



Latvia University of Agriculture
Faculty of Rural Engineering

CIVIL ENGINEERING'13

4th International Scientific Conference
Part I

PROCEEDINGS

Volume 4

Jelgava 2013

International Scientific Conference and Proceedings “Civil Engineering 13” – dedicated to the 150th anniversary of the higher agriculture education in Latvia and the Latvia University of Agriculture, and the 275th anniversary of the Jelgava Palace

The 4th International Scientific Conference „Civil Engineering 13” is organized on a regular basis and this year it was held on May 16-17, 2013. More than 80 reports were presented at six conference sections. Reports were presented by scientists and civil engineering professionals from the Latvia University of Agriculture, Riga Technical University as well as scientists from universities of Lithuania, Estonia, Russia, Poland, Netherlands and other countries. The main research directions represented at the conference were: construction and materials, landscape architecture, land management and geodesy, building and renovation, structural engineering, environment and environmental effects, industrial energy efficiency and others. One of the nowadays research priorities – effective usage and saving of energy resources, received a lot of attention - 10 scientific reports were presented at the “Industrial Energy Efficiency” section.

The conference „Civil Engineering 13” international scientific committee is represented by civil engineering experts and academic staff from Latvia, Lithuania, Estonia, Poland, Finland, Sweden, Czech Republic, Netherlands.

The 4th International Scientific Conference „Civil Engineering 13” Proceedings are developed in a notable anniversary year for all of us – the conference and proceedings are dedicated to the 150 anniversary of the higher agriculture education in Latvia and the Latvia University of Agriculture. The home of the Latvia University of Agriculture is the Jelgava Palace - the largest architectural monument in the Baltic States. The Jelgava Palace this year is celebrating its 275 anniversary years. We are proud that this monument is fundamental and outstanding and it definitely influences also modern building tendencies in Latvia and abroad.

It is important to note that scientific papers from previous International Scientific Conference „Civil Engineering 11” Proceedings were included in the AGRIS, CAB ABSTRACTS, EBSCO Central & Eastern European Academic Source and SCOPUS databases.

Scientific Conference "Civil Engineering" has become very traditional and I hope that in future it will expand and will provide a collection of excellent researches.

Sincerely,
Dr. sc. ing., prof. Juris Skujans
Rector of Latvia University of Agriculture

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