Review and Workshop on “**OPTIMAL DESIGN AND SCRUTINY OF PROJECT PROPOSALS** “ for STA Coordinators of Karnataka and Maharashtra at Pune on 17-9-2004
2. Presented a paper on “**COIR STABILISED LATERITE SOIL FOR PAVEMENTS**” at Indian Geotechnical Conference 2004 at NIT Warangal, Organised by Department of Civil Engineering, National Institute of Technology, Warangal, Dec 2004.
3. Vice Chairman of **ROAD INFRASTRUCTURE DEVELOPMENT** at Indian Geotechnical Conference 2004, Organized by Dept. of Civil Engineering, NIT Warangal
4. Attended a workshop on “**INTEGRATED DEVELOPMENT OF RURAL ROADS AND ARTERIAL ROAD NETWORK- RURAL ROADS VISION 2025** ”, at Vijyan Bhavan New Delhi from 25th to 27th Feb 2005, Organised by Indian Roads Congress and Ministry of Rural Development, Govt. of India.
5. Training of Trainers for dissemination of Road Safety Manual Trainers Workshop from 24th to 27th May 2005, at Haryana State Institute of Public Administration, Gurgaon. (Sponsored by National Highway Authority of India)
6. Regional Review meeting on 10th June 2005, at Unnati meeting hall on ground floor, Krshi Bhavan, New Delhi.
7. Regional Review Workshop of PMGSY at Chennai on 22-9-2005.
8. Regional Review Workshop of PMGSY at Hyderabad on 03-05-2006.
9. *National Conference on Exposition on Rural Roads* at Vigyan Bhawan, New Delhi 22nd & 23rd May 2007
10. *Indian Roads Congress Annul Session at Kolkata(69th) From Dec 12-14, 2008*
11. *International workshop on Asset Management for Asian Countries, Kaulalumpur, Malaysia, Feb 23,24, 2009.*
12. International Conference International Conference on Ground Improvement and Ground Control – 2012, 30 Oct – 2 Nov 2012, Wollongong, Australia. October 30,31,2012 to Nov2,3, 2012.
13. 3rd International Engineering Symposium, March 4-6, 2013, Kumamoto Uty, Japan
14. Indian Geotechnical Conference, December 22-24, 2013, Roorkee.
15. GeoShanghai - 2014, International Conference, May 25-28, 2014, Shanghai, China.
16. 9th International Symposium on Lowland Technology, 9th ISLT2014”Problems and Remedial Measures of Lowland, Sept 29 to October1, 2014, Organised by International Association of Lowland Technology(IALT), Institute of Lowland and Marine Research(ILMR)(, Saga University, Saga, Japan
17. Indian Geotechnical Conference, 18 to 20 December 2014, Organised by Department of Civil Engineering, University College of Engineering, Kakinada, Jawaharlal Nehru Technological University Kakinada, Andhra Pradesh

Annexure – IV

Summer and Winter Schools Attended

| Sl. No | Title of the Course | Duration | | Total Time (Weeks) |
|--------|--|-----------------------|------------|--------------------|
| | | From | To | |
| 1. | Summer School on ' FERROCEMENT AND FIBRE REINFORCED CONCRETE IN RURAL APLLICATIONS ' Organized by Dept. of Civil Engineering, K.R.E.C. Surathkal. (Sponsored by ISTE) | 20-5-1985 | 2-6-1985 | 2 |
| 2. | Summer School on " TRANSPORTATION SYSTEMS MANAGEMENT ", Organised by Transportation Engineering Section, Dept. of Civil Engg., R.E.C. Warangal , (Sponsored by ISTE) | 2-6-1985 | 14-6-1985 | 2 |
