

High Resolution SEM

What is it used for?

- ❑ For doing SE images at high resolution (magnifications up to 150'000-200'000x)
- ❑ On powders or fractured surfaces
- ❑ Need to coat samples first, either with high quality carbon or with iridium (4-5 nm)

Applications

- ❑ Hydration studies
- ❑ Morphology of hydrates
- ❑ Morphology of raw materials

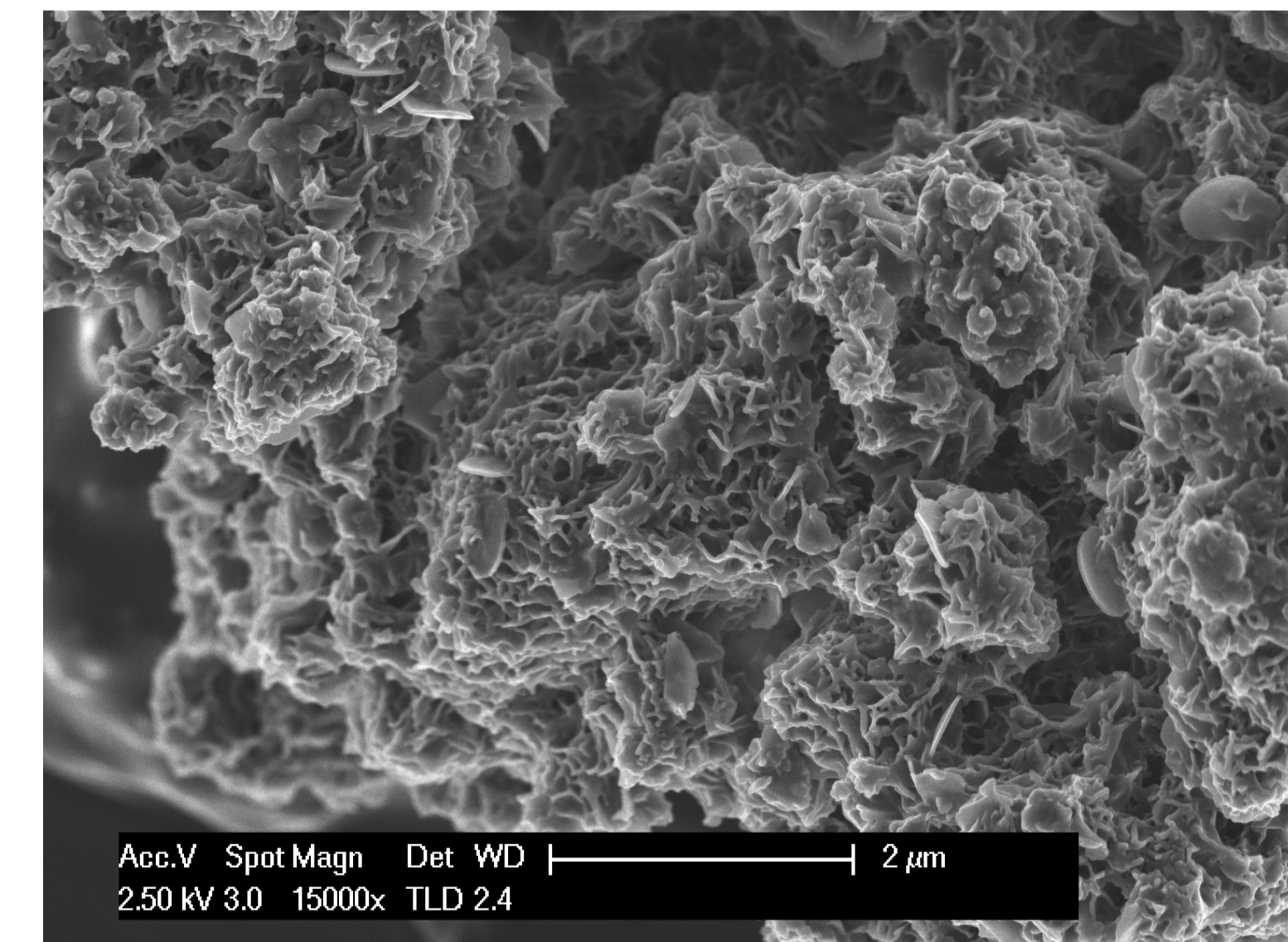


FEI SFEG Sirion

Examples



HR-SEM image of alite surface after 1 hour of hydration : nucleation of C-S-H crystals can clearly be distinguished.



HR-SEM image of synthetic C-S-H whose morphology is clearly foil-like.