



# Surface and interface characterization

## Responsible

-  Hervé Martinez

## Field of applications

- Materials: energy storage, corrosion study, microelectronics, catalysts
- Environment, Health: nanoparticles
- Polymers: pneumatic, recycled materials

## Skills

- Surface spectroscopic analysis: chemical detection, identification of local chemical environments (speciation), quantitative analysis
- Chemical mapping of surface elements
- Morphological analysis of a Surface: measurement of roughness and surface mechanical properties
- Electronic structure of materials
- Transfer and analysis of controlled atmospheric samples/ Cold Analysis (frozen samples T N2)
- Ability to analyse samples without contact with the atmosphere

## Equipment

- Spectrometer XPS KRATOS
- Spectrometer XPS Thermo Kalpha
- Spectrometer XPS Thermo Escalab
- Spectrometer Auger AES Jeol
- Spectrometer TOF-SIMS Phi Electronics TRIFT 5
- Near-fiel scanningMicroscopy AFM/STM Bruker