| 3. | Short Term Course on " RECENT DEVELOPMENT IN FOUNDATION ENGINEERING ", Organized by Dept. of Civil Engg., IIT Kharagpur , (Sponsored by QIP, MHRD., Govt. of India) | 23- 6-1986 | 4 –7-1986 | 2 |
| 4 | Winter School on " APPLICATIONS OF OPERATION RESEARCH IN CIVIL CONSTRUCTION PROJECTS ", Organised by Dept. of Civil Engg., IIT Kharagpur, (Sponsored by ISTE) | 1-12- 1986 | 12–12-1986 | 2 |
| 5. | A course on " COMPUTER PROGRAMMING LANGUAGES ", Organized by Dept. of Civil Engg., U.O. Roorkee | 19-2- 1987 | 9-3- 1987 | 2 |
| 6. | A summer School on " URBAN PUBLIC TRANSPORT-PLANNING, OPERATIONS AND MANAGEMENT ", Organized by Dept. of Civil Engg., U.O. Roorkee (Sponsored by QIP, MHRD, Govt. of India) | 22–6-1987 | 5 –7-1987 | 2 |
| 7 | A summer School on " COMPUTER AIDED DRAFTING IN MINI AND MICRO COMPUTERS ", Organised by Dept. of Civil Engg., U.O. Roorkee , (Sponsored by QIP, MHRD, Govt. of India) | 18–6-1989 | 1-7- 1989. | 2 |
| 8. | A Special Course on " PAVEMENT EVALUATION MAINTENANCE AND STRENGTHENING MEASURES ", Organized by Dept. of Continuing Education, U.O. Roorkee | 23–1-1990 | 3–2-1990 | 2 |
| 9. | Participated in " PROFESSIONAL DEVELOPMENT PROGRAMME ", Organized by KREC Surathkal, (sponsored by MHRD, Govt. of India) | 22 nd July | 28-07-1991 | 1 |
| 10. | Participated in " REMOTE SENSING APPLICATIONS TO TRANSPORTATION ENGINEERING ", Organised by Institute of Postgraduate Studies & Research, JNTU Hyderabad | 26 –6-1993 | 31 –7-1993 | 1 |
| 11. | A Winter School on " ECO MANAGEMENT OF COASTAL AREAS ", organized by Dept. of Civil Engg., Govt. College of Engineering, Foarmagudi, GOA (Sponsored by ISTE) | 26 –2-1996 | 10-3- 1996 | 2 |
| 12. | A summer School on " ENVIRONMENTAL FRIENDLY BUILDING TECHNOLOGY ", Organized by Dept. of Civil Engg., Mohammed Satak Engineering College, Kiakarai, (Sponsored by ISTE) | 27-5-1996 | 08-06-1996 | 2 |
| 13. | A winter School on " INSTUTIONAL PLANNING AND MANAGEMENT ", organized by Dept. of Mechanical Engg., KREC Surathkal | 5-1-1997 | 11-1-1997 | 1 |
| 14. | A summer school on" INDUSTRY INSTITUTE | 17-3-1997 | 22-3-1997 | 1 |

| | | | | |
|-----|--|------------|------------|---|
| | PARTNERSHIP , Organised by Dept., of Mechanical Engg., Dept., KREC SURATHKAL, (Sponsored by AICTE-ISTE) | | | |
| 15 | Short Term Course on “ Sustainable Urban Transportation Systems Planning ”, Organized by Dept. of Civil Engineering, IIT Madras(Sponsored by QIP) | 18-12-2000 | 22-12-2000 | 1 |
| 15. | Short Term Course on “ ADVANCED ROAD INFRASTRUCTURE PLANNING AND DEVELOPMENT ”, Organized by Dept. of Civil Engg., IIT Kharagpur (Sponsored By ISTE) | 17-7-2002 | 23-7-2002 | 1 |
| 16. | Training of the Trainers for “ Dissemination of Road Safety Manual ,” held at Haryana State Institute of Public Administration, Gurgaon. (Sponsored by National Highway Authority of India) | 24-05-2005 | 27-05-2005 | 1 |

Courses Conducted

| Sl. No | Title of the Course | Duration | | Total Time (Weeks) |
|--------|---|------------|------------|--------------------|
| | | From | To | |
| 1. | A Winter School on “ENVIRONMENT IMPACT ASSESSMENT OF TRANSPORTATION SYSTEMS”, organized by Dept. of Civil Engg., KREC SURATHKAL, (Sponsored by ISTE) Co-ordinators: Dr. S. Shrihari Dr. A.U. Ravi Shankar | 5-12-1994 | 17-12-1994 | 2 |
