



Editorial

# Preface: The 4th International Conference on Advances in Environmental Engineering †

Adriana Estokova <sup>1</sup>, Natalia Junakova <sup>2</sup>, \*, Tomas Dvorsky <sup>3</sup>, Vojtech Vaclavik <sup>3</sup> and Magdalena Balintova <sup>2</sup>

- Department of Material Engineering, Institute for Sustainable and Circular Construction, Faculty of Civil Engineering, Technical University of Kosice, Vysokoskolska 4, 04200 Kosice, Slovakia; adriana estokova@tuke sk
- Department of Environmental Engineering, Institute for Sustainable and Circular Construction, Faculty of Civil Engineering, Technical University of Kosice, Vysokoskolska 4, 04200 Kosice, Slovakia; magdalena.balintova@tuke.sk
- Department of Environmental Engineering, Faculty of Mining and Geology, VSB—Technical University of Ostrava, 17. Listopadu 15/2172, 708 00 Ostrava, Czech Republic; tomas.dvorsky@vsb.cz (T.D.); vojtech.vaclavik@vsb.cz (V.V.)
- \* Correspondence: natalia.junakova@tuke.sk; Tel.: +421-55-602-4266
- <sup>†</sup> Presented at the 4th International Conference on Advances in Environmental Engineering, Ostrava, Czech Republic, 20–22 November 2023.

#### 1. Introduction

The 4th International Conference on Advances in Environmental Engineering (AEE 2023) was hosted by the Faculty of Mining and Geology at the VŠB-Technical University of Ostrava in the Czech Republic, in collaboration with the Faculty of Civil Engineering at the Technical University of Kosice in Slovakia. This conference took place from 20 to 22 November 2023, in Ostrava, Czech Republic. It successfully gathered more than 57 participants, both PhD students and representatives from various industries, hailing from five different countries: The Slovak Republic, the Czech Republic, Spain, Poland, and Iraq. This conference builds upon the previous successful editions, where it was possible to bring together experts from both academia and industry to discuss current topics, seek new solutions, and, above all, establish mutual cooperation and create a network of experts in the field of environmental engineering at the regional level. The conference was held under the auspices of the representatives of the faculties: Prof. Ing. Hana Staňková, Ph.D., the Dean of the Faculty of Mining and Geology at the VŠB-Technical University of Ostrava, and Prof. Ing. Dušan Katunský, CSc., the Dean of the Faculty of Civil Engineering at Technical University of Kosice.

From the numerous submissions received, 42 contributions were chosen for inclusion in this *Engineering Proceedings* volume. The organizing committee expresses deep gratitude for the dedicated efforts of the Editorial Board and the reviewers for their invaluable work in preparing this volume. Special thanks are also extended to all the authors for their cooperation and adherence to deadlines.

## 2. Conference Topics

The conference primarily concentrated on the broad spectrum of environmental engineering, encompassing topics such as:

- Water and wastewater management;
- Water and sediment pollution control and remediation;
- Waste management;
- Soil degradation, conservation, and remediation;
- Landscape management;
- Sustainable building materials;
- Building ecology;



Citation: Estokova, A.; Junakova, N.; Dvorsky, T.; Vaclavik, V.; Balintova, M. Preface: The 4th International Conference on Advances in Environmental Engineering. *Eng. Proc.* 2023, *57*, 1. https://doi.org/10.3390/engproc2023057001

Published: 17 November 2023



Copyright: © 2023 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

Eng. Proc. 2023, 57, 1

- Environmentally friendly building materials and technologies;
- Life cycle analysis of materials and constructions;
- Air pollution prevention;
- Environmental urbanism and sustainable cities;
- Environmentally sustainable entrepreneurship;
- Solutions for climate change mitigation.

The scientific presentations, which encompassed lectures and posters, covered an extensive array of research domains. This volume offers a comprehensive perspective on the current trends in environmental engineering and addresses the challenges in achieving sustainability.

