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## FOREWORD

The modern approach to the subject of land management is based, to a large extent, on the use of modern data acquisition and processing techniques, which facilitate an effective diagnosis of problems, and the development of well-suited methods for solving those problems. These issues are coming increasingly to the fore in current scientific research, and they are also the main focus of this year's fourth edition of *Geomatics, Landmanagement and Landscape journal*, which we are hereby presenting to the Readers. Since its inception in 2013, the GLL journal has become more and more valued in the scientific community as a platform for the exchange of views and for the presentation of research results in the areas of science defined by the constituent elements of its title.

The current issue of the journal brings along a number of extremely interesting articles. Geographically, they cover a number of European and Asian countries, including Poland, Ukraine, Moldova, Iraq and Bangladesh. The wide range of data acquisition and processing methods and technologies used in the presented research is noteworthy; and these include digital photogrammetry, satellite data, advanced GIS technologies, and three-dimensional modelling. A substantial number of articles deal with the analysis of threats and opportunities associated with environmental factors. These include flood risk management, avalanche risk assessment, and the use of renewable energy.

The first of the articles presents the methods of determining the spatial structure of land for the purposes of building and modernizing the cadastre, and monitoring the land use, employing data obtained using the QuickBird satellite, as illustrated with the example of a particular area in Iraq. The second article introduces the current model of land management in rural Bangladesh, and the related problems and perspectives pertaining to the activities undertaken to modernize and upgrade the discussed process. The next paper concerns the real estate market, and it presents an interesting approach of using GIS techniques to analyse transaction prices in low-investment areas. The fourth article presents the results of research carried out in the Ukrainian part of the Carpathians, enabling the identification of areas threatened with avalanches, based on the use of cartographic, meteorological, and geomorphological data, as well as information obtained via remote sensing techniques. The fifth article presents an extremely up-to-date topic, namely the correct identification of optimal locations for

investment projects, related to obtaining solar energy. Multi-criterion analysis of the decision making process, including AHP, has been applied for the purpose. The sixth article provides the reader with an opportunity to get acquainted with the results of research on the development of a terrain model for the needs of flood risk management in the area of Moldova, in the creation of which the digital photogrammetry methods were used. The seventh paper presents contemporary methods of modelling three-dimensional structures of architectural monuments and memorials, in the context of documenting historical and cultural heritage objects. The eighth article contains a comparison between selected methods of interactive geo-visualization of data on monuments and memorials, as illustrated with the example of Poland. The last article in the current issue is a very interesting study on the development of green public spaces as a part of the revitalization process in residential and industrial areas.

Finally, I would like to invite you to become familiar with the content of the presented research results, but also to take part in co-creating the content of the *Geomatics, Landmanagement and Landscape* journal, and to submit your own results of interesting studies on the subject.

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