| 2. | A Winter school on Geology and Geotechnology Role in Country Planning & Development ”, Organized by Dept. of Civil Engineering, N.I.T.K., Surathkal (Sponsored by ISTE) <i>Coordinators</i> Dr. D. Venkata Reddy Dr. A.U. Ravi Shankar | 29-12-1999 | 8-1-2000 | 2 |
| 3. | A Short Term Training Programme on “ DESIGN, CONSTRUCTION AND MAINTENANCE OF RURAL ROADS ”, Organized by Dept. Of Civil Engg., & CCE , NITK SURATHKAL, (Sponsored by NRRD, Ministry of Rural Development, Govt. of India) <i>Coordinators</i> Dr. A.U. Ravi Shankar Dr. Sitaram Nayak Dr. R. Shivashankar | 12-7-2004 | 17-7-2004 | 1 |
| 4. | -----do----- | 2-8-2004 | 7-8-2004 | 1 |
| 5. | -----do----- | 16-8-2004 | 21-8-2004 | 1 |
| 6. | -----do----- | 20-9-2004 | 25-9-2004 | 1 |
| 7. | -----do----- | 4-10-2004 | 9-10-2004 | 1 |
| 8. | -----do----- | 6-12-2004 | 12-12-2004 | 1 |
| 9. | -----do----- | 10-1-2005 | 15-1-2005 | 1 |
| 10. | -----do----- | 17-1-2005 | 22-1-2005 | 1 |
| 11. | -----do----- | 31-1-2005 | 5-2-2005 | 1 |
| 12. | Workshop on “Road Safety” Organized by Division of Civil Engineering Systems, NITK , SURATHKAL (Sponsored by TEQUIP) <i>Coordinators:</i> Dr. Ch. S.N. Murthy Dr. A.U. Ravi Shankar | 17-2-2005 | 17-2-2005 | One day |
| 13. | A Short Term Training Programme on “ PREPARATION OF DETAILED PROJECT REPORT ”, Organized by Dept. Of Civil Engg., & CCE , NITK SURATHKAL, (Sponsored by NRRD, Ministry of Rural Development, Govt. of India) <i>Coordinators</i> Dr. A.U. Ravi Shankar Dr. Sitaram Nayak Dr. R. Shivashankar | 07-07-2006 | 08-07-2006 | Two days |
| 14. | A Short Term Training Programme on “ DESIGN, CONSTRUCTION AND MAINTENANCE OF RURAL ROADS ”, Organized by Dept. Of Civil | 24-07-2006 | 29-07-2006 | 1 |

| | | | | |
|-----|---|------------|------------|--------|
| | Engg., & CCE , NITK SURATHKAL, (Sponsored by NRRD, Ministry of Rural Development, Govt. of India) <i>Coordinators</i> Dr. A.U. Ravi Shankar Dr. Sitaram Nayak Dr. R. Shivashankar | | | |
| 15. | A Short Term Training Programme on “ DESIGN, CONSTRUCTION AND MAINTENANCE OF RURAL ROADS ”, Organized by Dept. Of Civil Engg., & CCE , NITK SURATHKAL, (Sponsored by NRRD, Ministry of Rural Development, Govt. of India) <i>Coordinators</i> Dr. A.U. Ravi Shankar Dr. Sitaram Nayak Dr. R. Shivashankar | 21-08-2006 | 26-08-2006 | 1 |
| 16. | A Short Term Training Programme on “ Road Safety ”, Organized by Dept. Of Civil Engg., & CCE , NITK SURATHKAL, (Sponsored by NRRD, Ministry of Rural Development, Govt. of India) <i>Coordinators</i> Dr. A.U. Ravi Shankar Dr. Sitaram Nayak | 04-09-2006 | 05-09-2006 | 2 days |
| 17. | A Short Term Training Programme on “ DESIGN, CONSTRUCTION AND MAINTENANCE OF RURAL ROADS ”, Organized by Dept. Of Civil Engg., & CCE , NITK SURATHKAL, (Sponsored by NRRD, Ministry of Rural Development, Govt. of India) <i>Coordinators</i> Dr. A.U. Ravi Shankar Dr. Sitaram Nayak Dr. R. Shivashankar | 17-4-2006 | 22-4-2006 | 1 |
| 18. | -----do----- | 24-7-2006 | 29-7-2006 | 1 |
| 19. | -----do----- | 21-8-2006 | 26-8-2006 | 1 |
