

Antoni Barbacki: Evaluation of Possibilities for the Utilization of Thermal Waters for Space Heating, Recreation and Balneology in the Busko-Zdrój Vicinity • Geomatics and Environmental Engineering 2008, t. 2, z. 4

Hydrogeothermal conditions in the Busko area within Cenomanian, Jurassic and Devonian aquifers are evaluated. Particularly favourable geothermal conditions in this area result from good hydrogeological parameters of the Cenomanian sandstone and limestone at the bottom of Jurassic deposits. Currently, other aquifers in this area: Devonian, Carboniferous and Triassic are regarded as being of secondary importance for geothermal purposes. With regard to temperatures and water yield, the Cenomanian aquifer is especially designated for balneology and recreation. The downthrow side of dominant fault should guarantee temperatures of about 20–25°C, still, the large yield and application of the heat pump technology may render its use economically feasible. The curative valor of this aquifer is of crucial importance (content of iodine and bromine). The hydrogeothermal conditions of this region, at the current stage of recognition, do not allow confirmation of its usability for the heating purposes. Improvement of the current state of the conditions detection would have occurred provided the holes in this zone were reconstructed.

Keywords: thermal waters, geological structure, Busko region, hydrogeothermal parameters

Jarosław Bydłosz: The Register of Prices and Values for Real Estates Database Modelling, Applying Computer Aided Software Engineering Tools • Geomatics and Environmental Engineering 2008, t. 2, z. 4

This paper concerns the register of prices and values (RCiWN) for real estates database modelling, applying CASE (Computer Aided Software Engineering) tools. The paper's first part contains legal basis and technical guidelines for register of prices and values (RCiWN) managing. The main purpose of researches that had been performed there was register of prices and values database creating. The register's modelling includes the following stages – conceptual modelling, logical model building and physical model creation. The process of conceptual modelling has already been done before, for the Technical

instruction G-5 contains register's objects catalogue and their relation schema. The logical model has been built according to practically ready conceptual model that is included in instruction G-5. The register of prices and values objects, including corresponding attributes and links among them were created in Microsoft Visio. The UML notation was used. The author's intention was the register of prices and values database creating with ArcInfo software, so the template from ESRI, *ESRI XMI Export* tool and *SemanticsChecker* macro were used. The register of prices and values for real estates were then exported into XML format file, that is semantically correct and corresponds with ArcInfo UML model. The final result of this work is the register of prices and values for real estates database in mdb format, ready for filling with data and possible further processing with ArcGIS software and other programs managing databases. The additional result is XML file that might be used for other works concerning ground and building cadastre system.

Keywords: ArcGIS, the register of prices and values for real estates, XML, UML

Janusz Dąbrowski: **Real Estate Market Analysis for Market Value Assessment** • Geomatics and Environmental Engineering 2008, t. 2, z. 4

The article describes the components of the market price function. It demonstrates the need for extensive research on the real estate market, i.e. on the local and global attributes. It lists the crisis factors on the real estate market and points out an algorithm that will allow eliminating some components of this function. The author has synthetically listed the reasons for real estate price increase in Poland over the last years.

Keywords: real estate market analysis, local and global attributes

Timi Ecimovic: **Climate Change System. Introduction. Part 3** • Geomatics and Environmental Engineering 2008, t. 2, z. 4

Third part is presenting real values and has concluding remarks. The only real value is our civilization, but on the other hand our civilization could exist at suitable environment. The Earth is only home of our civilization. That is why we have to transcend from present Globalization ages to the SUSTAINABLE FUTURE for our civilization, harmony of our civilization with the Nature of the planet Earth. Recommendations and Literature are ending our three parts presentation of the Climate Change System Introduction.

Keywords: the climate change system, living conditions on the Earth, one planet, world government, world constitution, sustainable future of our civilization.

Ewa Panek, Dawid Bedla: **Ecological and Landscape Valuation of Small Water Bodies situated in the Krakow City** • Geomatics and Environmental Engineering 2008, t. 2, z. 4

This paper contains value of functions and threats characteristic of small water reservoirs, not exceeding 1 hectare (29 objects situated in Krakow city). Among the most important functions of small water bodies the following were specified: biocoenotic, physicoenotic, landscape. These sort of reservoirs are very susceptible to anthropogenic pressure. In this paper identified factors which provide to degradations and devastation water bodies in dynamically developing areas of city agglomerations. Indicate the main reasons of devastation. Moreover indicate and proper protection of small water bodies, objects of the highest landscape and biological value.

Keywords: water ponds/bodies, environmental functions, small water reservoirs degradations.

Krzysztof Zdanowicz: **Possibilities of Taking Measurement Photos with Camera from Board of Radio-Controlled Hang-Glider Model** • Geomatics and Environmental Engineering 2008, t. 2, z. 4

In this essay the results of low-altitude photogrammetric photos study are presented. The photos were gained by using a model of radio-controlled hang-glider with an amateur photo camera installed on it. The analysis of the photos was done on the photogrammetric digital station "Delta". On the area of aerial flight polygonal and leveling traverse was create to allow the photos being photogrammetrically worked out. Thanks to the traverse the spatial model received from photos was oriented in accepted coordinate system. Finally, on the basis on the report from absolute orientation and geodesy measurement conclusions were proposed. They are connected with taking measuring photos with photo camera installed on the board of unmanned hang-glider.

Keywords: photogrammetry, low-altitude aerial flight, Unmanned Aerial Vehicle (UAV), DPS Delta

Ryszard Żróbek: **Selected Issues of Managing Agricultural Real Estate Comprising the State Treasury – Owned Agricultural Real Estate Resources in Poland** • Geomatics and Environmental Engineering 2008, t. 2, z. 4

Polish agriculture is still waiting for the general reform of its structure. Very important for Polish agriculture was implementation of market principles in the Polish economy after 1990. From 1 January 1992 started the effective changes of the Law of Managing Agricul-

tural Real Estate of the State Treasury. The Agricultural Property Agency was to take over the whole agricultural real estate owned by the State. Some information concerning land management the State Land by the Agency was done in the paper.

Keywords: management, property, State Treasury