SUMMARIES

Wiesław Babik: **Infologic and Ecologic Aspects of Sustainable Development and the Society's Access to Information and Knowledge** • Geomatics and Environmental Engineering 2009, Vol. 3, No. 1

Information overproduction and the related flood of unwanted information have been recognized as the most important information problems at the beginning of the 21st century. The threats discussed in the article can originate either from information as such or from modern information technologies. The development of information and knowledge society should determine the method of society's operation in that environment. That is a global strategy of counteracting the ways of information and knowledge generation which escape human control. To avoid such threats, or at least reduce their scale, it was recognized that information management was indispensable, with the intention to attain sustainable development of information and knowledge and well-thought-out shaping of human information environment.

Keywords: infology, information ecology, information society, anthropoinfosphere, sustainable development, knowledge-based society

Małgorzata Buśko, Robert Krzyżek, Paweł Hanus: **The Update of a Land Survey and Height Map for Design Purposes with the Use of the RTK GPS Technology** • Geomatics and Environmental Engineering 2009, Vol. 3, No. 1

The paper presents issues pertaining to the use of RTK GPS measuring techniques in geodetic project work. The authors concentrated basically on classic distance and height measurements applied for updates of the basic map for design purposes. The paper presents a few ways for determination of geodetic network points formed by stations and junction points as well as a few indirect methods to determine diffcult to access land details with the use of RTK GPS technique. A content of various resources within basic trig data taken from distance and height measurements with the use of RTK GPS technique was also described.

Keywords: basic map, distance and height measurements, RTK GPS, basic trig data

Elżbieta Jasińska, Edward Preweda: **Reverse Mortgage – Focus on the Cracovian Real Estate Market** • Geomatics and Environmental Engineering 2009, Vol. 3, No. 1

The article presents the idea of reverse mortgage as an innovative method of "liberation of capital with the property", following the regulations in the United States. This product has met with a great interest in the markets of many countries; therefore its introduction on the Polish market is the only matter of time. The largest Polish cities, including Cracow are perfectly suitable for the introduction of this product, and the old and attractive districts will become the first subject of interest. The analysis of elementary prices of housing real estates on Cracovian secondary market permits to conclude, that except of apartments in panel buildings, one can expect annual 10% growths, which places these investments as the most attractive in the long-term period.

Keywords: reverse mortgage, Cracovian secondary market

Zofia Śmiałowska-Uberman, Anita Kwartnik-Pruc: **Detail Questions of Real Estate Expropriation** • Geomatics and Environmental Engineering 2009, Vol. 3, No. 1

The authors present in detail the connections between the problem of real estate expropriation and the regulations of other legal acts and principles of the application of administrative law. The authors wanted to show that real estate expropriation is not a separate legal entity and that the interpretation of regulations must strictly comply with the development of legal and geodetic knowledge. It is equally important to consider newly appearing problems of getting real estates for public purposes and adjusting the statutory interpretation to present economic needs. Thus the attention was paid at the wide range of the institution of real estate expropriation, its tight link with civil law, spatial planning and the code of administrative procedures.

Keywords: expropriation, purpose of expropriation

Agnieszka Włodyka-Bergier, Tomasz Bergier: **Adsorption of Trihalomethanes (THMs) on Activated Carbons** • Geomatics and Environmental Engineering 2009, Vol. 3, No. 1

The paper presents the results of researches on the trihalomethanes (THMs) removal on activated carbons AG-5 and NC-I, which differ in their surface areas. The model solutions containing four THMs: trichloromethane (TCM), bromodichloromethane (BDCM), dibromochloromethane (DBCM) and tribromomethane (TBM) have been used for the researches. The initial total trihalomethanes (TTHMs) concentrations in the model solutions have been: 35 μg/dm^3; 58.40 μg/dm^3;

166.70 μg/dm^3 and 280.50 μg/dm^3. The dynamic method on the model activated carbon beds has been applied in these laboratory researches. The model solutions have been passed through beds with different flow rates (2 to 15 m/h). The researches have proved the high potential of activated carbons to remove THMs from water. The activated carbon AG-5, which has the higher surface area and pores volume than the NC-I, has shown the higher efficiency in THMs removal from water. Out of four analyzed THMs, compounds with the higher bromine ions level have been better adsorbed than the THMs with the higher chlorine ions level. TCM has been best adsorbed, than DBCM, than BDCM, and TCM has been adsorbed on the lowest level. These differences in adsorption effectiveness of separate THMs were higher for higher flow rates.

Keywords: adsorption on activated carbons, trihalomethanes, THMs

Maria Żukowska: **Resolving of Internal Graphic Conflicts of Broken Lines, which Shape is Subject to Simplification** • Geomatics and Environmental Engineering 2009, Vol. 3, No. 1

One of elements of cartographic generalization automation is objects shape simplification. Most of existing algorithms, that serve automation of this process, is not free from appearing graphic conflicts. Using a recognizability buffer, which construction is based on the Perkal's theory of objective generalization and Chrobak's theory of elementary triangle allows exploring and furthermore also resolving of graphic conflicts, particularly internal conflicts of broken lines. Such process of graphic conflicts resolving should be realized in precisely defined groups and be based on hierarchy and topology of map objects. Carried out tests allow to believe, that presented in the paper algorithm, that is based on mentioned above values and conditions, can solve the problem of internal graphic conflicts to a great degree.

Keywords: cartographic generalization, shape simplification, graphic conflicts, recognizability buffer