| 20. | A Short Term Training Programme on “ PREPARATION OF DETAILED PROJECT REPORT ”, Organized by Dept. Of Civil Engg., & CCE , NITK SURATHKAL, (Sponsored by NRRD, Ministry of Rural Development, Govt. of India) <i>Coordinators</i> Dr. A.U. Ravi Shankar Dr. Sitaram Nayak | 07-7-2006 | 08-7-2006 | 2 days |
| 21. | A Short Term Course on “ Road Safety ”, Organised by Dept. Of Civil Engg. & CCE NITK Surathkal(Sponsored by NRRDA, Ministry of Rural Development, Govt. of India) <i>Coordinators</i> Dr. A.U. Ravi Shankar Dr. Sitaram Nayak | 04-9-2006 | 05-9-2006 | 2 Days |
| 22. | A Short Term Training Programme on “ Soil & Material Characterisation for Rural Roads ”, Organized by Dept. Of Civil Engg., & CCE , NITK SURATHKAL, (Sponsored by NRRD, Ministry of Rural Development, Govt. of India) <i>Coordinators</i> Dr. A.U. Ravi Shankar Dr. Sitaram Nayak | 25-9-2006 | 26-9-2006 | 2 days |

| | | | | |
|-----|---|------------|------------|--------|
| 23. | -do- | 30-10-2006 | 31-10-2006 | 2 days |
| 24. | A Short Term Training Programme on “ Quality Control & Quality Assurance ”, Organized by Dept. Of Civil Engg., & CCE , NITK SURATHKAL, (Sponsored by NRRD, Ministry of Rural Development, Govt. of India) <i>Coordinators</i> Dr. A.U. Ravi Shankar & Dr. Sitaram Nayak | 27-10-2006 | 28-10-2006 | 2 days |
| 25. | A Short Term Training Programme on “ Surveying & Layout for Rural Roads ”, Organized by Dept. Of Civil Engg., & CCE , NITK SURATHKAL, (Sponsored by NRRD, Ministry of Rural Development, Govt. of India) <i>Coordinators</i> Dr. A.U. Ravi Shankar and Dr. Sitaram Nayak | 07-11-2006 | 8-11-2006 | 2 Days |
| 26. | A Short Term Training Programme on “ Ground Improvement & Use of Geotextiles “ Surveying & Layout for Rural Roads ”, Organized by Dept. Of Civil Engg., & CCE , NITK SURATHKAL, (Sponsored by NRRD, Ministry of Rural Development, Govt. of India) <i>Coordinators</i> Dr. A.U. Ravi Shankar, Dr. Sitaram Nayak | 07-12-2006 | 08-12-2006 | 2 days |
| 27. | A short Term Training Programme on”Design Construction & Maintenance of All Weather Roads” Organised by Dept. of Civil Enginbeering&CCE, NITK, Surathkal(Sponsored by Engineering Staff College, Krishnarajasagar, Mysore) Co ordinators Dr. A.U. Ravi Shankar, Dr. Sitaram Nayak | 17-9-2007 | 21-9-2007 | 5 days |
| 28 | A short Term Training Programme on”Design Construction & Maintenance of All Weather Roads” Organised by Dept. of Civil Enginbeering&CCE, NITK, Surathkal(Sponsored by Engineering Staff College, Krishnarajasagar, Mysore) Co ordinators Dr. A.U. Ravi Shankar, Dr. Sitaram Nayak | 01-09-2014 | 05-09-2014 | 5days |
| 29 | Five Day refresher Course on”Soil Mechanics and Testing for Road Engineers”, Organised by Dept. of Civil engineering & CCE NITK Surathkal(Sponsored by Engineering Staff College, Krishnarajasagara, Mysore). Coordinators: Dr. Sitaram Nayak and Dr. A.U. Ravi Shankar | 19-01-2015 | 23-01-2015 | 5 days |

Special Lecture Delivered

1. **“Transport Planning: General Aspects”**, on 19-5-1998, at Deputy Commissioners Office, for a one day Workshop on **“Traffic Safety and Transport Planning: General Aspects”**, Organized by Traffic Police Dept. & Rotary Club Mangalore.
