

Report on National-Level Guest Lecture

The Department of Physics (DST-FIST sponsored), Koneru Lakshmaiah Education Foundation (KLEF) and Materials Research Society of India (MRSI, Mumbai, India) jointly organized a National Online Guest Lecture titled " **“Superhydrophobic coatings for space applications”** on 26th July 2024.

The Guest Lecture featured distinguished speaker **Prof. Dr Meena Laad**, Professor (Physics) & Head, Dept. of Applied Sciences, Material Science Researcher Symbiosis Institute of Technology, Near Lupin Research Park, Pune, Maharashtra.

Prof. Dr Meena Laad, who shared her insights and expertise on superhydrophobic coatings their different synthesis techniques and their various applications in the field of Space.

The Guest Lecture received an overwhelming response from participants, including students, researchers, academicians, and professionals from various fields. The interactive sessions and panel discussions provided a platform for meaningful dialogue and knowledge exchange on different research aspects.

Dr K Swapna, Head & Chair, **Dr G Sunita Sundari**, and **Dr S Shanmugam**, Convenors at KLEF, expressed gratitude to the resource person and participants for their active participation and contributions to making the guest lecture a success. The Department Chair emphasised the importance of such initiatives in raising awareness and fostering collaboration to address the challenges in various research fields.

The Department of Physics at KLEF remains committed to organising more such events to promote scientific discourse and contribute to finding sustainable solutions to environmental challenges.

The screenshot shows a Zoom meeting interface. The main content is a presentation slide titled "Synthesis and Characterization of Polymer Modified Bitumen Nanocomposites". The slide includes a bulleted list of objectives and a "Master Curve" graph. The graph plots "Energy Dissipation (kJ/m²)" on the y-axis (0 to 10000) against "Applied Strain (mm/mm)" on the x-axis (0 to 10000). The curve shows a peak in energy dissipation around 1000 mm/mm strain. Below the graph are three images: "Deteriorated Road Pavements", "Fabrication and Testing of Modified Bitumen", and "Master Curve for Fatigue Resistance". The meeting controls at the bottom show "Unmute" and "Stop video" buttons.

The screenshot shows a Zoom meeting interface. The main content is a presentation slide titled "Superhydrophobicity". The slide lists characteristics: "Repels water to an extremely high degree", "Causes water droplets to roll off the surface without wetting", and "Water contact angle >150°". It also lists factors: "Low surface energy" and "Micro-nano scale roughness". The slide includes two images: "Surface of lotus leaf" and "water droplets lifted on a rough surface". The meeting controls at the bottom show "Unmute", "Start video", and "Share" buttons.



Department of
Physics

SAKSHI, IN ASSOCIATION WITH
UNIVERSITY OF APPLIED SCIENCES,
SYMBIOSIS INSTITUTE OF TECHNOLOGY

Collaborations
Materials and Coatings, Lotus Coating
(GSC-TOPS-19), Mitigating Dust
Accumulation and Repelling Liquids



National-Level Guest Lecture

SUPER HYDROPHOBIC COATINGS FOR SPACE APPLICATIONS

26th July 2024(Friday) @ 1 to 3 pm
Meeting Venue: Cisco WebEx (online)

Resource Person



Prof. Dr Meena Laad

Material Science Researcher, Professor (Physics) & Head,
Dept. of Applied Sciences,
Symbiosis Institute of Technology
Near Lupin Research Park,
Gram: Lavale, Tal:Tulshi,
Maharashtra 412115.

Meeting Venue:

<https://kluniversity.webex.com/kluniversity/j.php?MTID=m56839e23afaa2d073802e1ac5b0ea484>

Registration link:

<https://forms.office.com/r/MWXZsEqDiG>

No Registration fee and E-certificate will be provided to all participants.

For queries or more information regarding the Guest Lecture,

Convenor:

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Chair:

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