



Program of the scientific and practical conference «Mathematical modeling and experimental studies of civil and mechanical engineering problems»

Program of the Day (January 28, 2025)

Location: Leškova 3A, Bratislava

OPENING OF THE CONFERENCE

09:00 – 09:10 – MISHURIS G., GAŽIOVÁ A. Opening of the conference–Main objectives and organization

09:10 – 09:15 – ISTENES I. Welcome speech by the organizer

09:15 – 09:20 – DANISHEVSKYY V. Director of the Educational and Scientific Institute «Prydniprovsk State Academy of Civil Engineering and Architecture», Ukrainian State University of Science and Technologies. Welcome speech

PLENARY LECTURES

09:20 – 09:30 – ISTENES I. The 220-Ton Challenge: Vacuum Distillation Column

09:30 – 09:50 – SIVÝ M. The Effect of Vibrations on the Tightness of Flange Joints in a Piping System

09:50 – 10:10 – BABENKO M. Agricultural Waste to Insulation: Laboratory Study of Mycelium-Stabilized Straw Composites

10:10 – 10:30 – DANISHEVSKYY V. Particle swarm optimization for the rational design of earthquake resistant buildings with friction dampers

10:30 – 10:50 – VOLCHOK D. Optimal Design of a Truss Structure Under Uncertainty

10:50 – 11:10 – ZHURAVLOVA Z. The Torsion Problem of Finite Cylinder with Different Coupling Conditions Between its Layers

11:10 – 11:30 – PROTSEROV Y. Axisymmetric Thermoelastic Problem for a Cone Truncated Twice by Spherical Surfaces

11:30 – 11:50 – KARASEV A. Numerical Analysis Character of Conical Shells Buckling Problem and Effect of Geometry Deviations

11:50 – 12:00 – Coffee break

YOUNG RESEARCHER LECTURES

12:00 – 12:15 – VERSHKOVA Y. Determination of the Load-Bearing Capacity of Flat Sandwich Panels

12:15 – 12:30 – ZAVARYKIN S. Motion Extraction Technology and Optical Flow Method for Structural Deformation Monitoring in Construction and Civil Engineering

12:30 – 12:45 – KOVAL V. Modeling and Experimental Investigation of a Cantilevered Steel Structure

12:45 – 13:00 – MOVCHAN O. Proposal of a Permanent Formwork Block to Enhance Low-Rise Building Construction

13:00 – 13:15 – DUNDA V. Rational Design of an Energy-Efficient Foundation Slab with Void Formers

13:15 – 13:30 – HRYHOROVYCH M. Drone-Enabled AI for Real-Time Roof Breach Detection and Repair Cost Analysis

13:30 – 14:10 – Lunch break

YOUNG RESEARCHER LECTURES

14:10 – 14:25 – SIRENOK K. Development of Structural Solutions for Floors Made Using 3D Printing Technology

14:25 – 14:40 – KOVROVA V. Impact of Column Damage on the Stability of the Reinforced Concrete Building Frame

14:40 – 14:55 – BEZVERKHYYI D. Analysis of the Elastic Waves Attenuation in Heterogeneous Layered Structures

14:55 – 15:10 – YERMAKOV O. Investigation of the Effect of Mineral Oils on the Mechanical Characteristics of Heavy Concrete

15:10 – 15:25 – MYKHAILYK D. Modern Software for Organizational and Technological Solutions in Construction

15:25 – 15:40 – KUCHYN I. Investigation of the Impact of Geometric Configuration on Wave Attenuation in a Composite Beam with Circular Inclusions

FINAL CEREMONY

15:40 - 15:45 – GAŽIOVÁ A.: Farewell words

15:45 – End of the Day

LINK / QR TO THE MEETING:

<https://shorturl.at/1MNrf>

