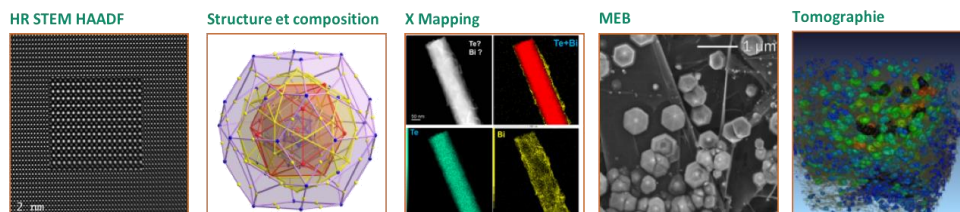


Our services

Structural and microstructural characterization



ANALYSES

- Identification of crystalline phases (DRX, MET)
- Identification of crystalline structures (DRX, MET)
- Determination of grain size (MET, MEB, DRX)
- Analyses of residual constraints (DRX)
- Identification and quantification of chemical elements by energy loss spectroscopy (TEM/STEM-EELS) and X-ray photon energy dispersive spectroscopy (STEM-EDS)
- Morphology analysis (SEM, DRX)
- Determination of layer thicknesses, layer roughness (SEM, DRX)
- Determination of valency (Mössbauer)

SAMPLES

- Powders
- Massive samples
- Thin films
- Nanoparticles
- Organic / Inorganic
- Insulator / Conductor
- Monocrystal / Polycrystal

KEYWORDS

DRX, SEM, TEM, STEM, EDS, EELS, Tomography, Crystal Structure, X-Map, Mössbauer

IMAGING

- Surface image (SEM):
 - Topographic Image (SE)
 - Chemical image (BSE)
- High resolution imaging in TEM/STEM with a resolution of 0.12 nm in TEM and 0.08 nm in STEM
- Conventional TEM imaging (BF, DF)
- Electronic diffraction in TEM
- X-mapping (EDS) in STEM mode
- X-ray tomography: 3D image (DRX)

OPTIONS

- Analysis under different controlled atmospheres: neutral, reducing or oxidising (DRX)
- Temperature-dependent analysis between 10 K and 2573 K (DRX)
- Specimen holder for *in situ* experimentation (TEM):
 - Heated up to 1000°C
 - Cryogenic up to 77K

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