PREFACE

Institute of Civil Engineering of Peter the Great Saint-Petersburg Polytechnic University presents International scientific conference Week of Science in SPbPU - Civil Engineering (SPbWOSCE-2015)

The conference is supported by Saint Petersburg authorities: Housing Committee, Construction Committee, Committee on Energy and Engineering Support.

The Organizing Committee warmly welcomes all the distinguished authors and guests to SPbWOSCE-2015, held on December 03-04, 2015, in Ambassador hotel, Saint-Petersburg, Russia.

Scientific editor - Vera Murgul

The conference provides a platform to discuss contemporary engineering problems with participants from different countries. Its success is reflected in the papers received, with participants coming from several countries, allowing a real multinational multicultural exchange of experiences and ideas.

The present volumes collect accepted papers and represent an interesting output of this conference. This book covers these topics: History and Theory of Architecture, General Architecture, Urban Planning, Buildings and Structures, Foundations and Underground Space, Bridges, Roads and Tunnels, Building Materials and Products, Municipal Facilities and Building Services, Urban Environmental Engineering, Applied Mechanics in Construction and Material Science, Energy Efficiency, Renewable Energy, Green Buildings and Sustainable Development, Organization and Planning of Construction Works and Municipal Facilities.

On behalf of the organizing committee, I would like to especially thank Isaline Augusto and all the editors from EDP Sciences for their great support to SPbWOSCE-2015.

All the organizing members will be committed us to make SPbWOSCE more and more professional with fully and enjoyable academic research and discussion platform for authors and attendees.

Sincerely as always, we look forward to your attention to the next SPbWOSCE in 2016

Nikolai Vatin & Vera Murgul