RNM-374 Earth Sciences and Geological Engineering

Coordinator: Dr. Francisco Javier Rey Arrans (jrey [arroba] ujaen [punto] es)

The Earth Sciences and Geological Engineering Research Group comprises researchers from Jaén University, Granada University and the Junta de Andalucía regional government, and has its main headquarters at the Linares Scientific Technological Campus. These facilities represent the clear commitment of Jaén University to Research, Development and Innovation. The group has three main objectives: first, scientific research (R&D & Innovation) in Geological Engineering, Geology, Hydrogeology, Exploration of Mining Resources, Environment, Civil Engineering and even archaeological auscultation. This research is funded through national and international projects. Second, technical-scientific collaboration/advisory service with and for the different administrations as well as private and public companies. Third, training of researchers and technicians in these fields.

Research lines

- Analysis of aquifer systems
- Groundwater contamination
- Hydrogeochemistry of mining areas
- Geochemical characterization of soils and sediments
- Geological risks
- Geophysical and geochemical prospection in hydrogeology, mining, geotechnics and environment
- Auscultation of landslides associated with linear constructions
- Thermodynamic modelling of metamorphic processes
- Devolatilization reactions in subduction zones.

Related services and products

- Hydrogeological and hydrogeochemical studies
- Analysis of aquifer system vulnerability
- Interpretation and modeling of hydrochemical data
- Construction of protection perimeters for capturing groundwater
- Contamination of waters and soils
- Applied geophysical prospection: hydrogeology, environment, civil engineering and geotechnics, mining and archaeology
- Geological advice and reports on groundwater, mining, geotechnics and civil works
- Specialization courses in Earth Sciences and Geological Engineering

Spanish website: https://bit.ly/2QMwHnZ