

## ELIGIBILITY

Practicing engineers from construction and consultancy firms, government and public sector agencies, scientists/engineers from R&D establishment, teachers, post graduate and research students from engineering colleges having interest in the design and evaluation of pavements can apply. Student applicants should be pursuing/ or completed M Tech/Ph.D in Transportation Engineering. Teachers applying for this workshop should have completed M.Tech/Ph.D in Transportation Engineering.

## REGISTRATION FEE FOR PARTICIPANTS

Category	Registration Fee	Accommodation and Food
Govt/ private organizations	Rs.10,000	To be borne by the participants
Teachers- Non TEQUIP-II	Rs. 5,000	
Students-Non TEQUIP-II	Rs. 2,000	

## Teachers and students from TEQUIP-II Colleges:

No charges for Registration fee, Accommodation and Food. Number of applicants from each TEQUIP-II college will be limited.

## TRAVEL EXPENDITURE

Expenditure related to travel from place of origin to IIT Kharagpur campus (to & fro) should be borne by the participants from TEQUIP-II as well as non-TEQUIP colleges and other participants.

## SPONSORSHIP

Interested agencies can avail the sponsorship opportunity as per the following details.

Type of sponsorship	Amount	Registration fee waiver for
Gold	Rs.50,000	02 participants
Silver	Rs. 30,000	02 participants
Bronze	Rs. 15,000	01 participant

Sponsors can distribute the relevant literature and interact with participants of the workshop.

Application for attending the workshop, in the format given overleaf, should be accompanied by registration fee in the form of crossed demand draft on any nationalized bank drawn in favour of "CEP-STC, IIT, Kharagpur" payable at Kharagpur, West Bengal and sent to the workshop coordinator. No refund of registration fee will be made in case of withdrawal of the candidate.

IIT Kharagpur was established under Institute of Technology Act 1961 and is exempted from paying Income Tax under Section 10(23C)(iiiab) of Income Tax Act, 1961. As a consequent the Institute is exempted under section 194J of the Income Tax Act, 1961. Hence no TDS (Tax Deduction at Source) should be made.

## ACCOMMODATION

Arrangement will be made to accommodate a limited number of participants in New Guest House – NGH (Teachers, consultants and govt officials) and student hostels (students) inside IIT Kharagpur. The number of beds is limited to 50. The rooms (twin sharing basis) will be allotted to the participants on a first-come first-served basis.

## TWIN SHARING ROOM CHARGE/DAY/HEAD

New Guest House : Rs.600/- and Student hostel: Rs. 150/-

## VENUE FOR LECTURES

Lectures will be held in the seminar hall of the Civil engineering department, IIT, Kharagpur.

## CONTACT

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## Three day Workshop on PAVEMENT DESIGN, EVALUATION & MATERIAL CHARACTERIZATION (PAVE)

December 21-23, 2015



### Course Coordinators

Dr. M. Amaranatha Reddy  
Prof. K. Sudhakar Reddy

Department of Civil Engineering  
Indian Institute of Technology  
KHARAGPUR -721 302, W.B

## THE INSTITUTE AND COURSE CONTENT

The Indian Institute of Technology Kharagpur is one of the highest ranked technical institutes in India. The Civil Engineering Department was established in the year 1951 and it is one of the oldest departments of IIT Kharagpur. The Transportation Engineering Section of Civil Engineering has been conducting research in different aspects of Transportation Engineering including Pavement Materials, Pavement Analysis and Design and Pavement Evaluation for the last four decades.

The focus of the workshop is to highlight various concepts in pavement engineering that include pavement design, pavement evaluation and pavement material characterization to highway professionals, teachers and students to help them gain insight into different theoretical and practical aspects related to analysis, design and evaluation of pavements. Besides the presentations to be made by the experts, it is also planned to demonstrate different design software and laboratory equipment of the pavement engineering research laboratory.

The following topics will be covered in the workshop.

### Pavement Design:

- Pavement Design concepts and philosophy
- Mechanistic-Empirical Flexible and Rigid Pavement Designs
- Salient features of IRC: 37-2012 – “Guidelines for Design of Flexible Pavements”
- Salient features of IRC:58-2011 and IRC:58-2015 “Guidelines for the Design of Plain Jointed Rigid Pavements for Highways”

### Pavement Evaluation:

- Developments in Structural Evaluation of Pavements
- IRC: 115-2014 -“Guidelines for Structural Evaluation and Strengthening of existing Flexible Pavement using Falling Weight Deflectometer (FWD) Technique”
- Pavement failures and field investigations

### Pavement Material Characterization:

- Binder Evaluation: Binder characterization using Dynamic Shear Rheometer (DSR), Superpave specifications for binders
- Evaluation of Bituminous Mixes for Resilient modulus, Dynamic modulus, Flow number, Rutting characteristics, Moisture susceptibility of bituminous mixes
- Effective CBR for weak Subgrade soil
- Bituminous Mix design for a) Hot Asphalt Mixes (HMA) b) Cold recycled and hot recycled asphalt mixes
- Laboratory demonstration of pavement material characterization

### FACULTY

Resource persons will be from IIT Kharagpur and other agencies.

### LECTURE NOTES AND CERTIFICATE

Arrangement is being made to provide lecture notes / PPT and workshop participation Certificate to the participants at the end of the workshop.

**Dr. M. Amaranatha Reddy**

**Prof. K. Sudhakar Reddy**

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### COURSE COORDINATORS



## Application form for the Workshop on Pavement Design, Evaluation and Material Characterization (PAVE)

(21-23 Dec, 15)

(Last date for submission: 14th december 2015)

Name: \_\_\_\_\_

Designation: \_\_\_\_\_

Organization: \_\_\_\_\_

Mailing Address: \_\_\_\_\_

E-mail: \_\_\_\_\_

Telephone No: \_\_\_\_\_

Educational Qualification : \_\_\_\_\_

Gender : Female / Male

Postgraduate Degree (For Teachers/ students): \_\_\_\_\_

Experience (Years) : \_\_\_\_\_

Please tick the appropriate box below:

Govt / Private organizations : Rs. 10,000/-

Teachers from engineering college : Rs. 5,000/-

M.Tech / Ph.D / MS Student : Rs. 2,000/-

Teachers / students from TEQUIP II Colleges : NIL

Sponsorship (Gold/Silver/Bronze) : \_\_\_\_\_

#### Course fee details

Demand draft No: \_\_\_\_\_ Amount: Rs. \_\_\_\_\_

Name of the bank: \_\_\_\_\_

Signature of applicant

Date: .....

#### For Teachers/M.Tech/Ph.D/MS student

The application of Dr/Mr/Ms..... is forwarded herewith.

- Further this is to state that ..... (Name of the institute) is under TEQUIP-II/ not under TEQUIP-II (strike off whenever is not applicable).
- The student is pursuing M Tech/PhD in Transportation Engg/ The Faculty member has done M.Tech/MS/PhD in Transportation Engg and /or teaching Transportation Engg subjects(strike off whenever is not applicable).

(Signature of the Head of the Institute with date and seal)