### 3. Scientific Committee

#### 3.1. Chairs of the Conference

Professor Adriana Eštoková, the conference chair and a full professor at the Faculty of Civil Engineering of the Technical University of Kosice in Slovakia, specializes in materials and environmental engineering. Her research centers on sustainable construction, particularly the development of building materials derived from waste and secondary materials, their characterization, and evaluation of their environmental safety, including heavy metals, leachability, and radionuclide activity. She also investigates the environmental impact of these materials in buildings, employing life cycle assessment (LCA) and assessing their carbon footprint. Additionally, her work explores material durability in aggressive environments, addressing concerns such as bio-corrosion and chemical corrosion.

Co-chairperson Associate Professor Vojtěch Václavik, from VSB – Technical University of Ostrava in the Czech Republic, is an environmental engineering expert, with a special focus on materials recycling, recovery, and water management. His research activities are mainly focused on the treatment and use of industrial byproducts for the production of building materials. He maintains active collaboration with industry practitioners.

Another co-chairperson, Professor Magdaléna Bálintová, a full professor at the Faculty of Civil Engineering of the Technical University of Kosice in Slovakia, is focused on wastewater treatment, water and sediment quality, remediation methods, removal of heavy metals, and soil protection. She is affiliated with various associations and serves on the editorial boards of multiple journals. Additionally, she actively participates in scientific committees for both international and national conferences. Her contributions extend to editing, guest editing, and reviewing for several reputable scientific journals.

#### 3.2. Scientific Committee Members

The scientific committee comprised distinguished experts in the field of environmental engineering:

- 1. Peter ANDRÁŠ, Matej Bel University in Banská Bystrica, Slovakia;
- 2. Magdaléna BÁLINTOVÁ, Technical University of Kosice, Slovakia;
- 3. Rui Alexandre CASTANHO, University of Johannesburg, Republic of South Africa;
- 4. Sanja DIMTER, University of Osijek, Croatia;
- 5. Endre DOMOKOS, University of Pannonia, Hungary;
- 6. Konstiantyn DYADYURA, Sumy State University, Ukraine;
- 7. Anatolijus EISINAS, Kaunas University of Technology, Lithuania;
- 8. Adriana EŠTOKOVÁ, Technical University of Kosice, Slovakia;
- 9. Bozena GAJDZIK, Silesian University of Technology, Poland;
- 10. Silvie HEVIANKOVA, Technical University of Ostrava, Czech Republic;
- 11. Petr HLUŠTÍK, Brno University of Technology, Czech Republic;
- 12. Natália JUNÁKOVÁ, Technical University of Kosice, Slovakia;
- 13. Sebastian KOT, Czestochowa University, Poland;
- 14. Šárka KROČOVÁ, VSB—Technical University of Ostrava, Czech Republic;
- 15. František KUDA, VSB—Technical University of Ostrava, Czech Republic;