2. **“Design of Rigid Pavement”** at Hotel Pentagon, Mangalore, for One day Seminar on **“Pavement Design, Construction & Traffic Engineering,”** Organized by IGC Surathkal Chapter on 04-5-2000.
3. **“Road Geometrics for Hill Roads and Analysis of Accident Data,”** at Govt. Pre-university College Seminar Hall, Medikeri on 16-6-2002, for a one day workshop on **“Traffic Management & Vehicle Pollution Control,** Organized by Superintendent of Police, Medikeri Division, Koorge.
4. **“Design of Rid Pavements for Rural Roads”**, on 18-9-2003, at Dept. of Civil Engineering, National Institute of Technology, Tiruchirapalli, for 3 days training programme on **Design Construction and Maintenance of Rural Roads**, for Zilla panchayat Engineers, Under Pradhan Mantri Gram Sadak Yojna, Sponsored by National Rural Roads Development Authority, A division of Ministry of Rural Roads, Govt. of India.
5. **“Design of Flexible Pavements for Rural Roads”**, on 20-6-2004, at Dept. of Civil Engineering, U.V.C., Jnanabharathi, Bangalore University, for the 6 days training programme on **Design Construction and Maintenance of Rural Roads** on for Zilla panchayat Engineers, Under Pradhan Mantri Gram Sadak Yojna, Sponsored by National Rural Roads Development Authority, A division of Ministry of Rural Roads, Govt. of India.
6. **“Detailed Project Report Preparation”**, on 20-7-2004 at Dept. of Civil Engineering, U.V.C., Jnanabharathi, Bangalore university, for the 6 days training programme on **Design Construction and Maintenance of Rural Roads** for Zilla panchayat Engineers, Under Pradhan Mantri Gram Sadak Yojna, Sponsored by National Rural Roads Development Authority, A division of Ministry of Rural Roads, Govt. of India.
7. **“Design of Flexible Pavements for Rural Roads”**, on 20-8-2004, at Dept. of Civil Engineering, U.V.C., Jnanabharathi, Bangalore university, for the 6 days training programme on **Design Construction and Maintenance of Rural Roads** for Zilla panchayat Engineers, Under Pradhan Mantri Gram Sadak Yojna, Sponsored by National Rural Roads Development Authority, A division of Ministry of Rural Roads, Govt. of India.
8. **“Detailed Project Report Preparation,”** on 20-8-2004, at Dept. of Civil Engineering, U.V.C., Jnanabharathi, Bangalore university, for the 6 days training programme on **Design Construction and Maintenance of Rural Roads** for Zilla panchayat Engineers, Under Pradhan Mantri Gram Sadak Yojna, Sponsored by National Rural Roads Development Authority, A division of Ministry of Rural Roads, Govt. of India.
9. **“Design of Flexible Pavements for Rural Roads”**, on 21-9-2004 at Dept. of Civil Engineering, U.V.C., Jnanabharathi, Bangalore university, for the 6 days training programme on **Design Construction and Maintenance of Rural Roads** for Zilla panchayat Engineers, Under Pradhan Mantri Gram Sadak Yojna, Sponsored by National Rural Roads Development Authority, A division of Ministry of Rural Roads, Govt. of India.

10. “**Design of Rigid Pavements for Rural Roads**”, on 26-10-2004, at Dept. of Civil Engineering, National Institute of Technology, Tiruchirapalli, for 6 days training programme on **Design Construction and Maintenance of Rural Roads**, for Zilla panchayat Engineers, Under Pradhan Mantri Gram Sadak Yojna, Sponsored by National Rural Roads Development Authority, A division of Ministry of Rural Roads, Govt. of India.
11. “**Design of Flexible Pavements for Rural Roads**”, on 28-12-2004, at Dept. of Civil Engineering, U.V.C., Jnanabharathi, Bangalore university, for the 6 days training programme on **Design Construction and Maintenance of Rural Roads** for Zilla panchayat Engineers, Under Pradhan Mantri Gram Sadak Yojna, Sponsored by National Rural Roads Development Authority, A division of Ministry of Rural Roads, Govt. of India.
