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UNIVERSITY OF AGRICULTURE  
IN KRAKOW

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# Geomatics, Landmanagement and Landscape

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**GLL** *Geomatics,  
Landmanagement  
and Landscape*

A decorative graphic element consisting of a horizontal line with a stylized arrowhead pointing to the right, integrated into the bottom of the 'LL' part of the 'GLL' logo.

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## FOREWORD

Contemporary science increasingly puts more emphasis on interdisciplinary research and the possibility of its application in practice. In this very spirit, the Geomatics, Landmanagement and Landscape (GLL) quarterly, for five years now has been offering its readers a review of the latest achievements by scientists from around the world. The texts that combine the various scientific disciplines in a novel way are also of great interest – supporting the achievement of the desired goals, and enabling better quality and more accurate findings. The articles published in the present issue of GLL also open the doors to the world of geodesy, spatial economy, urban planning, landscape architecture, and related sciences.

In the field of landscape studies and protection of cultural heritage, a method of using ultrasound computed tomography with a precise examination of the condition of trees was presented. The article describes the work undertaken in the field, in the area surrounding the orthodox church in Włodawa, conducted with the aid of Picus 3 sonic tomography device. The use of this specialized diagnostic equipment makes it possible to broaden the dendrological inventory results with a detailed tree management plan, and to determine the exact guidelines for the management of individual specimens. This may help to stop the process of cutting out historical rows of trees, avenues and stands, which is typically conducted solely based on untested suspicions of alleged diseases and tree weaknesses.

Issues related to spatial management and planning, included in the present issue of the GLL, are represented by the analyses of the use of the digital online version of the Local Spatial Development Plan (LSDP) of the Tomice municipality. Ways of obtaining data on the use of the LSDP by online users are described, as well as the possibilities for improving the database and expanding statistical data pool for better management of the municipality's space.

The next article presents the methodological foundations for the activities, which are necessary in order to improve the quality of space within housing estates in the suburbs of cities – which is one of the leading problems of contemporary urban planning. The article describes their spontaneous formation, and defines social and urban problems related to their uncontrolled spread. The discussion covers several areas, and in its scope, it takes into account the historical conditions, changes in the existing elements of space, and the creation of new ones. As a result of that discussion, methods of proper spatial management and governance are presented, so that the discussed

areas could become an integral part of the city, meeting the essential expectations of its residents.

Geodetic themes in this issue of the GLL journal focus on precise design of land division in the consolidation process. Complexity of the problem of geodetic field measurements of land with a very high value is presented. The article describes operational difficulties when, on the one hand, there is a need to round the measurement result, and on the other hand, even the slightest measurement differences may significantly affect the value of the measured area.

Bearing in mind the advantages of interdisciplinary scientific activity, and the benefits resulting from such a view for the application of research results in practice, we present this current issue of the journal to our readers. We sincerely hope that the subject matter will encourage you to submit your own papers, describing your achievements and findings in these pages. We also hope that the content you find herein will prove useful in your scientific, didactic, designing and implementation work.

*Professor Urszula Litwin*  
Scientific Editor of the Journal  
Chair of the Scientific Board