



## *VI International Scientific-Technical Conference*



### ***ACTUAL PROBLEMS OF RENEWABLE ENERGY, CONSTRUCTION AND ENVIRONMENTAL ENGINEERING***



24 – 27 November 2022, Kielce, (Poland, Ukraine, Croatia, Slovakia, Lithuania)



**The time and place of the meeting: 24 – 27 November 2022.  
Faculty of Environmental, Geomatic and Energy Engineering, Kielce University of  
Technology, Poland.**

**al. Tysiąclecia Państwa Polskiego 7, 25-314 Kielce**

Beginning of conference – 24 November 2022 in 10:00.

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**Conference languages:** Polish, English, Ukrainian



#### *Conference Chairs:*

##### **Anatoliy Pavlenko**

prof. doctor of science Head of Department of Building Physics  
and Renewable Energy, Kielce University of Technology

##### **Aleksander Szkarowski**

prof. doctor of science Head of Department of Construction  
Networks and Systems, Koszalin University of Technology



*24 – 27 November 2022, Kielce, Poland*



### **The organizers:**

- Kielce University of Technology Faculty of Environmental, Geomatic and Energy Engineering (Poland);
- Kozsalin University of Technology Faculty of Civil Engineering, Environment and Geodetic Sciences (Poland);
- Institute of Engineering Thermophysics National Academy of Sciences of Ukraine (Ukraine);
- The European Academy of Education and Science (Poland);
- National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" (Ukraine)
- University of Zagreb Faculty of Metallurgy (Croatia);
- University of Žilina Department of Power Engineering (Slovakia)
- Vilnius Gediminas Technical University (Lithuania)

### **Scientific and organizing committee of the conference:**

#### ***Co-organizers (scientific committee):***

- **Prof. doctor of science Anatoliy Pavlenko** – Head of Department of Building Physics and Renewable Energy, Kielce University of Technology, Poland;
- **Prof. PŚk doctor of science Lidia Dąbek** – Scientific Director of the Discipline Environmental Engineering, Mining and Energy, Kielce University of Technology, Poland;
- **Prof. doctor of science Aleksander Szkarowski** - Head of Department of Construction Networks and Systems, Kozsalin University of Technology, Poland;
- **Prof. doctor of science Hanna Koshlak** – Department of Building Physics and Renewable Energy, Kielce University of Technology, Poland;
- **Prof. doctor of science Engvall Klas** – KTH, Sweden;
- **Prof. doctor of science Ladislav Lazić** - Faculty of Metallurgy University of Zagreb, Croatia;
- **Prof. doctor of science Milan Malcho** – Head of Department of Power Engineering, Slovakia;
- **Doctor of science Andrej Kapjor** – Department of Power Engineering, Slovakia;
- **Prof. doctor of science, Corresponding Member of NAS of Ukraine Borys Basok** - Head of Department "Thermophysical Basics of Energy-Saving Technologies" Institute of Engineering Thermophysics National Academy of Sciences of Ukraine, Ukraine;
- **Doctor of science Helen Skop** - Smart heat corporation, USA;
- **Prof. Doctor of science Violeta Motuzienė** Vilnius Gediminas Technical University, Lithuania;
- **Prof. Doctor of science Zongming Yang** Jiangsu university of science and technology, China;
- **Prof. doctor of science Valerii Deshko** - National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute", Ukraine

### **Papers of authors can be published in journals:**

"Енергетика: економіка, технології, екологія" <https://kpi.ua/publication-en>

„Journal of New Technologies in Environmental Science” [jntes.tu.kielce.pl](https://jntes.tu.kielce.pl) (DOAJ)

"Rocznik Ochrona Środowiska" ([Web of Science \(Clarivate\)](#)), [Scopus \(Elsevier\)](#)

"Energies/Latest Research of Building Heat and Mass Transfer" (Q1), ([Web of Science \(Clarivate\)](#)), [Scopus \(Elsevier\)](#)

"Materials/ Special Issue "Heat and Mass Transfer in Porous Materials" (Q1), ([Web of Science \(Clarivate\)](#)), [Scopus \(Elsevier\)](#))

"Power engineering: research, equipment, technology" ([DOAJ](#))

"Thermophysics and Thermal Power Engineering" [www.ihe.nas.gov.ua](http://www.ihe.nas.gov.ua)

You can send your articles to us at [jntes@tu.kielce.pl](mailto:jntes@tu.kielce.pl) with the name of the journal in which you want to publish the article. Review will be carried out by the scientific committee of the conference.

## CONFERENCE PROGRAMME

### Regulations:

in the plenary – to 20 min.;

at the meetings sectional –10-15 min.;

speaking –to 5 min.

<b>The general program of the Conference</b>	<b>Time</b>	<b>Place</b>	<b>Moderator</b>
Registration of participants	24 November 2022 10:00-10:45		The Organizing Committee
This opening session, plenary session	25 November 2022 11:00-12:00	4.09 E	Prof. doctor of science <b>Anatoliy Pavlenko</b> Prof. doctor of science <b>Aleksander Szkarowski</b> Prof. doctor of science <b>Violeta Motuzienė</b> Prof. doctor of science <b>Borys Basok</b> Prof. doctor of science <b>Ladislav Lazić</b> Prof. doctor of science <b>Milan Malcho</b> Prof. doctor of science <b>Valerii Deshko</b> Prof. doctor of science <b>Hanna Koshlak</b> Prof. doctor of science <b>Lidia Dąbek</b>
<b>Actual problems of building physics</b>	25 November 2022 12:30-14:00	1.15 E	Prof. doctor of science <b>Valerii Deshko</b>
<b>Actual problems of environmental engineering and ecology</b>	25 November 2022 12:30-14:00	1.20 E	Prof. doctor of science <b>Hanna Koshlak</b>
<b>Actual problems of thermal and renewable energy</b>	25 November 2022 12:30-14:00	1.08 E	Prof. doctor of science <b>Anatoliy Pavlenko</b> Prof. doctor of science <b>Violeta Motuzienė</b>
<b>Actual problems fundamental heat and mass transfer</b>	25 November 2022 12:30-14:00	1.09 E	Prof. doctor of science <b>Ladislav Lazić</b> Prof. doctor of science <b>Lukasz Orman</b>
<b>Theoretical foundations of thermal machines</b>	25 November 2022 12:30-14:00	2.19 E	Prof. doctor of science <b>Lidia Dąbek</b> Prof. doctor of science <b>Milan Malcho</b>
<b>Actual problems of quantitative assessment of the low-carbon energy and industry</b>	25 November 2022 12:30-14:00	2.20 E	Prof. doctor of science <b>Aleksander Szkarowski</b>
<b>Thermophysics of the interaction of a building with the environment</b>	25 November 2022 12:30-14:00	1.14 E	Prof. doctor of science <b>Borys Basok</b>
Continued work of section	26 November 2022 12:30-14:00		The section moderators
Discussion	26 November 2022 14:15-15:30		The section moderators
Summary and the closing of the conference,	27 November 2022 16:00	4.09 E	The Organizing Committee