



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.

Website: <u>www.natpac.kerala.gov.in</u>

Email: contactus.natpac@kerala.gov.in

TransPedia Research Talk # 28

Bio-Bitumen from Algae: a Sustainable Alternative

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 # 28

India's rapid economic growth is driving extensive road development, sharply increasing bituminous binder demand and associated greenhouse gas emissions. The search for a sustainable alternative material to conventional bitumen has led to the development of biobituminous binders from biomasses. Bio-oil and bio-char are prepared from diverse biomasses by high-pressure liquefaction at high temperatures and anoxic conditions, pyrolysis, or enzyme conversion. Subsequently, the biobitumen is prepared by adding the bio-oil/biochar to the bituminous binder. This talk will discuss the performance of algae-derived bio-bitumen and its potential for sustainable pavement applications.

Dr. Anjali Balan L

Assistant Professor Department of Civil Engineering NIT Calicut



Dr. Anjali Balan L received Ph.D. in Civil Engineering from IIT Delhi under the supervision of Dr. Aravind Krishna Swamy on the topic "Characterizing viscoelastic behavior of asphalt binder and mixture using a continuous approach." Her spectrum research interest areas include pavement materials, viscoelastic characterization, chemical characterization, pavement evaluation, bio-binders, sustainable pavements, etc.

JOIN US:

26.11.2025, 03:00 PM IST

https://tinyurl.com/transpedia28



Attendees

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

Follow us on:







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.