

# International Scientific Conference on Energy, Environmental and Construction Engineering EECE-2018

Saint-Petersburg (Russia), 19-20 November 2018

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## Organization

Peter the Great Saint-Petersburg Polytechnic University, Saint-Petersburg, Russia

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

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## From the Editors

Peter the Great Saint-Petersburg Polytechnic University presents “International Scientific Conference on Energy, Environmental and Construction Engineering” (EECE-2018)

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

The Organizing Committee warmly welcomes all distinguished authors and guests to EECE-2018, held on November 19-20, 2018, in Peter the Great Saint-Petersburg Polytechnic University, Saint-Petersburg, Russia.

Scientific editors – Anatolijs Borodinecs (Riga Technical University), Vitaly Sergeev and Nikolai Vatin (Peter the Great Saint-Petersburg Polytechnic University).

The conference EECE-2018 joins interests of academic and industry experts in the field of energy, ecology and construction. The conference purpose is to take an advantage of the developed synergy of speakers and participants cooperation to analyse and suggest solutions to the current problems of ensuring secure and sustainable production, and use of energy resources. This conference disseminates the most recent advances in this field and promotes collaborations to maximize opportunities for innovative solutions. New developments in renewable energy generation, transmission, storage, and consumption relate to this conference.

The present volumes collect accepted papers and represent comprehensive output of the conference. The following topics are covered.

- \* BIM (Building Information Modeling)
- \* Bridges, Roads and Tunnels
- \* Building Materials and Products
- \* Development of New Perspective Technological Products
- \* Economics in Energy Sector
- \* Energy Efficient and Green Buildings
- \* Engineering Nets and Equipment
- \* FEM and Structural Mechanics
- \* Fluid mechanics
- \* Information and Measuring Technologies
- \* Innovative Technologies for Technosphere safety
- \* Innovative Technologies in Environmental Management
- \* ITER Technology
- \* Power Consumption Management
- \* Renewable energy
- \* Smart City
- \* Sustainable Development of Arctic Region
- \* Waste management

The discussions and conclusions of the sessions helped to formulate proposals and recommendations addressed to construction institutions and organizations. The discussions focused on the safety of buildings, structures, energy facilities and environmental protection.

We are convinced that the conference materials offer an interesting overview of the achieved progress and provide the motivation for new research.

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