

What is it used for?

Imaging

Back Scattered Electrons (BSE) with atomic number (Z) contrast

Chemical composition

Energy Dispersive X-Ray Spectroscopy (EDX/EDS) for spatial distribution and quantification of elements in cement

SEM Quanta



Applications

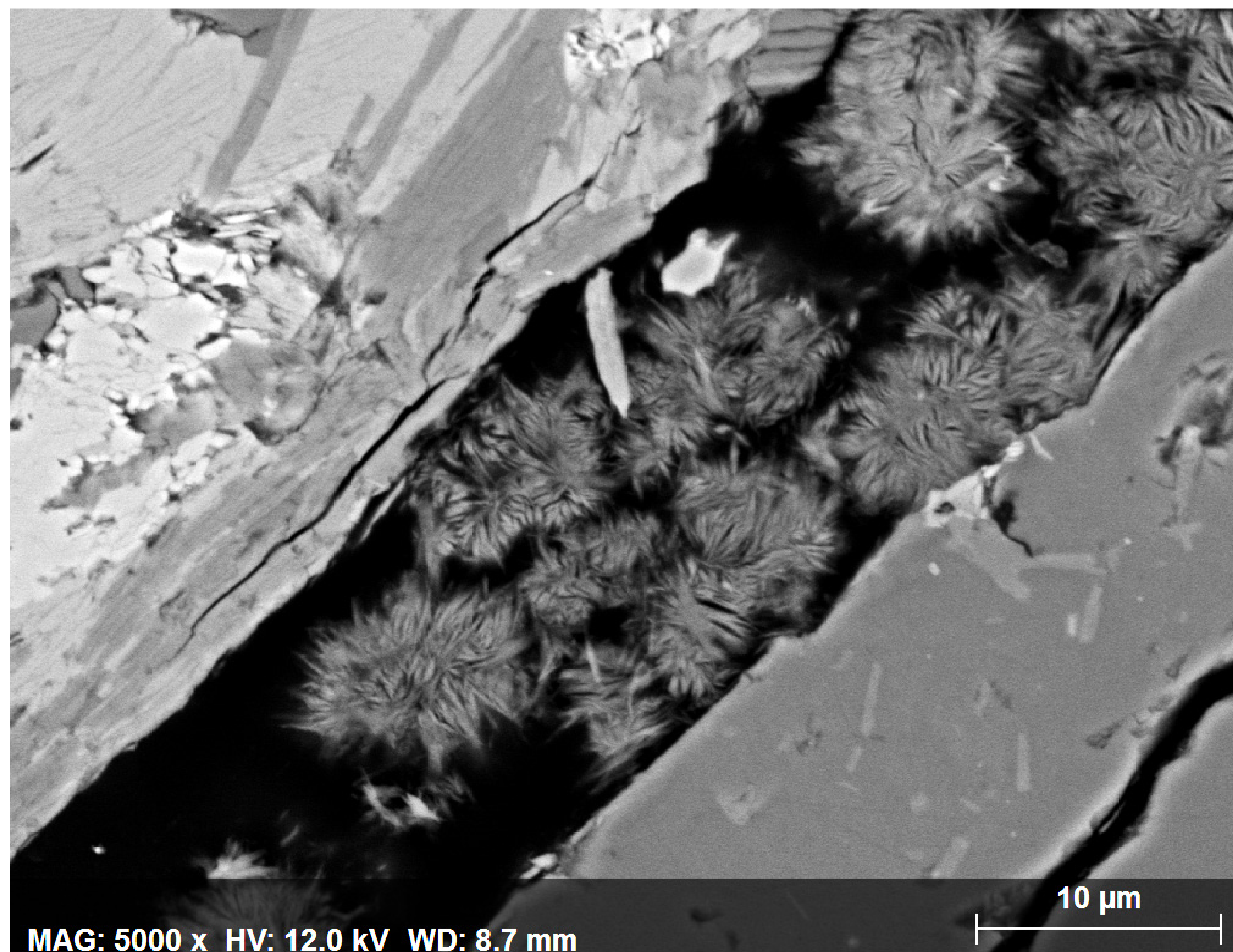
Hydration studies

Composition and 2D morphology of C-S-H

Composition and 2D morphology of ASR

Porosity quantification

Example : SEM image of ASR “hedgehogs” growing inside a crack.



Example: Elemental distribution of hydrated cement