12. “**Design of Flexible Pavements for Rural Roads**”, on 30-11-2004, at Dept. of Civil Engineering, U.V.C., Jnanabharathi, Bangalore university, for the 6 days training programme on **Design Construction and Maintenance of Rural Roads** for Zilla panchayat Engineers, Under Pradhan Mantri Gram Sadak Yojna, Sponsored by National Rural Roads Development Authority, A division of Ministry of Rural Roads, Govt. of India.
13. “**Material Characterization for Rural Roads**”, on 25-12-2004 at Dept. of Civil Engineering, National Institute of Technology, Warangal for the Six Days Training Programme on **Design Construction and Maintenance of Rural Roads** for Zilla Panchayat Engineers, Under Pradhan Mantri Gram Sadak Yojna, Sponsored by National Rural Roads Development Authority, A division of Ministry of Rural Roads, Govt. of India.
14. “**Design of Flexible Pavements for Rural Roads**”, on 18-1-2005, at Dept. of Civil Engineering, U.V.C.E., Jnanabharathi, Bangalore university, for the 6 days training programme on **Design Construction and Maintenance of Rural Roads** for Zilla panchayat Engineers, Under Pradhan Mantri Gram Sadak Yojna, Sponsored by National Rural Roads Development Authority, A division of Ministry of Rural Roads, Govt. of India.
15. “**Design of Flexible Pavements for Rural Roads**”, on 26-1-2005, at Dept. of Civil Engineering, U.V.C.E., Jnanabharathi, Bangalore university, for the 6 days training programme on **Design Construction and Maintenance of Rural Roads** for Zilla panchayat Engineers, Under Pradhan Mantri Gram Sadak Yojna, Sponsored by National Rural Roads Development Authority, A division of Ministry of Rural Roads, Govt. of India.
16. “**Investigation and Preparation of DPR**”, on 26-1-2005, at Dept. of Civil Engineering, U.V.C.E, Jnanabharathi, Bangalore university, for the 6 days training programme on **Design Construction and Maintenance of Rural Roads** for Zilla panchayat Engineers, Under Pradhan Mantri Gram Sadak Yojna, Sponsored by National Rural Roads Development Authority, A division of Ministry of Rural Roads, Govt. of India.
17. “**Investigation and Preparation of DPR**”, on 04-02-2005 at IR Rasta, Road Institute, Bangalore for the Six Days Training Programme on **Design Construction and Maintenance of Rural Roads** for Zilla Panchayat Engineers, Under Pradhan Mantri Gram Sadak Yojna, Sponsored by National Rural Roads Development Authority, A division of Ministry of Rural Roads, Govt. of India.
18. “**Quality Control & Quality Assurance for Rural Roads**”, on 04-02-2005 at IR Rasta, Road Institute, Bangalore for the Six Days Training Programme on **Design Construction and Maintenance of Rural Roads** for Zilla Panchayat Engineers, Under Pradhan Mantri

- Gram Sadak Yojna, Sponsored by National Rural Roads Development Authority, A division of Ministry of Rural Roads, Govt. of India.
19. **“Preparation of Detailed Project Report”** on 7th July 2006 at NITK., Surathkal, for the two days training programme on **Preparation of Detailed Project Report** for Panchayat Raj Engineers, Under Pradhan Mantry Gram Sadak Yojna, Sponsored by National Rural Roads Development Authority, A division of Ministry of Rural Roads, Govt. of India.
 20. **Material Characterisation and Design of Rigid Pavements** on 7th July 2006 at NITK., Surathkal, for the two days training programme on **Preparation of Detailed Project Report** for Panchayat Raj Engineers, Under Pradhan Mantry Gram Sadak Yojna, Sponsored by National Rural Roads Development Authority, A division of Ministry of Rural Roads, Govt. of India.
 21. **Design of Rigid Pavements** on 24th July 2006 at NITK., Surathkal, for the two days training programme on *Design Construction and Maintenance of Rural Roads* for Zilla Panchayat Engineers, Under Pradhan Mantri Gram Sadak Yojna, Sponsored by National Rural Roads Development Authority, A division of Ministry of Rural Roads, Govt. of India.
