

## DICAM DIPARTIMENTO DI INGEGNERIA CIVILE, CHIMICA, AMBIENTALE E DEI MATERIALI

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## Surface characterization as a basis for the evaluation of slip resistance and cleaning behavior of ceramic tile surfaces

Dr. Marcel Engels

Abstract: The presentation will address the possibilities of topography measurement as a tool to evaluate slip resistance properties, as well as the cleaning properties of ceramic surfaces and their durability. The basics of the topography measurement and the background of the different surface parameters, as developed within the European SlipSTD Project, will be discussed in the context of the current research. The implications of the results on the standardization of slip resistance measurement and the development of new functional test methods will be highlighted.

Short Bio:

Marcel Engels made the degree of Engineer Chemical Technology at the Technical University of Eindhoven Netherlands before he started working for Sphinx Sanitary ware and Tiles in the Netherlands as head of Ceramic Technological Support in 1991. From 1997 on he was Project Manager Ceramics Department of the TNO-TPD Institute for Applied Physics Eindhoven Netherlands. Since 2002 he is Project Manager Silicate Ceramics at the Forschungsinstitut für Anorganische Werkstoffe – Glas/Keramik GmbH Höhr-Grenzhausen. Throughout his career he has, as Dutch delegate in the CEN/TC 67, been involved in development and application of tile standard tests, including slip resistance on ceramic tiles. As FGK project manager he is specialized in surface characterisation and slip testing, which was the basis for his participation in international projects like the SlipSTD Project. He furthermore is involved in assessments and expertise reports on floorings and has presented on this topic at expert meetings and national and international symposia.