

Damage in cement-based materials by the Alkali-Aggregate Reaction: detection and characterization by X-ray Tomographic Microscopy

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We investigated the usefulness of X-ray Tomographic Microscopy (XTM) as a tool for the detection and characterization, at multiple scales, of the damage produced by the Alkali-Aggregate Reaction (AAR) in cement-based materials. The goal of our broad experimental campaign was to assess the potentiality of XTM as a non-destructive technique complementary to other 2D microscopy methods that require invasive specimen preparation.

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