

Institute of Structural Mechanics Faculty of Civil Engineering Brno University of Technology

Pozvánka na přednášku / Lecture Announcement

Název / Title

Stáž na FAST VUT v Brně v rámci projektu MeMoV II:

Use the ATENA program for the analysis of concrete elements modified with waste materials

Přednášející / Lecturer

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Jazyk/Language English

Wednesday 14. 12. 2022, 10:00 h

FCE BUT, Brno, Veveří 331/95, budova / Building C, místnost / Room 421 zasedací místnost ústavu STM

Abstrakt / Abstract

The use of the ATENA program for analyzes of reinforced concrete structures is becoming more and more common. Its advantage over other programs is caused by the number of concrete models and the way of loading the concrete elements. This presentation will focus on the use of the ATENA program to analyze concrete elements made of selected waste materials. Some analysis will focus on concrete elements made of waste sand. The beams (0.15×0.20×3.3 m) in the four-point bending test were modelled and next analysed. The numerical results of deflection and cracking of beams under short time load will be presented and will be compared with the results of experimental studies. Additionally, the results of different elements presented in previously presentation in October 2022 will be compared with the numerical analyzes in the ATENA program.

Přednášející / Lecturer

He is a successful D.Sc. Ph.D. M.Sc. B.Sc. qualified scientist, associate professor at Koszalin University of Technology, highly experienced engineer of concrete structures. He has a wide experience as a concrete researcher, mix designer, quality controller of concrete production (both ready-mix and precast elements) and concrete structures lecturer. His teaching interests focus on concrete structure and computer aided structural engineering. He is Head of the Department of Construction and Building Materials, previously Head of the Laboratory of Materials Strength and Civil Building Structures at Koszalin University of Technology. He is an active member of several organisations such as Technical Committee in Polish Committee for Standardization, Polish Chamber of Civil and Structural Engineers and Polish Union of Construction Engineers and Technicians. In 2008 he obtained qualifications to structural design and to supervise construction works with no restrictions. He is an alumnus of "TOP 500 Innovators – science, management, commercialization" programme (University of California Berkeley, USA) and a participant of multiple foreign internships (Czech Republic, Romania, Finland, Slovakia). His current research and technical interests cover: properties of concrete and SFRC, durability and serviceability of concrete and SFRC elements, non-destructive testing of concrete, SFRC and other cement based composites, green concrete, waste and recycled aggregate. He is an author of over 40 scientific papers in various fields of concrete technology and concrete structures published in proceedings and journals.

Organizátor / Organizer

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Projekt / Project

Mezinárodní mobilita výzkumných, technických a administrativních pracovníků výzkumných organizací (MeMoV II) CZ.o2.2.69/o.o/o.o/18_o53/oo16962