

**National Institute for Research – Development in domain of Geology, Geophysics,
Geochemistry and Remote Sensing - Geological Institute of Romania.**

Since the Geological Institute of Romania was established in 1906, its main goal was the geological mapping of the national territory, to which successive assignments have been added relating to geochemistry, geophysics, agro-geology, engineering geology, geological heritage conservation, etc.

Throughout its over 100 years of continuous activity, GIR has acted as Romania's main centre for geological research, bringing about continuous and balanced development of individual branches of geological science, accompanied by public dissemination of the resulted knowledge and information.

Today, as any other time, GIR is able to approach any earth science topic, due to its highly qualified staff and knowledge of the whole of the Romanian territory. In order to fulfil its assignments as a national geological survey and to harmonize its activity with the European trends set forth by the Association of Geological Surveys of the European Community (EuroGeoSurveys), of which GIR has been a full member since February 2006, GIR has reshaped its activity by developing its survey capabilities and its abilities to act as a geological advisor to policymakers and administrative actors.

The main research and development topics assumed by GIR consist of basic and applied research, technological progress, development of studies and prognoses of public interest generally regarding:

- Deciphering the geological structure and the lithosphere evolution of the national territory;
- Setting up, editing and printing of geological, hydrogeological, geophysical and geochemical maps at various scales covering the entire territory of the country;
- Identification and outlining of areas containing mineral resources;
- Setting up geological, geophysical, geochemical and remote-sensing methods, procedures and techniques in order to identify mineral resources, geothermal areas, assessment of risk and pollution due to industrial activities, especially in mining and oil-bearing areas;
- Risk assessment and establishment of regulations for mitigation of geological hazards;
- Maintenance, management and development of national fund for geological data, including preservation and valuation of National Drill Core Repository and National Geological Museum;

- Continuous measurements of the geomagnetic field by National Geomagnetic Observatory in close relationship with international INTERMAGNET and MagNetE programmes;
- Technology transfer in the field of geological research by dissemination of various geothematic cartographic materials designed to meet various needs (infrastructure, exploration, civil engineering), and by editing the Romanian Journal of Earth Sciences;
- Public promotion of Earth Science domain using the National Geological Museum facilities to organise for pupils, students and general public: thematic workshops, conferences, temporary exhibitions, etc.

GIR's international cooperation activities in the field of earth sciences have been continuously developed by virtue of bilateral agreements at institutional and government level, and international programmes founded by European Union as: 7th Framework Programme, South-East Transnational Cooperation Programme, Competitiveness and Innovation framework Programme (CIP ICT-PSP), INTERREG Programme. Theirs topics are oriented to the most important issues resulting from the pan-European needs for harmonization of geologic observations, knowledge and procedures.

The following are, using the acronyms and short definitions, projects where GIR has been a partner or subcontractor:

- ✓ SafeLand - landslide risk management in Europe,
- ✓ DIGISOIL - mapping soil properties,
- ✓ PanGeo - geological information in support of GMES,
- ✓ EuroGeoSource - information system for sustainable supply with energy and mineral resources,
- ✓ Thermomap - assessment on superficial geothermal resources,
- ✓ ProMine - mineral resources for nano-particle products,
- ✓ OneGeology – creating of a digital geologic map of the world,
- ✓ OneGeology Europe "plus" – creating of a digital map of Europe using INSPIRE specifications,
- ✓ SARMa - aggregate resource management in South-East Europe,
- ✓ SNAPSEE - planning the sustainable aggregate supply in South-East Europe,
- ✓ GASH - European black shale database,
- ✓ ERCIP - European river corridor improvement.