

Detailed programme of the conference

06.09.2023 Wednesday:

Building V of the Rzeszow University of Technology

- 13:00 - 16:00 Registration of conference participants
hall of the building V (al. Powstańców Warszawy 12, 35-959 Rzeszów)
- 16:00 - 17:00 Official opening of the conference: **auditorium V-1**
- 16:00 – 16:15 Opening of the conference - Professor Piotr Koszelnik,
Rector of Rzeszów University of Technology
- 16:15 – 16:30 Presentation of the Faculty of Civil and Environmental Engineering and Architecture,
Rzeszów University of Technology - Prof. Lech Lichołai, Dean of the Faculty
- 16:30 – 16:45 Presentation of the Institute of Civil Engineering and Building Systems, Lviv Polytechnic
National University - Prof. Zinovii Blikharskyi, Director of Institute
- 16:45 – 17:00 Presentation of the Faculty of Civil Engineering, Kosice University of Technology -
Prof. Dušan Katunský, Dean of the Faculty
- 17:00 - 19:00 Opening session on infrastructural problems of Ukraine in the post-war period
- Chairmen: Prof. P. Koszelnik
1. Prof. Z. Blikharskyi, Director of Institute of Civil Engineering and Building Systems, Lviv Politechnic National University:
Scale of the problem, volume of destruction, statistics of needs
 2. Dr Fedir Yatsko, Prezes Ukraińskiego Stowarzyszenia Organizacji Projektowych (UADO):
Damage to bridge structures as a result of hostilities,
 3. Prof. Andrzej Nowak, Professor and Chair Elton & Lois G. Huff Eminent Scholar Chair Department of Civil and Environmental Engineering, Auburn University:
Design specifications, codes, guides – American and others, ACI, PCI, AISC, NDS, Eurocodes; after war proposals for Ukraine
 4. General discussion
- 19:00 Dinner in a form of standing party - hall of the building V

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07.09.2023 Thursday:

Building **P** of the Rzeszow University of Technology (ul. Poznańska 2, 35-084 Rzeszów)

09:00 – 11:00 Session 1 P - 23	Civil Engineering, Architecture	09:00 – 11:00 Session 1 P - 24	Environmental Engineering
Chairman: Zinoviy Blikharskyy Szczepan Woliński		Chairman: Zuzana Vranayová Janusz R. Rak	
Vadim Griniov - The strength of compressed complex reinforced concrete structures on the basis of hollow concrete blocks		Zbigniew Respondek - Climatic loads on triple-glazed insulating glass units used as an external horizontal building envelope	
Natalia Bróz, Piotr Nazarko - A comparative analysis based on contact and non-contact measurements		Erika Dolníková, Dušan Katunský, Zuzana Dická - Comparison of Daylight Levels using Simulation Calculation Tools	
Alina Novhorodchenko, Taras Shnal, Roman Yakovchuk, Nazarii Tur - The study of the behavior of reinforced concrete structures of modular shelter in conditions of explosion		Oleksandr Riabenko, Anna Panasenko, Dmytro Olefir, Volodymyr Tymoshchuk - Improving the Efficiency of Using Water Resources for the Production of Electricity in Market	
Jacek Abramczyk, and Katarzyna Chrzanowska - An influence of roof lattice girder inclination on the work of structural systems supporting shed roof sheeting		Daniela Kaposztasova, Zuzana Vranayova, Oto Hudec, Natasa Urbancikova - Green Buildings: Paving the Way for a Sustainable Energy Future	
Bohdan Demchyna, Leonid Vozniuk, Mykhailo Surmai - Testing of the ribbed dome which is manufactured by 3D printing		Orest Voznyak, Iryna Sukholova, Oleksandr Dovbush, and Kyrylo Andreiko - Air distribution in a room by the swirled-compact compressed air jets	
Przemysław Smela, Rafał Szozda, Leonard Ziemiański - Modeling of the cryogenic tank to warehouse Liquefied Natural Gas (LNG) in the event of the earthquake		Natalia Brycht - The problem of recycling construction waste in Poland	
Myroslav Sanytsky, Tetiana Kropyvnytska, Orest Vakhula and Yuriy Bobetsky - Nanomodified Ultra High-Performance Fiber Reinforced Cementitious Composites with enhanced operational characteristics		Kocúrková Mária, Pavol Knut, Vranayová Zuzana - Green facades and their benefits in a sponge city	
Anna Maria Martyka - Development directions of small historic cities in the Subcarpathia		Martina Zeleňáková, Rastislav Fijko, Viktor Karľa, Igor Hančovský, Marcel Behún, Ervín Lumnitzer, Hany F. Abd-Elhamid - Green zones at TUKE campus	
11:00 - 11:30 Coffee break			

