

The 11th International Conference

ENVIRONMENTAL ENGINEERING

11th ICEE

SELECTED PAPERS

Edited by
Donatas Čygas and Rasa Vaiškūnaitė

21–22 May, 2020
Vilnius, Lithuania

Organized by
Vilnius Gediminas Technical University

In co-operation with:

Lithuanian Academy of Sciences
Academy of Sustainable Development
Federation of European Heating, Ventilation and Air-Conditioning Associations
International Federation of Surveyors
Baltic Road Association
European Spatial Planning Observation Network
International Association of Public Transport
International Academy of Ecological and Life Protection Science
Lithuanian Water Suppliers Association

Selected papers of the 11th International Conference, 21–22 May, 2020 Vilnius, Lithuania.

The Proceedings include 52 abstracts and articles were selected from 20 countries authored by leading foreign and Lithuanian researchers.

The Proceedings contain the selected papers from four sections:

1. Environmental Protection and Water Engineering;
2. Smart Cities, Roads and Railways;
3. Technologies of Geodesy and Cadastre;
4. Energy for Buildings.

All papers were reviewed by the members of the scientific committee

Conference Organizing Committee address:

Vilnius Gediminas Technical University,
Saulėtekio al. 11, LT-10223 Vilnius,
Lithuania

Conference Information:

The 11th International Conference “Environmental Engineering”, 21–22 May 2020, Vilnius,
LITHUANIA

Source: ICEE-2020 – International Conference on Environmental Engineering

Book Series: International Conference on Environmental Engineering (ICEE) Selected papers

Publisher:

Vilnius Gediminas Technical University Press Technika
leidykla.vgtu.lt

VGTU Press “Technika” scientific book No. 2020-018-K

eISSN: 2029-7092

eISBN: 978-609-476-232-1

Book doi: <https://doi.org/10.3846/enviro.2020>

CONFERENCE COMMITTEE

CHAIRMAN OF THE CONFERENCE –
Prof. Dr Donatas Čygas

CHAIRMAN OF THE ORGANIZING COMMITTEE –
Assoc. Prof. Dr Rasa Vaiškūnaitė

SESSIONS

1. ENVIRONMENTAL PROTECTION AND WATER ENGINEERING

Chairman – *Assoc. Prof. Dr R. Grubliauskas*
Secretary – *Assoc. Prof. Dr M. Valentukevičienė*

2. SMART CITIES, ROADS AND RAILWAYS

Chairman – *Assoc. Prof. Dr V. Vorobjovas*
Secretary – *Assoc. Prof. Dr L. Bertulienė*

3. TECHNOLOGIES OF GEODESY AND CADASTRE

Chairman – *Assoc. Prof. Dr J. Sužedelytė-Visockienė*
Secretary – *Assoc. Prof. Dr R. Birvydienė*

4. ENERGY FOR BUILDINGS

Chairman – *Assoc. Prof. Dr A. Rogoža*
Secretary – *Assoc. Prof. Dr V. Misevičiūtė*

MEMBERS OF CONFERENCE SCIENTIFIC COMMITTEE:

- Andrus Aavik (Estonia)
- Dago Antov (Estonia)
- Bystrík Bezák (Slovakia)
- Sergey V. Bogdanovich (Belarus)
- Dagnija Blumberga (Latvia)
- Aleš Brezníkár (Slovenia)
- Marija Burinskienė (Lithuania)
- Luca D'Acierno (Italy)
- Gianluca Dell'Acqua (Italy)
- Artu Ellmann (Estonia)
- Andrzej Grzebielec (Poland)
- Raimondas Grubliauskas (Lithuania)
- Marek Iwanski (Poland)
- Tomas Januševičius (Lithuania)
- Romuald Kaczyński (Poland)
- Denis Kapskij (Belarus)
- Mait Kriipsalu (Estonia)
- Aliaksei Laureshyn (Sweden)
- Marjan Lep (Slovenia)
- Vytautas Martinaitis (Lithuania)
- Giorgio Passerini (Italy)
- Peter Randerson (United Kingdom)
- Gunno Renman (Sweden)
- Mindaugas Rimeika (Lithuania)
- Artur Rusowicz (Poland)
- Juris Smirnovs (Latvia)
- Tomaz Tollazzi (Slovenia)
- Kiran Tota-Maharaj (United Kingdom)
- Xavier Ubeda (Spain)
- Andrzej Urbanik (Poland)
- Audrius Vaitkus (Lithuania)
- Jost Wichser (Switzerland)
- Adam Zofka (Poland)
- Mirosław Zukowski (Poland)