

SPONSORSHIP CERTIFICATE

Certified that Dr./Mr./Ms.....
.....
is a faculty/employee/student of this institution and if selected, he/she will be permitted to attend the **Workshop on Binder Rheology** during **December 15th – 17th, 2016**.

This is to certify that this institute is recognized by AICTE.

Place:
Date:

Signature of Head of the Institution
(Principal/Director)

(SEAL)

IMPORTANT DATES

Submission of application form through Post/Email:
9th December 2016

Intimation of Selected Candidates through Email:
10th December 2016

ADDRESS FOR CORRESPONDENCE

Dr. V. Sunitha / Dr. Nisha Radhakrishnan
Assistant Professor
Department of Civil Engineering
National Institute of Technology
Tiruchirappalli – 620 015, Tamilnadu, India
Phone : 0431-2503165, 2503162 (O)
 : 09443302930, 09843260869 (M)
Fax : 0431-2500133
E-mail : sunitha@nitt.edu / nisha@nitt.edu

NATIONAL INSTITUTE OF TECHNOLOGY TIRUCHIRAPPALLI

The National Institute of Technology (formerly known as Regional Engineering College) Tiruchirappalli, situated in the heart of Tamil Nadu on the banks of river Cauvery, was started as a joint and co-operative venture of the Government of India and the Government of Tamil Nadu in 1964 with a view to cater the needs of man-power in technology for the country. The institute offers Under graduate programmes in ten branches and Post graduate programmes in twenty five disciplines of Science, Engineering & Technology, Management and Architecture, besides M.S. (by Research) and Ph.D. in all the departments.

DEPARTMENT OF CIVIL ENGINEERING

The Department of Civil Engineering has been one of the oldest and finest departments of the Institute. Right from its inception in 1964, it has been involved in fulfilling its vision to shape infrastructure development with societal focus and thus accomplish its mission by providing professional Civil Engineers who will work for the society. The Department offers an Undergraduate programme in Civil Engineering and four Postgraduate programmes in Transportation Engineering and Management, Structural Engineering, Environmental Engineering and Construction Technology and Management. The B.Tech. and M.Tech. (Transportation Engineering and Management) programme have been recently accredited by NBA for 5 years. The Department also offers M.S. and Ph.D. (Full time & Part time) for aspiring researchers.

CETransE

The Centre of Excellence in Transportation Engineering (CETransE) at NIT Tiruchirappalli was established in the year 2013 by the Department of Higher Education, Ministry of Human Resource Development, and Government of India under the scheme 'Establishment of 50 Centers of Excellence in frontier areas of Science and Technology'. It was established with a vision of creating sustainable transportation technologies and infrastructure for optimal national and societal impact through shaping professional Transportation Engineers, assisting National and State agencies, providing R&D for Industry and offering continuing education. It is carrying out focused research in the areas of Transportation Planning, Intelligent Transportation Systems and Pavement Engineering.

Workshop on Binder Rheology

December 15th - 17th, 2016



Coordinators

Dr. V. SUNITHA
Dr. NISHA RADHAKRISHNAN
Dr. SAMSON MATHEW
Dr. S. MOSES SANTHAKUMAR

Organized by

**Centre of Excellence in Transportation
Engineering
(CETransE)**

Department of Civil Engineering
National Institute of Technology
Tiruchirappalli - 620 015
Tamilnadu, India
www.nitt.edu

INTRODUCTION

Bitumen, the most commonly used binder for pavement construction, exhibits a range of response from Newtonian at mixing temperatures to Elastic at sub-zero temperatures. In the working temperature range of the pavement (20—70°C), bitumen exhibits a viscoelastic behavior, wherein the response is governed by the frequency of loading. Thus, it is essential to characterize the rheological response of the material with respect to frequency and temperature for a better characterization of the damage in the pavement.

The Dynamic Shear Rheometer (DSR) is the most commonly used equipment in this regard. It can be used to estimate the rheological response of the materials over a range of temperatures and frequencies at different ageing conditions such as short-term and long-term.

OBJECTIVES OF WORKSHOP

The purpose of this workshop is to provide an insight into the rheological characterization of asphalt binder. Hands-on-training will be provided on DSR. The participants of the workshop will be able to determine the Performance Grading of unmodified and modified binder and determine the location in which the binder can be used.

COURSE CONTENT

Theory

- Introduction to Rheology
- Non-Newtonian and Viscoelastic Response
- Performance Grading

Laboratory Sessions

- Creep and Recovery Test
- Stress Relaxation Test
- Oscillatory Shear Test
- Performance Grading test
- MSCR (Multiple Stress Creep and Recovery) Test

RESOURCE PERSONS

Dr. J. Murali Krishnan, Professor, Dept. of Civil Engineering, IIT Madras

Dr. Nivitha M.R., Project Officer, IIT Madras

Ms. Divya P.S., Project Officer, IIT Madras

TARGET AUDIENCE

The programme is intended for faculty handling Transportation Engineering subjects for UG and PG in AICTE approved Engineering Colleges/Polytechnics, Scientists/Engineers from R&D establishments, Research Scholars and Post Graduate students working in the area of binder and related topics.

REGISTRATION FEE

Registration fee: Rs.330/- per participant

The registration fee shall be paid by Cheque or DD drawn in favour of **The Director, NIT, Tiruchirappalli – 620015** payable at SBI, NITT Branch (Code - 1617) and can be submitted in person on the first day of the programme.

Participants will be provided free lodging in the Institute Guest House/Hostels on sharing basis. The participants who do not avail this facility will not be entitled to any rebate. Working lunch and refreshments will be provided during the workshop.

HOW TO REACH NITT?

NIT-T is located on the Tiruchirappalli - Tanjore Highway (NH-67) about 23 kms from Trichy Railway station. One can avail Bus No.128 or Tanjore bound buses from the Central Bus Stand (CBS) to reach NIT. Town buses are also available from Chatram city bus stand.

Workshop on

Binder Rheology

December 15th – 17th, 2016

REGISTRATION FORM

1. Name:.....
2. a) Age:.....b) Gender: Male/Female
3. Qualifications:.....
4. Designation:.....
5. Organisation:.....
6. Address for Communication:
.....
.....
.....
7. Mobile:.....Land Line:.....
8. E-mail:.....
9. Area of Specialization.....
.....
10. Accommodation required? Yes/No
11. Food Preference: Vegetarian/Non-Vegetarian
12. Payment Details: Amount: Rs. 330/-
Cheque /DD (No:.....)

The information furnished above is true to the best of my knowledge. I agree to abide by the rules and regulations governing the programme. If selected, I shall attend the programme for the entire duration. I also undertake the responsibility to inform the Coordinator sufficiently in advance, in case I am unable to attend the programme.

Place:

Date:

Signature of the applicant