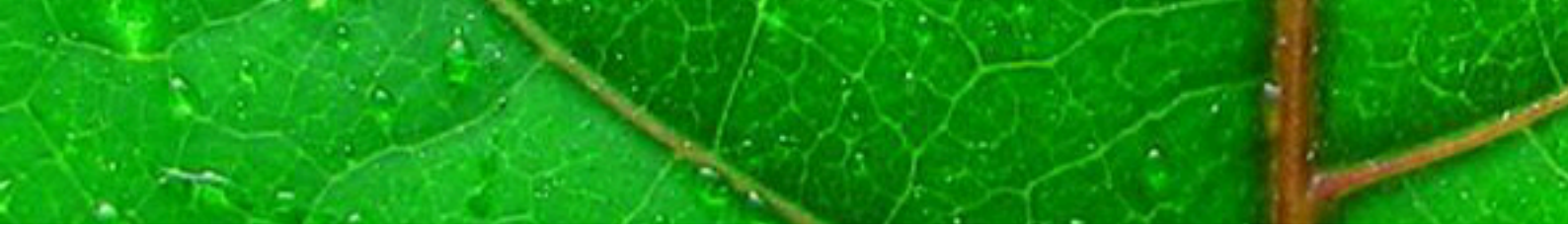

Platform “I3”

Inorganic Isotopic Imaging

Platform I3 offers analytical capabilities for isotope ratio measurements, characterization of nano-objects, high-sensitivity metal analysis by laser ablation, and imaging of very small-scale chemical elements (cells).

Fields of application

- Geosciences
- Environment: characterization of nano-objects,
- Agri-food/health: traceability of origin, understanding metabolic processes in cells

Themes and skills

- Isotopy of Metals, Metalloids, Radionuclides ... by Mass Spectrometry with Inductively Coupled Plasma Ionization Source, High Resolution & Multicollection of Ions.
- Qualitative identification, adulteration, traceability of origin.
- Elementary imaging,
- Geochronological dating (U, Pb & Th)
- Biomineral analysis, forensics, traceability (counterfeits, adulteration)
- Characterization of chemical elements and their nanoscale isotopes on the surface of a sample and/or subcellular elements in the field of life and medicine.

Equipment and Instruments

- High resolution ICP-MS (GC coupling possible)
- FFF-UVDAD-MALS-ICPMS couplings, preparative separation systems for frontal and tangential ultrafiltration
- Femtosecond laser
- quadrupole ICPMS
- NanoSIMS