Overview

The infrastructure of any country plays a major role in economical and social success of the population. The road infrastructure plays an important role in this arena. The commerce, well-being of the community and the development of the country all are dependent on a long lasting pavements and bridges. One of the most important development in recent years has been the use of polymerized asphalt binders in many areas of the world. The use of the polymers has extended the life of the pavements, saving money in conducting less maintenance work, and creating a safer environment for the public. In addition, the utilization of by-products and recyclable materials in infrastructure has gained tremendous support and acceptance from many municipalities and countries around the world. For example, in the USA, the use of recycled asphalt pavement (RAP) has been practiced for many years. The contractors and the state DOTs use approximately 80% of the materials being picked up. This translates to over 70 million tons of materials being used each year. There are many other recyclable materials that have been used in pavements such as coal ash, fly ash, and many others.

The primary objectives of the course are as follows:

i) Exposing participants to the fundamentals of asphalt binders,

ii) Building in confidence and capability amongst the participants in the application of laboratory experiments and testing procedures;

iii) Providing exposure to practical problems and their solutions, through case studies from around the world;

iv) Enhancing the capability of the participants to identify the problems associated with a polymerized binder and its utilization in many applications;

v) Enhancing the capability of the participants to identify the physical and environmental properties of recycled products in infrastructure applications.

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<tr>
<th>Dates for the Course</th>
<th>4-9 December, 2017</th>
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<tbody>
<tr>
<td>Host Institute</td>
<td>IIT Madras</td>
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<tr>
<td>No. of Credits</td>
<td>1</td>
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<tr>
<td>Max. No. of participants</td>
<td>40</td>
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**You Should Attend If...**

- Engineers and researchers from consulting companies, researchers from government organizations including R&D laboratories.
- Students at all levels (B. Tech. /MSc/M. Tech. /Ph. D.) or Faculty from reputed academic institutions and technical institutions.

**Course Registration Fees**

<table>
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<th>The participation fees for taking the course is as follows:</th>
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<tr>
<td>Student Participants:</td>
<td>Rs.1,000/-</td>
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<tr>
<td>Faculty Participants:</td>
<td>Rs.5,000/-</td>
</tr>
<tr>
<td>Government Research Organization Participants:</td>
<td>Rs.10,000/-</td>
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<tr>
<td>Industry Participants:</td>
<td>Rs.10,000/-</td>
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The above fee is towards participation in the course, the course material, computer use for tutorials and assignments, and laboratory equipment usage charges.

**Mode of payment:** Demand draft in favour of “Registrar, IIT Madras” payable at Chennai

**Accommodation**

The participants may be provided with hostel accommodation, depending on the availability, on payment basis. Request for hostel accommodation may be submitted through the link: [http://hosteldine.iitm.ac.in/iitmhostel](http://hosteldine.iitm.ac.in/iitmhostel)
Course Faculty

Prof. Serji N. Amirkhanian is a Professor of Civil Engineering at University of Alabama, Tuscaloosa, USA and an Adjunct Professor at the School of Sustainable Engineering and the Built Environment at the Ira A. Fulton Schools of Engineering, Arizona State University and President and CEO, Asphalt Technologies LLC, USA. He is a member of the technical committees of TRB, ASTM, FHWA, etc. His research interests are in the areas of pavement material characterization, pavement design, construction management and recycling of pavement materials.

Prof. A. Veeraragavan is with the Department of Civil Engineering at the Indian Institute of Technology (IIT) Madras, India. His research interests are in the area of pavement maintenance and management, recycling of bituminous mixes for sustainable highway pavements, forensic investigation of pre-mature failure of pavements and use of modified binders for long lasting pavements, through non-destructive testing methods.

Course Coordinator

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http://www.civil.iitm.ac.in/new/?q=veer_edu