 22. **Design of Rigid Pavements** on 21st August 2006 at NITK., Surathkal, for the two days training programme on *Design Construction and Maintenance of Rural Roads* for Zilla Panchayat Engineers, Under Pradhan Mantri Gram Sadak Yojna, Sponsored by National Rural Roads Development Authority, A division of Ministry of Rural Roads, Govt. of India.
 23. **“Introduction to Road Safety Issues and Trends”**, 4th September 2006 at NITK., Surathkal, for the two days training programme on **Road Safety** for Panchayat Raj Engineers, Under Pradhan Mantry Gram Sadak Yojna, Sponsored by National Rural Roads Development Authority, A division of Ministry of Rural Roads, Govt. of India.
 24. **“Role of Engineers, Planners and Non-Engineering Measures”**, 4th September 2006 at NITK., Surathkal, for the two days training programme on **Road Safety** for Panchayat Raj Engineers, Under Pradhan Mantry Gram Sadak Yojna, Sponsored by National Rural Roads Development Authority, A division of Ministry of Rural Roads, Govt. of India.
 25. **“Counter Measures at Hazardous Locations”**, 4th September 2006 at NITK., Surathkal, for the two days training programme on **Road Safety** for Panchayat Raj Engineers, Under Pradhan Mantry Gram Sadak Yojna, Sponsored by National Rural Roads Development Authority, A division of Ministry of Rural Roads, Govt. of India.
 26. **“Safety Management of Road Networks and Work Zones”**, 5th September 2006 at NITK., Surathkal, for the two days training programme on **Road Safety** for Panchayat Raj Engineers, Under Pradhan Mantry Gram Sadak Yojna, Sponsored by National Rural Roads Development Authority, A division of Ministry of Rural Roads, Govt. of India.
 27. **“Design of Rigid Pavements”**, A short Term Training Programme on “Design Construction & Maintenance of All Weather Roads” Organised by Dept. of Civil Enginbeering&CCE, NITK, Surathkal(Sponsored by Engineering Staff College, Krishnarajasagar, Mysore) (17th Spt to 21 Sept. 2007)
 28. **“Material Properties & Characterization”** A short Term Training Programme on “Design Construction & Maintenance of All Weather Roads” Organised by Dept. of Civil Enginbeering&CCE, NITK, Surathkal(Sponsored by Engineering Staff College, Krishnarajasagar, Mysore) (17th Spt to 21 Sept. 2007)
 29. **“MORD Specifications for Rural Roads and Rural Roads Manual”**, on 6th Feb 2009 at Abdul Nazeer sab State Institute of Rural Development, Mysore
 30. **“Deficiencies in DPR’s and Weakness in Investigation”** on 6th Feb 2009 at Abdul Nazeer sab State Institute of Rural Development, Mysore.

31. **“MORD Specifications for Rural Roads and Rural Roads Manual”**, on 10th July 2009 at Abdul Nazeer sab State Institute of Rural Development, Mysore
32. **“Task Force for Quality Assurance in Public Constructions”** on 10-11, June 2010, T.V. ramanapai Convention Centre, Mangalore
33. **“Deficiencies in DPR’s and Weakness in Investigation”** on 17th August 2010 at Abdul Nazeer sab State Institute of Rural Development, Mysore.
34. **“MORD Specifications for Rural Roads and Rural Roads Manual”**, on 10th July 2009 at Abdul Nazeer sab State Institute of Rural Development, Mysore
35. **“Deficiencies in DPR’s and Weakness in Investigation”** on 17th August 2010 at Abdul Nazeer sab State Institute of Rural Development, Mysore
36. **“Deficiencies in DPR’s and Weakness in Investigation”** on June 27, 2011at Staff Training College, Mysore
37. **“Deficiencies in DPR’s and Weakness in Investigation”** on July 18, 2011at Staff Training College, Mysore
38. **“Advanced Rigid Pavements”**, July31, 2012 At Lions Seva Mandir, Mallikatte, Organised by Association of Consulting Civil Engineers(I), Mangalore Centre.
39. **“Scope of Transportation Engineering”** on August 25, 2012 at Sahyadri College of Engineering & Management, Mangalore.
