

PAVEMENTS AND MATERIALS – ARE WE PROGRESSING OR REGRESSING?

Thursday, February 22, 2018

12:00 - 1:00 pm

[College Avenue Commons \(CAVC\) Room 455](#) (Parking)



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About the Talk

Current pavement design has evolved from early days of Roman roads via Tresaguet, McAdam and Telford roads, and AASHO Road test. Recently state-of-the art, mechanistic-empirical pavement design methods are being put into practice. Modern pavements built with mostly natural materials also have incorporated engineered materials, such as, Portland cement, asphalt binder, admixtures, additives, etc. Lately recycled materials are being incorporated due to sustainability and economic concerns. However, durability of modern pavements has become a challenge. In this presentation, Dr. Hossain will outline how pavement and materials education, research and technology transfer programs at Kansas State University (KSU) have helped the Kansas Department of Transportation (KDOT) increase asphalt pavement life by 20% resulting in projected savings of \$1 billion over next 15 years. He also will discuss challenges faced by KSU and KDOT in calibrating and implementing ASU-developed AASHTOWare Pavement ME Design software.

About the Speaker

Dr. Hossain is the Munger Professor of Civil Engineering and Interim Department Head at Kansas State University (KSU). He received his doctoral degree from Arizona State University (ASU) in 1990. A prolific teacher, Dr. Hossain has taught 14 different undergraduate and graduate classes at ASU and KSU from 1990 to date. In 2005 and 2007, he won the Chi Epsilon Undergraduate Teaching Excellence Award. From 2006-2009, he won the Chi Epsilon and ASCE Undergraduate Advising Excellence Awards. He was named the Outstanding Faculty Member by the ASCE Student Chapter in 2011 and 2012. In 2014, he won the Clair W. Mauch Steel Ring Advisor of the Year award from the KSU College of Engineering. Dr. Hossain has been the Principal or Co-Principal Investigator for 73 sponsored research projects worth well over \$6.8 million. He also has supervised 34 master's and ten doctoral students at KSU. He has authored or co-authored two book chapters and 228 technical publications. Dr. Hossain has made numerous presentations at various national and international forums. He was named the Dwight D. Eisenhower Faculty Fellow by USDOT in 1995, 2000 and 2003, and has been recognized with numerous other awards.

Refreshments provided by Graduate & Professional Student Association (GPSA). Event is open to the public.



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