



LAKIREDDY BALI REDDY COLLEGE OF ENGINEERING

(AUTONOMOUS)

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L.B.Reddy Nagar, Mylavaram-521230, Krishna Dist, Andhra Pradesh, India

DEPARTMENT OF CIVIL ENGINEERING

REPORT ON

ONLINE WEBINAR ON

“HIGHWAY MATERIALS: BITUMEN CHARACTERISATION”

Event Type	Webinar
Date / Duration	17-06-2021
Resource Team	Dr V. Vinayaka Ram, Associate Professor, BITS - Pilani, Hyderabad Campus
Name of Coordinator	P. Mohana Gangaraju, Asst Professor
Target Audience	Faculty, Research scholars, M.Tech and B.Tech students
Total no of Participants	143 (Internal - 20, External – 123)
Objective of the event	<ul style="list-style-type: none">To discuss the process of characterizing and qualifying the bitumen for road applications.
Outcome of event	Understanding of bitumen characterization along with introduction to advancements.
Feedback / Suggestions	Participants gave positive feedback on the webinar and requested to conduct more webinars and FDPs.

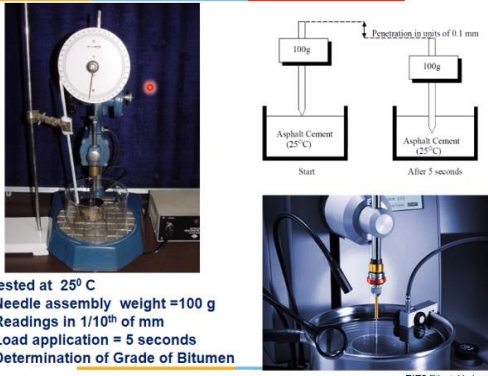
Photographs :



HOD Dr. V. Ramakrishna addressing event



Resource person Dr V. Vinayaka Ram, delivering the Lecture.

BITUMEN SOURCES	PENETRATION TEST
<p>Lake Asphalt</p> <ul style="list-style-type: none"> • Trinidad Islands – 1595 Walter Raleigh • Binder - 54 %, Mineral matter – 36 % and Organic Matter – 10 % • Softening point is about 95° C. <p>Rock Asphalt</p> <ul style="list-style-type: none"> • European Reserves <p>Gilsonite</p> <ul style="list-style-type: none"> • Utah - Vertical Deposits – Softening Point of 115 to 190° C. • Refined Bitumen <p style="text-align: right;">BITS Pilani, Hyderabad Campus</p>	 <ul style="list-style-type: none"> • Tested at 25° C • Needle assembly weight =100 g • Readings in 1/10th of mm • Load application = 5 seconds • Determination of Grade of Bitumen <p style="text-align: right;">BITS Pilani, Hyderabad Campus</p>
Presentation of Resource Person	Presentation of Resource Person

Press Clippings: Nil

REPORT

A one-day webinar on “**HIGHWAY MATERIALS: BITUMEN CHARACTERISATION**” is organized in Civil Engineering Department on 17-06-2021 with **Dr V. Vinayaka Ram**, Associate Professor, BITS - Pilani, Hyderabad Campus acting as Resource Person.

Bitumen is one of the most important material in flexible pavement. There are two types of pavements, one is flexible pavement and rigid pavement. Flexible pavements are made with Bituminous binders and rigid pavements are made with cement concrete material. Bituminous pavement has good draining quality. The type of pavement depends upon the type of soil and availability of material. Bitumen is a by-product of crude petroleum oil.

Bitumen emulsion is a mixture of asphalt cement, water and emulsifying agent. The basic tests on bitumen are consistency tests, specific gravity test and flash and fire point test. Consistency tests are penetration test, softening point test, viscosity test and ductility test. These tests are conducted on bitumen to assess its consistency, gradation, viscosity, temperature susceptibility and safety.

The webinar discussed exclusively on the Bitumen characteristics and how they are interpreted for field applications. The session is interactive and engrossed the participants. At the end, the participants acknowledged the contribution and desired more programmes of such nature.