“Creating of hydrogeological model of Latvia to be used for management of groundwater resources and for evaluation of their recovery measures”

Summary of activities performed within the project framework of the European Regional Development Fund

The general aim of the project is to establish a Latvian regional hydrogeological model that can be used for Latvian groundwater management and evaluation of measures for environmental recovery. The model is an essential object in the shared environmental information system of Latvia. The specific aim of the project is to use for the establishment of the model an innovative methodology allowing reducing substantially uncertainty of results and simplifying the model calibration process. The study conforms to informatics, hydro-engineering, mathematics and environmental science sectors of Latvia. The project fits in the approved priority scientific directions for 2010-2013: energy and environment, innovative materials and technologies, sustainable use of local resources.

The activities performed within the framework of the project do not have an economic character, since, according to Cabinet of Ministers Regulation No. 257 (2009.07.07.), Sub-paragraph 3.1, the project conforms to the following criteria:

— the project is implemented by the Riga Technical University whose Constitution lays down that the University shall perform scientific activity and dissemination of the scientific activity results in the form of technology transfer;

— it ensures availability to the public of the project study results.

To ensure that the aims are met, the project provides for carrying out the following activities:

1. Research:
   Industrial research – study work to gain knowledge and skills in the creation of a new product, the Latvian hydrogeological model, with an innovative methodology.

   1.1. Establishment of the Latvian regional hydrogeological model:
       1.1.1. creation of an initial data set;
       1.1.2. establishment of a digital map set;
       1.1.3. model establishment.

   1.2. Use of an innovative methodology for the establishment and calibration of the model.

2. Ensuring of public availability of the research results.

The place of implementation of the project – the Environment Modelling Centre of the Faculty of Computer Science and Information Technology of the Riga Technical University.

The estimated total duration of the project implementation: 24 months.

The estimated eligible costs of the project are LVL 140,900.