Eng. Proc. 2023, 57, 1 3 of 4

- 16. Radmila KUČEROVÁ, VSB—Technical University of Ostrava, Czech Republic;
- 17. Sergio António Neves LOUSADA, Universidade de Madeira, Portugal;
- 18. Antonio MESSINEO, University of Enna "Kore", Italy;
- 19. Daniel Francois MEYER, University of Johannesburg, Republic of South Africa;
- 20. NGUYEN THI MAI LINH, Ton Duc Thang University, Vietnam;
- 21. Martin Tchingnabé PALOU, Slovak Academy of Sciences, Slovakia;
- 22. Sudhakara PANDIAN R, Vellore Institute of Technology, India;
- 23. Peter PECIAR, Slovak University of Technology in Bratislava, Slovakia;
- 24. Eva PERTILE, VSB—Technical University of Ostrava, Czech Republic;
- 25. PHAM ANH DUC, Ton Duc Thang University, Vietnam;
- 26. Jiří POKORNÝ, VSB—Technical University of Ostrava, Czech Republic;
- 27. Janusz RAK, Rzeszow University of Technology, Poland;
- 28. Mindaugas RIMEIKA, Vilnius Gediminas Technical University, Lithuania;
- 29. Dagmar SAMEŠOVÁ, Technical University of Zvolen, Slovakia;
- 30. Serkan SAHINKAYA, Nevsehir Haci Bektas Veli University, Turkey;
- 31. Khrystyna SOBOL', Lviv Polytechnic National University, Ukraine;
- 32. Tomáš SVĚRÁK, Brno University of Technology, Czech Republic;
- 33. Miloslav ŠLEZINGR, Mendel University, Czech Republic;
- 34. Nadežda ŠTEVULOVÁ, Technical University of Kosice, Slovakia;
- 35. Hana ŠTVERKOVÁ, VSB—Technical University of Ostrava, Czech Republic;
- 36. Ekaterina TRUSOVA, Belarussian State Technological University, Belarus;
- 37. Vojtěch VÁCLAVÍK, VSB—Technical University of Ostrava, Czech Republic;
- 38. Nikolai VATIN, Peter the Great St. Petersburg Polytechnic University, Russia;
- 39. Hana VOJTKOVÁ, VSB—Technical University of Ostrava, Czech Republic;
- 40. Silvia VILČEKOVÁ, Technical University of Kosice, Slovakia;
- 41. Martins VILNITIS, Riga Technical University, Latvia;
- 42. Tatjana VOLKOV-HUSOVIC, University of Belgrade, Serbia;
- 43. Wang YU BO, Hubei University of Technology, China;
- 44. Tadeusz ZABOROWSKI, Poznan Technical University, Poland.

#### 4. Organizing Committee

The organizational guarantee of the conference was assumed by representatives of the institutions that participated in the organization of the conference: Assoc. Prof. Tomáš Dvorský from the VSB—Technical University of Ostrava, Czech Republic, and Assoc. Prof. Natália Junáková from the Technical University of Kosice, Slovakia.

**Organizing Committee Members** 

- 1. Jan Halfar
- 2. Kateřina Brožová
- 3. Jakub Charvát
- 4. Kateřina Máčalová
- 5. Miriama Čambál Hološová
- 6. Jana Budajová

#### 5. Sponsors

A heartfelt thank you goes out to all the partners and sponsors of the AEE 2023 conference (Figure 1).

Eng. Proc. 2023, 57, 1 4 of 4



Figure 1. Logos of the sponsors [1–12].

**Conflicts of Interest:** The authors declare no conflict of interest.

#### References

- 1. AZ GEO. Available online: https://www.azgeo.cz/ (accessed on 7 November 2023).
- ECOCOAL. Available online: https://www.ecocoal.cz/ (accessed on 7 November 2023).
- 3. LESOSTAVBY. Available online: https://lesostavby.cz/ (accessed on 7 November 2023).
- 4. NICOLET CZ, Molecular Spectroscopy. Available online: https://nicoletcz.cz/ (accessed on 7 November 2023).
- 5. KUBICEK Blowers. Available online: https://kubicekvhs.cz/cs/ (accessed on 7 November 2023).
- 6. Ostravské Vodárny a Kanalizace a.s. Available online: https://www.ovak.cz/ (accessed on 7 November 2023).
- 7. Cementáreň Ladce. Available online: https://www.pcla.sk/en/stranka/home (accessed on 7 November 2023).
- 8. MERCI. Laboratory as It Should Be. Available online: https://www.merci.cz/en/ (accessed on 7 November 2023).
- 9. Severomoravské Vodovody a Kanalizace Ostrava, a.s. Available online: https://www.smvak.cz/web/guest/home (accessed on 7 November 2023).
- 10. Czech Chamber of Authorized Engineers and Technicians Active in Construction. Available online: https://www.ckait.cz/(accessed on 7 November 2023).
- 11. Český Svaz Stavebních Inženýrů (ČSSI). Available online: http://www.cssi-cr.cz/ (accessed on 7 November 2023).
- 12. LENZIG. Available online: https://www.lenzing.com/ (accessed on 7 November 2023).

**Disclaimer/Publisher's Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.