Case Studies in Construction Materials

Article type: Full Length Research Article

Title: Characterization of Steel Corrosion in Alkali-Activated Mortars Using Advanced Techniques

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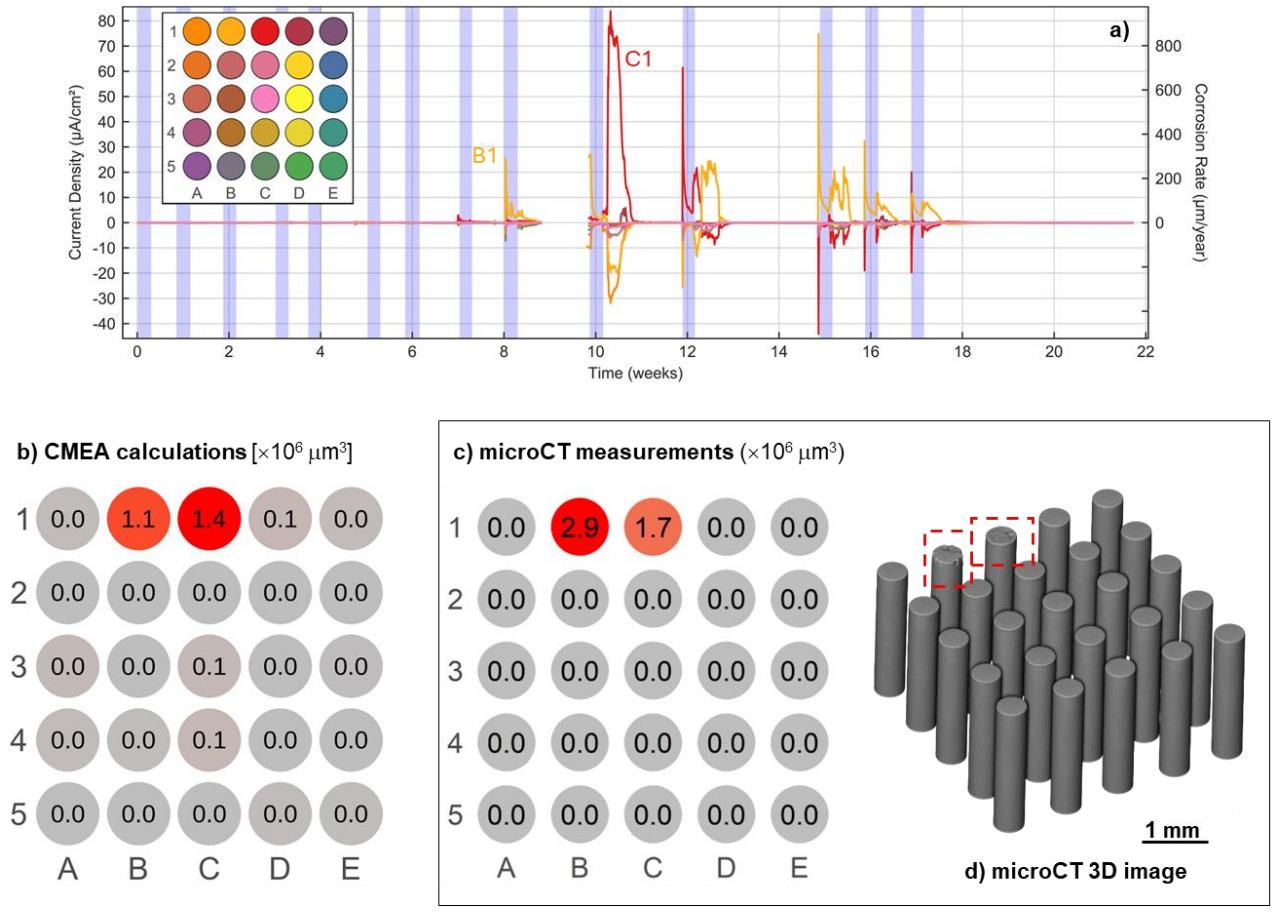
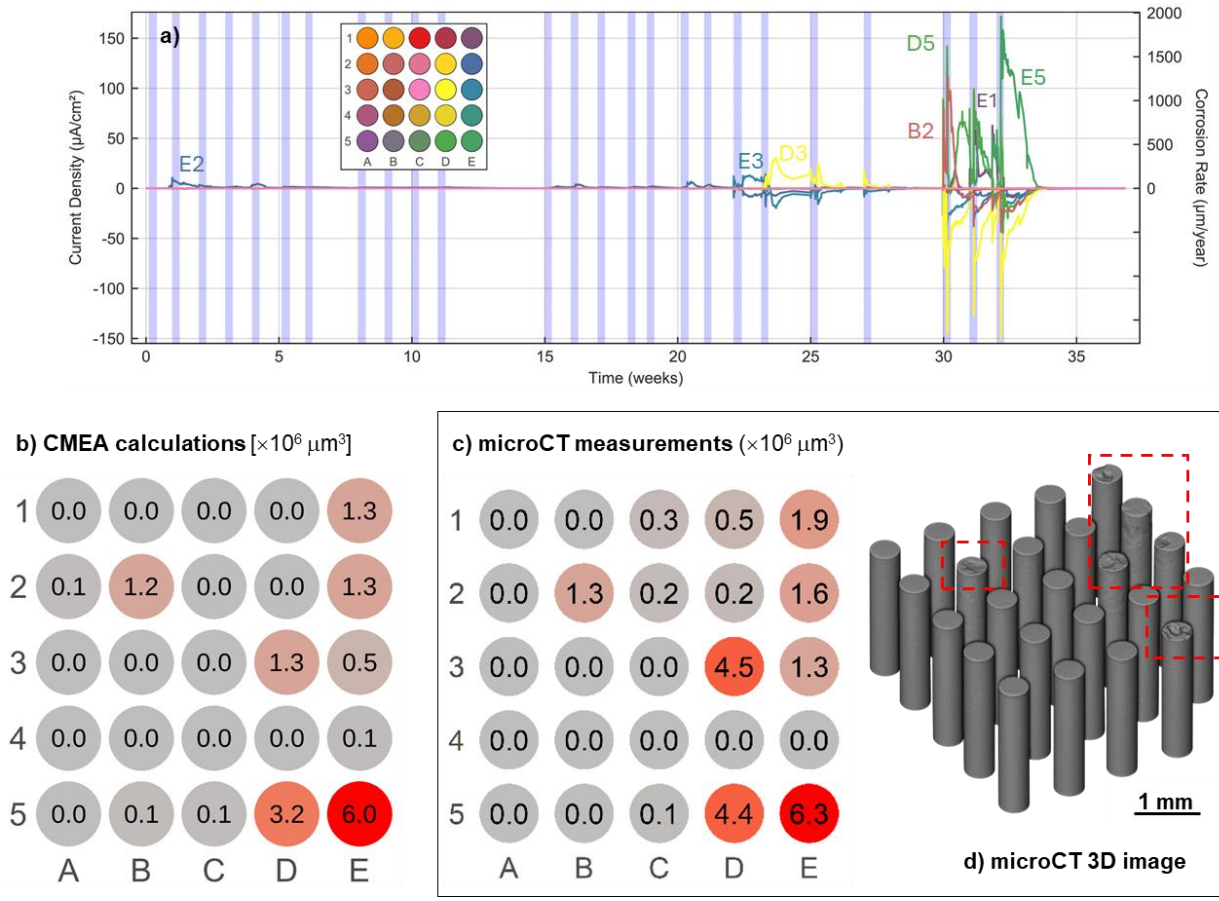
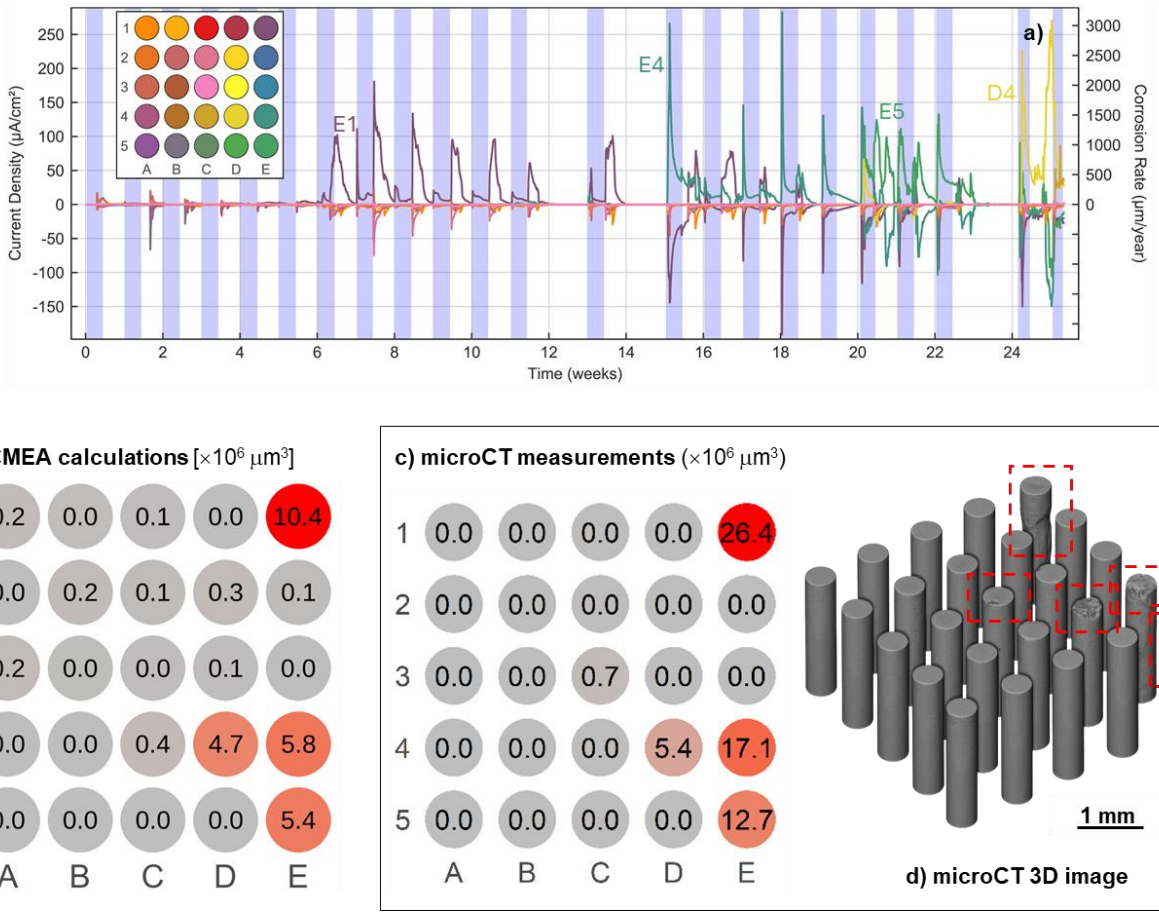
Supplementary material:



