



We offer geological solutions and consultancies; we have a top-notch scientific multidisciplinary team.

Our laboratories are equipped with modern technologies for the development of projects in different areas of the industry .

COMPOSITIONAL ANALYSES

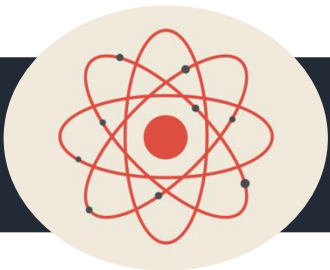
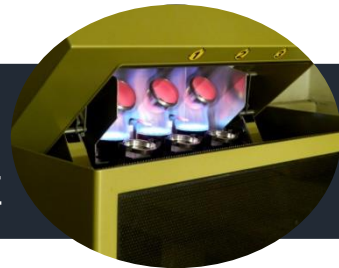


X-RAY DIFFRACTION

Identification and quantification of crystalline, amorphous and clay phases in different types of materials.

Quantitative elemental analysis different types of materials.

X-RAY FLUORESCENCE

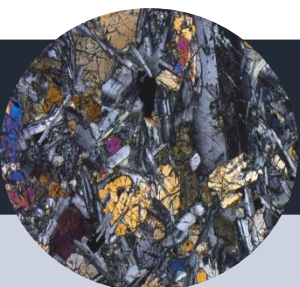


ICP-MS

Trace elements quantification and determination of isotopic compositions.



MICROSCOPY



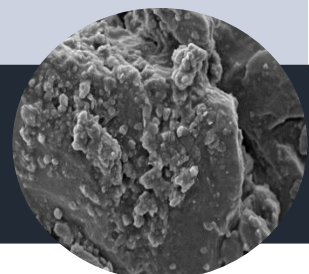
DIGITAL OPTICAL MICROSCOPY

We fabricate our thin sections for analysis under refracted and reflected light . Then using OneGeo^{MR} , our in-house system for creating high definition digital images of thin section and software for petrographic analysis, we prepare a detailed petrographic description of every sample

Morphological analyses of surfaces with backscattered electrons images (BSE).

Chemical analyses and mineral identification with energy-dispersive X-ray spectroscopy (EDX).

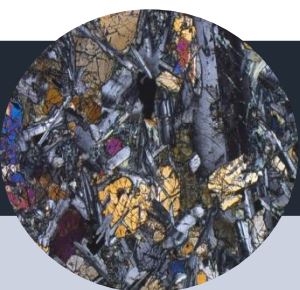
Porosity analyses, pore throat, micro-fractures and micro-deformation identification.



ELECTRONIC MICROSCOPY



DIGITAL MICROSCOPY



DIGITAL OPTICAL MICROSCOPY

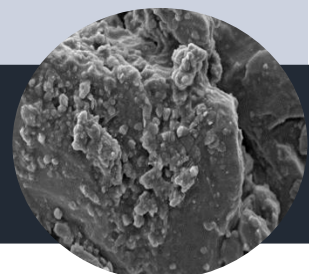
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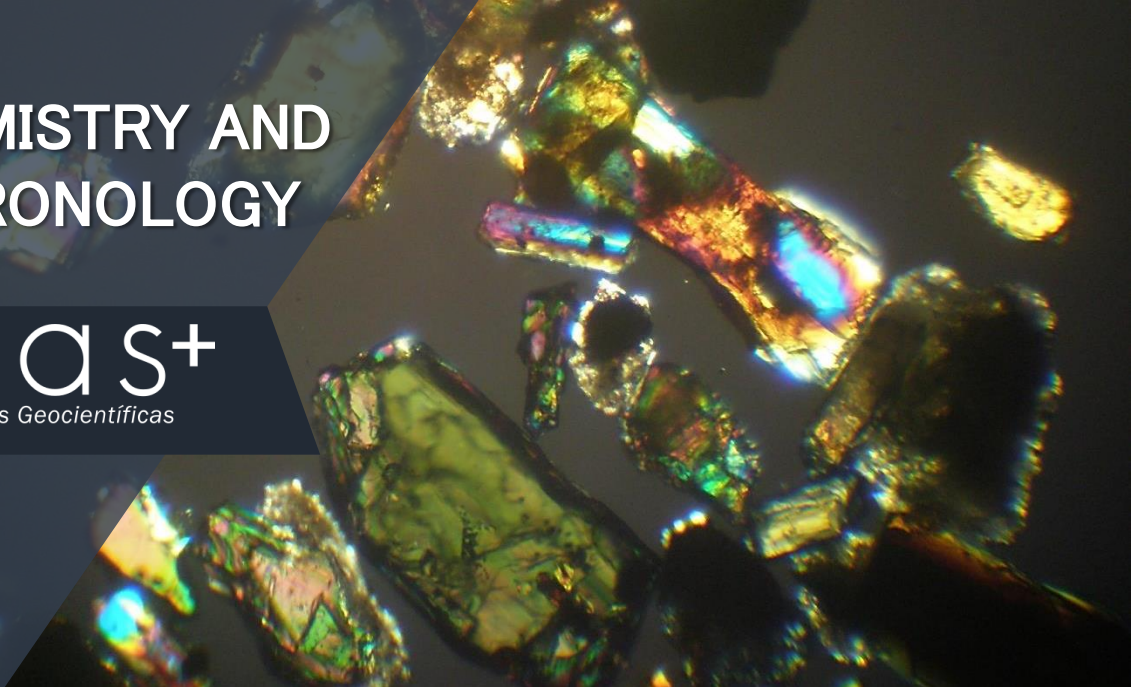
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ELECTRONIC MICROSCOPY



GEOCHEMISTRY AND GEOCHRONOLOGY



RADIOMETRIC DATING

Whole rock and/or mineral
radiometric dating:

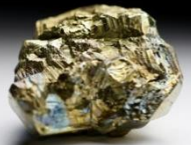
U-Pb	Sm-Nd
Pb-Pb	Ar-Ar
Rb-Sr	K-Ar

Fire assay for Au, Ag and PGE.

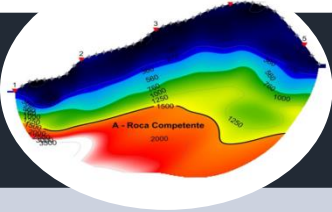
Heavy minerals preparation and
concentration.

Thin section preparation for
fluid inclusions.

GEOCHEMISTRY AND SAMPLES PREPARATION



GEOFYSICS



SEISMIC REFRACTION

Generation of P-wave velocity profiles.

Soil profiles clasification from S-wave velocity ranges.

Barton method (1996) implementation for quality rock analysis

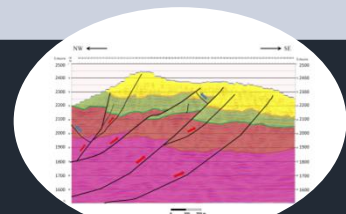
Design and acquisition of 2D seismic programs.

Common midpoint (CMP) velocity analysis, stack and post-stack migration.

Compilation and interpretation of seismic information, well logs and geochemistry of interest areas.

2D movement (transversal sections and structural maps) from seismic information.

SEISMIC REFLECTION



GEOPHYSICS



MICROSEISMIC MONITORING



Location (X,Y,Z, time) of microseisms

Determination of magnitude of the events

Temporal analysis of the location

Focal mechanisms analysis

High-accuracy relocation of the repetitive microseisms



SAMPLES PRESERVATION



Our facilities have a volume of more than 250 m³; they are equipped with excellent shelves for temporary storage of outcrop samples, cores and cuttings.





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