

Modena, mapping and monitoring of landslides will be the centrepiece of a two-day meeting at the University - (Translation)

The Department for Earth Sciences of the University of Modena and Reggio Emilia will host the 4th Workshop of the European project MONITOR II "Practical Use of Monitoring in Natural Disasters Management". The main objective of the conference is to further develop the processes for analysing and communicating natural hazards by improving the availability, reliability and communicability of hazard maps and contingency plans. Unfortunately recent disasters affecting Italy as well as other areas of the earth have stressed the urgent necessity to achieve progress in this field.

Prof. Daniela Fontana, the Director of the Department for Earth Sciences of the University of Modena and Reggio Emilia pointed out that unfortunately geological risks emerging from landslides are of great relevance. It has been reported during recent days that a regional train running up the railway line of the Vinschgau was derailed by a landslide with tragic consequences in terms of human lives. There is no doubt that driven by innovative research the development of new, science based applications for the prediction, prevention and mitigation of geological hazards especially those related to landslides are among the strategic objectives pursued by the Department for Earth Science. This project will contribute strongly to the enhancement of existing knowledge in this area, generating also important findings relevant for the protection of populations exposed to such risks.

A Workshop will be held from 9.30 am on Wednesday, 14 April to Friday, 16 April 2010 at the Department for Earth Sciences (Largo S. Eufemia, 19) in Modena, bringing to this city renowned experts active in this area who have joined this triennial project focusing on "protection and improvement of the environment" and supporting interventions aiming at "improving the prevention of environmental risks". The project has been launched in June 2009 and is funded by the South East Europe Transnational Cooperation Programme (SEE).

The University of Modena and Reggio Emilia is participating in this project with its research unit for applied geology of the Department for Earth Sciences coordinated by Prof. Alessandro Corsini. The research unit in Modena has been in particular entrusted with the analysis of scientific and technical issues related to the prevention of hydrological risks and the continuous monitoring of landslides.

Prof. Alessandro Corsini from the University of Modena and Reggio Emilia (picture) pointed out that the continuous monitoring of landslides is a significant outcome of practical relevance

for the management of hydro-geological risks, including the prevention as well as the prediction of events. In recent years considerable scientific progress has been achieved, leading to the development of innovative monitoring systems as well as to an effective use of data enabling the comprehension and mitigation of the analysed phenomena. One of the issues which have to be addressed is undoubtedly the integration of these important information in procedures for risk management, using for this purpose information support and management systems able to process data in real time. In this context, the effort of our research group is an intensive one, expressed among others in the participation in European projects such as MONITOR II, as well as in the continuous and active cooperation with various services, such as the Civil Protection Service and the Technical Service for Torrent Control of the Region of Emilia Romagna and the autonomous province of Bolzano.

The expected results in MONITOR II will include the development of procedures and information tools necessary for the integration of different information sources as well as the improvement of the usability of the hazard maps and contingency plans by promoting the use of integrated approaches. In addition, MONITOR II will contribute to the development of procedures for the evaluation of information required for the communication with the public, administrators and experts as well as initiatives aiming at the development of effective plans enabling the prevention and avoidance of disasters or at least minimizing the extent of disasters and the accompanying tragedies.

The technical discussion scheduled for two days will be followed by a one-day excursion allowing the participating experts to visit some landslides located in the northern Apennine where researchers of the University of Modena and Reggio Emilia in collaboration with the Technical Service of the Region of Emilia Romagna responsible for the catchment area of the river Po are carrying out a variety of research activities including the monitoring of landslides as well as the analysis of the existing risks and their mitigation.

The Project MONITOR II is coordinated by the Austrian Federal Ministry for Agriculture, Forestry, Environment and Water Management involving 11 partners from Austria, Bulgaria, Greece, Italy, Romania, Slovenia and Serbia.