



An Interdisciplinary Outlook to Design Future Materials for Our Roadway Infrastructure

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Time: 17:00-18:00
Venue: Z409, 4/F, Block Z, PolyU

ABSTRACT

Bitumen is literally the “glue” that holds most of our roadway infrastructure together and by extension has a critical social and economic impact. A challenge faced by our industry is to produce binders that are consistent in quality and tailored for different pavement applications while using a raw material that constantly changes with time and source. This challenge is amplified by the increasing demand to use more recycled asphalt binder from old roadways and/or extend it using other sustainable and eco-friendly materials. Overcoming this challenge requires an integration of theoretical and experimental tools from various disciplines such as materials science and mechanics. This talk explores some examples to demonstrate that a better understanding of bitumen chemistry and physical chemistry can help us better understand engineering properties of the binder and design future sustainable and durable binders.

SPEAKER'S BIOGRAPHY

Dr. Bhasin is a faculty member and Temple Foundation Endowed Fellow in the Department of Civil, Architectural, and Environmental Engineering at The University of Texas at Austin. He is also the Director of the Center for Transportation Research (CTR), which is multi- and interdisciplinary center that conducts research on all aspects of transportation. He has an active research program in the area of pavements and materials supported by a range of private and public agencies from within and outside of the United States. He is involved in several national and international organizations and committees pertaining to research in the area of pavements and materials. He is a founding member and the Past President for the Academy of Pavement Science and Engineering, which is an international body of academics in this area. His research and teaching have been recognized through several prestigious awards and honors including the National Science Foundation CAREER award, the CUTC-ARTBA award for Outstanding Contributions to Research and Teaching in Transportation, the University of Texas System Regents Outstanding Teaching Award, and the American Society for Civil Engineers (ASCE) Walter L. Huber Research Prize.

*** All Interested Are Welcome ***

For further information, please contact Dr. Z. Leng at Tel. 27666007

Free Admission. Please reserve your seat with Mr. Zhifei Tan: zhi-fei.tan@connect.polyu.hk.
Certificates of attendance will be provided to participants if they attend the whole lecture.