Geophysical Research Abstracts
Vol. 18, EGU2016-2742-1, 2016
EGU General Assembly 2016

Enviromental Geology and Geophysics Laboratory- present and perspectives in gold mining industry

Raluca-Mihaela Maftei
Geological Institute of Romania, Geo-Hazard, Bucharest, Romania (mafteir@yahoo.com)

The general strategic objective proposed by the project is in line with the objectives and priorities of COP, pursuing the infrastructure development of the existing R-D and having as priority the establishment of new centers (laboratories) equipped with research tools, intangibles and "state-of-the-art" IT equipment, aiming at the increase of scientific, theoretical and technical value of the studies conducted by GIR. This desire of optimization derives from the need to assess natural hazards from a multidisciplinary perspective in terms of climate change, pollution degree throughout the country, the preservation and sustainable management of natural resources and biodiversity in line with the European Research Area in the field of Environment especially in the management of the risk induced by climate change on resources.
The climate change induced-risk management and its impact on resources must consider the causes, prevention and reduction of medium and long term environmental change. Research on integrated assessment of human impact on the environment, monitoring the development of natural and/or anthropical geosystems rely on an infrastructure represented by properly equipped laboratories, high performance equipments, structures and logistics specific to the research at the European level.
The main objective of the project as well its title suggests, was to create a performance research infrastructure, multi-disciplinary, multi-user, plus the creation of new jobs by attracting young people and professionals with expertise in geology and environmental geophysics. By default, the project puts the central objective of increasing the quality and competitiveness of national research. To achieve the overall objective, the project LGGA proposes following specific objectives:
A. Create one modern research laboratory for studying natural hazards, with particular reference to landslides, desertification, soil erosion, soil, subsoil and water with various substances, the effect of global climate change on the environment etc .;
It involves:
B. Development of infrastructure CDI - to increase the quality and competitiveness of the national research.
The specific objectives refer to the acquisition of advanced equipment compatible with the potential partners in the country and abroad, in order to reduce disparities in development of research infrastructure necessary data acquisition, processing, as well as to attract young specialists that can contribute substantially to achieving results directly applicable in protecting the environment. It also aims to increase the quality and range of products that can be offered to the beneficiaries of private and local and / or county.
The following equipments were purchased: terrestrial laser scan, autonomous airborne system- UAV, magnetometer, seismic equipment, GPR, electrometry equipment upgrade, specific software etc. They will be of great use in potential gold areas and gold post mining effects study.
This work is presented within the framework of SUSMIN project.