Supplementary Fig. 1. A CMEA sensor embedded in the FA8 (fly ash) alkali-activated mortar: a) continuous measurements of the ANODIC (positive, j_{corr}) and CATHODIC (negative, j_{cath}) current densities (grey sections = wetting, white sections = drying), b) corrosion damage calculated from the measured CMEA anodic currents *(Dv)*, c) corrosion damage measured from the microCT scans, and d) a microCT 3D image of the CMEA folllowing the period of exposure.



Supplementary Fig. 2. A CMEA sensor embedded in the MK2 (metakaolin) alkali-activated mortar: a) continuous measurements of the ANODIC (positive, j_{corr}) and CATHODIC (negative, j_{cath}) current densities (grey sections = wetting, white sections = drying), b) corrosion damage calculated from the measured CMEA anodic currents *(Dv)*, c) corrosion damage measured from the microCT scans, and d) a microCT 3D image of the CMEA following the period of exposure.



Supplementary Fig. 3. A CMEA sensor embedded in the S3a-661 (slag) alkali-activated mortar: a) continuous measurements of the ANODIC (positive, j_{corr}) and CATHODIC (negative, j_{cath}) current densities (grey sections = wetting, white sections = drying), b) corrosion damage calculated from the measured CMEA anodic currents *(Dv)*, c) corrosion damage measured from the microCT scans, and d) a microCT 3D image of the CMEA following the period of exposure.