40. **“Rigid Pavements”** on January 11, 2013 at Ramana Pai Conventional hall, Organized by Association of Consulting Civil Engineers (I), Mangalore Centre, Kodialbail, Mangalore.
41. Delivered a special lecture on "Geotechnical Engineering in Highway Technology", One day workshop on "Research Avenues and Advances in Geotechnical Engineering", Organized by Dept. of Civil Engineering, Alva's Institute of Engineering and Technology, Mijar, Moodbidri, on 26th February 2014.
42. Delivered a special lecture on "Concrete Pavements", The Institute of Engineers(I), Mangalore Local Centre, Institute of Valuers Mangalore Branch and Kodagu, DK & UDUPI Engineers Association, Mangalore, at Hotel wood Lands, Bunts Hostel Road, Mangalore on 26th August 2014 at 5.45pm
43. Delivered a lecture on **“Aggregate and Bitumen Characterization”** on short term course on “Design, Construction and Maintenance of All Weather Roads”, For Karnataka Public Works and Irrigation Department Engineers, Sponsored by Engineering Staff College, Krishnarajasagars, Organised by Dept. of Civil engineering, National Institute of Technology, Karnataka, Surathkal from August1 to 5, 2014
44. Delivered a lecture on **“ Design of Flexible Pavement”**, ” on short term course on “Design, Construction and Maintenance of All Weather Roads”, For Karnataka Public Works and Irrigation Department Engineers, Sponsored by Engineering Staff College, Krishnarajasagars, Organised by Dept. of Civil engineering, National Institute of Technology, Karnataka, Surathkal from August1 to 5, 2014.
45. Delivered a lecture on **“ Design of Rigid Pavements Pavement”**, ” on short term course on “Design, Construction and Maintenance of All Weather Roads”, For Karnataka Public Works and Irrigation Department Engineers, Sponsored by Engineering Staff College, Krishnarajasagars, Organised by Dept. of Civil engineering, National Institute of Technology, Karnataka, Surathkal from August1 to 5, 2014
46. Delivered a lecture on **“Use of Local Available Materials”**, ” on short term course on “Design, Construction and Maintenance of All Weather Roads”, For Karnataka Public Works and Irrigation Department Engineers, Sponsored by Engineering Staff College, Krishnarajasagars, Organised by Dept. of Civil engineering, National Institute of Technology, Karnataka, Surathkal from August1 to 5, 2014

47. Delivered a lecture on “**Construction Methods of Pavements**”, on short term course on “Design, Construction and Maintenance of All Weather Roads”, For Karnataka Public Works and Irrigation Department Engineers, Sponsored by Engineering Staff College, Krishnarajasagars, Organized by Dept. of Civil engineering, National Institute of Technology, Karnataka, Surathkal from August 1 to 5, 2014
48. Delivered a lecture on “**Consistency Evaluation of Horizontal Curves of Rural Highways**” during five day workshop on Recent Advances in Traffic Engineering and Transportation Planning (RATE&TP) from 8-13th December 2014. organized by Malnad College of engineering Hassan on December 17 2014.
49. Delivered a lecture on “**Design of Flexible Pavements as per IRC:37:2002**” for engineers of PWD and IWT department, Govt. of Karnataka at a two day training program on “Design and Maintenance of Pavements and Culverts” organized by Department of Civil Engineering, R.V. College of Engineering, Bengaluru on 10-11th March 2015.
50. Delivered a lecture on “**Design of Flexible Pavements as per IRC:37:2002**” for Engineers of Bruhat Bengaluru Mahanagara Palike, on 16th February, 2016 for Two Weeks Training program on Design, Construction, Maintenance and Management of Urban Roads from 8 to 20th February 2016 at R V College of Engineering , Bangalore.
51. Delivered a lecture on “**Guidelines for the Design of Plain Jointed Rigid Pavements for Highways**”, IRC:58-2011”, for Engineers of Bruhat Bengaluru Mahanagara Palike, on 16th February, 2016 for Two Weeks Training program on Design, Construction, Maintenance and Management of Urban Roads from 8 to 20th February 2016 at R V College of Engineering , Bangalore.
- 52.