



KSCSTE - National Transportation Planning and Research Centre (NATPAC), an institution of Kerala State Council for Science, Technology and Environment (KSCSTE) is a premier R & D institution in the country which works on multi – modal system of transportation covering road, rail, water, air etc.

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## TransPedia Research Talk #35

### Development of Bio-Asphalt Using Rice Husk Ash: Synthesis, Characterization, and Performance Assessment

#### ABOUT THE TALK SERIES

NATPAC has been conducting a series of technical talks 'TransTech Talk Series', since February 2023, where industry experts and eminent researchers come together to discuss the latest advancements, challenges, and innovations in the field of transportation.

**TransPedia Research Talk Series** is yet another unprecedented and distinctive endeavor from NATPAC, envisioned to promote research for shared benefits, by disseminating knowledge on diverse topics from cutting-edge technologies to sustainable solutions. Desirably this also brings out a platform for young researchers across the globe to connect and interact to better shape the future of research and development in transportation.

#### ABOUT THE TALK #35

As pavement infrastructure faces increasing traffic demands, climatic variations and sustainability challenges, there is a growing need for innovative and environmentally friendly pavement materials. This talk explores the potential of bio-based asphalt technologies developed using agro-industrial by-product Rice Husk Ash (RHA). The presentation highlights the process of developing and evaluating bio-asphalt, with its impact on pavement performance and durability. The talk will further discuss the impact of RHA source, aging assessment, interaction mechanisms between asphalt and RHA, providing scientific insights into the design and optimization of sustainable asphalt binders. In addition, life-cycle assessment highlights the environmental advantages associated with the use of RHA in pavement construction.

#### Attendees

Transportation Professionals, Engineers, Urban Planners, Researchers, Industry Experts, Policymakers, Students, and anyone enthusiastic about the future of transportation.

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#### Dr. Bhavinlal K

**Pavement Expert,  
Surbana Jurong -  
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Dr. Bhavinlal completed his Ph.D. in Pavement Engineering from IIT Palakkad, under the guidance of Dr. Veena Venudharan, in the year 2026. He holds an M.Tech. in Transportation Engineering from NIT Trichy and B.Tech. in Civil Engineering from TKM College of Engineering. His research interests include asphalt modification, macro and micro level characterization, and life cycle assessment.

#### JOIN US:

**30.06.2026, 10:00 AM IST**

<https://tinyurl.com/transpedia35>



*Don't miss out on this opportunity to delve into the realm of transportation innovation. Join us for insightful conversations, connect with fellow industry professionals, and be part of shaping the future of transportation.*