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11:30 – 13:30 Session 2 P - 23	Civil Engineering	11:30 – 13:30 Session 2 P - 24	Environmental Engineering
Chairman: Tetiana Kropyvnytska Lech Lichołai		Chairman: Dušan Katunský Orest Voznyak	
Zinoviy Blikharskyy, Maksym Lobodanov and Pavlo Vegeera - The influence of the damage placement in the compressed area of concrete on the deformability of bent reinforced concrete elements		Stepan Shapoval, Stepan Mysak, Pavlo Shapoval, Halyna Matiko - Analysis of Current Use of Renewable and Alternative Energy Sources by European Countries	
V. V. Cherniuk, V. Ye. Fasuliak I. V. Bihun and M. V. Cherniuk - Variability of Darci Friction Factor in Differential Equation for Enforced Flow in Collector-pipeline		Justyna Zamorska, Izabela Kiełb - Sotkiewicz - UV radiation in wastewater disinfection	
Volodymyr Verba and Petro Kholod - An experimental study of beams made of autoclaved aerated concrete masonry units		Jan Domanicky, Frantisek Vranay - The impact of vegetative roof on heat energy demand	
Oksana Pozniak, Andriy Melnyk, Uliana Marushchak and Igor Margal - Research of Modified Cementitious System for Non-autoclave Aerated Concretes		Janusz R. Rak, Krzysztof Boryczko, Magdalena Stręk - Assessment of Water Volume Allocation in Network Water Supply Tanks Using Hulbert Method	
Ihor Lichnov, Vadym Kahanov - Vibro-pressed concrete in Ukraine: problems, trends and prospects for development		Anna Sedlakova, Jaroslav Vojtus, Ondrej Havrila - Analysis of alternative design of an administrative building from the point of view of energy – a case study	
Roman Tytarenko, Roman Khmil and Rostyslav Vashkevych - The Monte Carlo Simulation Used in the RC Structures Reliability and Durability Assessment Tasks: a Review		Alicja Puskarewicz, Agata Skwarczyńska - Wojsa, Paulina Sobolewska - Adsorption of acetaminophen on activated carbon	
Andriy Klym, Yaroslav Blikharskyy, Oleksandr Panchenko and Yuriy Sobko - The analysis of the influence of damaged concrete compression zone on the RC beam using FEM		Knut Pavol, Kapalo Peter - Analysis of electricity production by photovoltaic panels on a SINGLE - family house - case study	
		Andželika Domoń, Dorota Papciak, Eleonora Sočo - Clean and Tasty Water - Analysis of the Effectiveness of Water Filter Jugs	

13:30 - 14:30 Lunch

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14:30 – 16:30 Session 3 P - 23	POSTER SESSION	14:30 – 16:30 Session 3 P - 24	Environmental Engineering
Chairman: Piotr Nazarko		Chairman: Stepan Shapoval	
Eleonora Sočo, Andželika Domoń - Effect of Chemical Modification of the Coal Fly Ash onto Adsorption of Chromium(III) Ions in the Presence of Cobalt(II) Ions in a Single and Binary System		Daniela Kaposztasova, Danica Košičanová - Model of Accumulation of Rainwater from Surface Runoff in a Tank for Use in Building	
Agnieszka Lal Liquidity index of Lublin loess as a function of cone resistance q_c obtained from CPTu test		Jakub Żywiec, Barbara Tchórzewska – Cieślak, Janusz Rak - Safety of the water supply system from the system operator perspective	
Krzysztof Nepelski - The concept of assessing geohazards in spatial planning in the western part of Lublin		Zuzana Dická, Dusan Katunsky, Erika Dolnikova - Elimination options of solar heat gains through transparent surfaces – Review	
Kamil Szylak - Comparison of design methods for robustness on the example of a selected rc frame structure		Dorota Papciak, Monika Zdeb - Rainwater treatment technology for the hygienic and food purposes in households	
Lidia Buda-Ożóg, Zdzisław Pisarek, Joanna Zięba, Damian Nykiel - FEM simulations and experimental testing of a connector for prefabricated cylindrical tank elements		Michal Gorás, Frantisek Vranay - Accumulation of thermal energy in the thermal tank storage with the help of the sun	
Andrzej Wojnar, Edyta Bernatowska, Olena Chernieva - Analysis of building structure under impact load		Monika Zdeb, Justyna Zamorska, Adam Masłoń - Microbiological stability of post-fermentation leachate	
Edyta Bernatowska, Andrzej Wojnar, Lucjan Ślęczka - Behaviour of Steel Lattice Tower with Partially Preloaded Bolted Splices		Silvia Vilcekova, Eva Kridlova Burdova, Jana Budajova Peter Mesaros - Building materials circularity of green roofs	
Paweł Kut, Katarzyna Pietrucha -Urbanik, Martina Zeleňáková - Bibliometric analysis of renewable energy research and industrial assets in Poland and Slovakia			
19:00 Gala dinner – TWIERDZA Restaurant			

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08.09.2023 Friday:

Building **P** of the Rzeszow University of Technology

09:00 – 09.30 Official closing of the conference P – 23

Chairman of organizing committee Prof. Piotr Nazarko, Vice - Dean of the Faculty,

09:30 Introduction to technical trip – prof. Tomasz Siwowski, Rzeszow University of Technology, Head of the Department of Roads & Bridges

09:35 – 10.00 The Podkarpackie section of Via Carpatia (expressway S-19) – Wiesław Sowa, Deputy Director of the Rzeszow Branch of GDDKiA

10.00 - 10.20 Design aspects of the TBM tunnel along Via Carpatia in Babica – Tomasz Siwowski, CEO of Promost Consulting, Rzeszów

10.20 – 10.40 Construction aspects of the TBM tunnel along Via Carpatia in Babica – Sławomir Barczak, Contract Director, Mostostal Warszawa S.A. & Acciona Construciones, Madrid

10.40 – 13.00 Technical trip to the construction site of the TBM tunnel along Via Carpatia in Babica – Artur Salachna, Construction Manager, Mostostal Warszawa S.A. & Acciona Construciones, Madrid