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

BUDAPESTI MŰSZAKI
ÉS GAZDASÁGTUDOMÁNYI EGYETEM
Építőmérnöki Kar - építőmérnöki képzés 1782 óta
Építőanyagok és Magasépítés Tanszék

PLACE - Az ülés helye: **BME Building K, 1st Floor Room 87 (K187)**
1111 Budapest, Műegyetem rkp. 3.

DATE - Az ülés kezdete: **9 (Thursday) Jan. 2025, from 15.00 – 16.00**

INVITATION - MEGHÍVÓ

We kindly invite you for the preseantation of:

Carla Costa:

"Hydraulic Binders Driving Forward Sustainable Development and the Circular Economy and Discussion"

The presentation can be followed online using the following TEAMS link: https://tinyurl.com/32z9f4d5

Short summary of presentation:

The lecture will be devoted to exploring the critical role of Hydraulic Binders in advancing the Circular Economy and addressing environmental challenges, acknowledging that progress in material circularity remains modest. It will emphasize the necessity of a paradigm shift regarding traditional research practices, focusing on systematic statistical design approaches to develop mathematical models. These models unravel complex interactions between binder constituents and material properties, enabling the optimization of compositions tailored to performance requirements or market needs. By improving product quality, enhancing production efficiency, and reducing waste stockpiles, this research-driven approach increases the competitiveness of the construction sector while supporting EU in meeting its environmental commitments.

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Carla Costa
is a tenured Coordinator Professor at Lisbon School of Engineering (ISEL). She earned her Licenciatura in 1991 and a PhD in 1997 in Chemical Engineering, both from Instituto Superior Técnico, University of Lisbon.
Her research interests include micro/nanostructure characterization of cement-based materials and their correlation with mechanical and physical properties; development of eco-friendly cement-based products to promote sustainability in construction; and integration of ICT in education to create innovative pedagogical resources.
Carla has authored numerous scientific articles in international journals and conference proceedings, as well as several book chapters. She has contributed to many research and innovation projects, often involving industry partnerships and competitive funding.
She received the Green Project Award (2017) in the Sustainable Research and Development category for leading an innovative research project promoting sustainable practices. She also led R&D activities that resulted in the industrial-scale production of an adhesive cement, exemplifying the principles of the Circular Economy.
Carla teaches undergraduate and graduate Civil Engineering courses and has led educational research projects focused on improving teaching methodologies through technology integration.

Budapest, 5 Jan. 2025

Prof. Balázs L. György,
President of ***fib***-Hungary

Assoc. Prof. Salem G. Nehme,
Head of Department, Dept. of Construction Mats and Technologies
Budapest University of Technologies and Economics