

Vorlesungsverzeichnis

Sonderveranstaltungen

Sommer 2022

Stand 30.11.2022

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Summerschool P3: Use of Polymer-Modified Concretes (PCC) for Innovative Refurbishment Solutions

A. Flohr

Integrierte Vorlesung

Mo, Einzel, 13:30 - 15:00, Project introduction, 22.08.2022 - 22.08.2022

Di, Einzel, 13:30 - 17:00, Coudraystraße 11 C - Seminarraum (geologische Sammlung) 202, PCC: Basics / Load deformation behavior, 23.08.2022 - 23.08.2022

Mi, Einzel, 09:00 - 12:30, Coudraystraße 11 C - Seminarraum (geologische Sammlung) 202, Particle interactions / PCC for innovative refurbishment solutions, 24.08.2022 - 24.08.2022

Do, Einzel, 11:00 - 12:30, Coudraystraße 11 C - Seminarraum (geologische Sammlung) 202, PCC: Modelling of PCC load deformation behavior, 25.08.2022 - 25.08.2022

Do, Einzel, 13:30 - 17:00, MATHLAB-Übung, 25.08.2022 - 25.08.2022

Mo, Einzel, 13:30 - 17:00, 29.08.2022 - 29.08.2022

Di, Einzel, 13:30 - 17:00, PCC: fresh concrete properties, 30.08.2022 - 30.08.2022

Do, Einzel, 09:00 - 12:30, PCC: hardened concrete properties, 01.09.2022 - 01.09.2022

Beschreibung

Concretes are modified by the addition of polymers in order to improve the durability and the adhesive strength and due to that measure they suit optimal for refurbishment applications. The microstructural changes in the binder matrix, which consists of both cementitious and polymer components, will be studied. Afterwards it will be analyzed how they influence the macroscopic properties. The students will perform and analyze laboratory tests on different pure polymer specimens and selected concrete specimens in order to better understand the microscopic origin of the macroscopic behavior. The link between the micromechanical and macroscopic properties is briefly established using a continuum micromechanics approach. Different innovative restoration applications are addressed, in addition some examples will be shown for the use of PCC for constructional purposes.