

Az ülés helye (PLACE):

In cooperation with: BME Faculty of Civil Engineering **Department of Construction Materials and Technologies** and

Hungarian Road and Railway Association

Tárgy: Meghívó Ankétra - INVITATION

BME Building K. 1st Floor Room 87 1111 Budapest, Műegyetem rkp. 3.

Az ülés kezdete (DATE): 2 (Tuesday) April 2019, from 15.15 to 16.45

INVITATION - MEGHÍVÓ

Conductive Concrete for Infrastrucre Applications

Vezetőképes beton közlekedés építési alkalmazásokhoz -

Kedves Kolléga!

Tisztelettel meghívom a *fib* Magyar Tagozatának következő ülésére, amelynek programja lesz:

Conductive concrete is a material developed to achieve high electrical conductivity and high mechanical strength. Carbon powder, graphite and steel fibers are used to improve the electrical conductivity. In 1998, Yehia and Tuan developed a first-generation conductive concrete mixture. Because of the improved electrical properties, the material can be used in many infrastructure applications.

The conductive concrete was successfully implemented in a demonstration project for bridge deck deicing. Yehia and other research teams later evaluated the conductive concrete for cathodic protection electromagnetic shielding, and anti-static flooring applications. Currently, the research team is evaluating the feasibility of utilizing the conductive concrete for self-sensing applications. This will allow the its use in many health monitoring applications.

In this presentation, an overview of the development and evaluation of the conductive concrete for different applications will be shared and discussed. In addition, current research will be presented, and potential collaboration will be discussed.

Presentation is given in English.

Presented by - Előadó:



Prof. Sherif Yehia American University of Sharjah, Sharjah, **United Arab Emiretes** Deputy Head fib-UAE

Sherif Yehia earned a Ph.D. in Civil Engineering from University of Nebraska, Lincoln. Sherif Yehia has taught in Civil and Construction engineering departments at institutions such as University of Nebraska, Omaha and Western Michigan University, USA. Prof. Yehia is a registered Professional Engineer in the states of Nebraska and Michigan. He is the Co-developer of the newly conductive concrete application for deicing operations. His research interests include behavior of reinforced and prestressed concrete, composite structures, special concrete, infrastructure management systems and engineering database management and information technology. He has authored or co-authored more than 150 articles and technical reports published in internationally recognized journals / conference proceedings and hold 2 US patents. Prof. Yehia participated in several funded research projects from various federal, state, and private sources. Sherif Yehia has over 30 years of experience in research, construction material evaluation and teaching.

Prof. Sherif Yehia, e-mail: syehia@aus.edu

Civil Engineering Department, College of Engineering, American University of Sharjah PO Box 26666, Sharjah, United Arab Emirates, http://www.aus.edu Tel +971 6 515 2892, Fax +971 6 515 2979

http://www2.aus.edu/facultybios/profile.php?faculty=syehia https://www.aus.edu/conferences/ICIMART19

Budapest, 25 March 2019

Dr. Balázs L. György, s.k., a *fib* MT elnöke Honorary President of fib President of *fib*-Hungary