UNIVERSITÀ DI TRENTO
Dipartimento di Ingegneria Industriale

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SEMINAR ROOM - POLO FERRARI 2

Construction materials are ubiquitous, and their significant CO_2 impact calls for the urgent development and use of sustainable alternatives. Two complementary routes can be followed: replacing cement with supplementary or recycled cementitious materials that, once activated, form the hydration products responsible for strength; or earthen construction, which hardens by drying and can be tailored through dispersion–flocculation agents and aggregate packing. Both bring new physico-chemical complexity that governs how these materials are processed and how they perform once in place. This talk shows how rheology, particularly small amplitude oscillatory shear (SAOS), complemented by other physico-chemical techniques, tracks the build-up of cohesion in time and links it to hydration or drying mechanisms to optimise manufacturing. Hands-on examples from our laboratory will show why a fresh approach matters!



Speaker:
Prof. Teresa Liberto
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A fresh approach to sustainable construction materials

DII SEMINAR



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