

Thursday, 2nd of December 2021

9.00-9.15 Opening Ceremony

Session no 1 – Chairman: prof. Marcin Kamiński

9.15-9.40 **K. Kawaguchi**
Lightweight Steel Frames Manually Prestressed – General Lecture

9.40-10.00 **E. Błazik-Borowa, A. Misztela, M. Pieńko, A. Robak**
Finite Element Method Scaffoldings Modelling Based on Laboratory Tests - Invited Lecture

10.00-10.15 **N. Freiherrrova, M. Hornakova, D. Juracka, M. Kawulok**
Dependence of Membrane Structure Deformation on Different Material

10.15-10.30 **M.A. Dybizbański, M.W. Hązła, K. Rzeszut, I. Szewczak**
Economic and Reliability Assessment of TWCFS Structures Strengthened with CFRP Composites

10.30-11.00 **Coffee Break**

Session no 2 – Chairman: prof. Marcin Kamiński

11.00-11.15 **K. Winkelmann, K. Legowicz**
The Application of Simulation-Based Sensitivity Analysis in the Preliminary Design of Network Domes

11.15-11.30 **K. Żyliński, J. Górski**
Deformation of a Shell of a Fuel Tank Caused by Non-Uniform Soil Settlement

11.30-11.45 **A. Padewska-Jurczak, P. Szczepaniak, R. Walentyński**
Experimental and Numerical Analyses of Airflow Around Two Cylinders Angled to the Direction of Wind

11.45-12.00 **R. Szmit**
Structural Bionic Systems: Design and Numerical Analysis

12.00-12.15 **A. Rutkiewicz, L. Małyszko**
Results of Own Experimental Tests of a Tensegrity Simplex Under Static Loading

12.15-13.00 **Coffee Break**

Session no 3 – Chairman: prof. Romuald Tarczewski

13.00-13.25 **I.G. Siotor, I. Wright**
Design, Engineering and Installation of World Largest Cable Net Roof – General Lecture

13.25-13.45 **R. Studziński**
Use of the Blind Rivets in Sandwich Panels - Invited Lecture

13.45-14.00 **I. Calotescu, D. Bîtcă, M.P. Repetto**
Full-Scale Behaviour of a Telecommunication Lattice Tower Under Wind Loading

14.00-14.15 **P. Obara, M. Solovei, J. Tomasik**
Impact of the Initial Prestress Level on Behaviour of Tensegrity Domes

14.15-14.30 **A. Knitter-Piątkowska, O. Kawa, M.J. Guminiak**
An Application of the Discrete Wavelet Transform to Damage Detection in Flat Truss Girders

14.30-15.00 **Coffee Break**

Session no 4 – Chairman: prof. Romuald Tarczewski

15.00-15.15 **K. Winkelmann, J. Sikora**
Simulation-Based Sensitivity Assessment of a Truss Lookout Tower to Corrosion-Induced Degradation

15.15-15.30 **M. Wiśniowski, K. Koziel, L. Rogoziński**
Influence of Steel Roof Structure Rigidity on the Distribution of Internal Forces in Load-Bearing Multi-Span Trapezoidal Sheet

15.30-15.45 **R. Walentyński, M. Wiśniowski, D. Cornik**
Catenoidal Cooling Tower – Introductory Structural Analysis

15.45-16.00 **P. Stempin, W. Sumelka**
Free Vibration Analysis of Space-Fractional Beams

16.00-16.15 **A. Franus, S. Jemioło**
A Note on an Approximation on the Stress State in Inflated Damaged Cylindrical Tube

16.15-16.30 **D. Pilarska**
Optimization Approach for Dome Structures

17.00 **Gala Dinner**

Friday, 3rd of December 2021

Session no 1 – Chairman: dr Jacek Szafran

- 9.00-9.25 **A. Zingoni**
Use of Group Theory in the Reduction of Vector Spaces of Problems with Symmetry – General Lecture
- 9.25-9.40 **J. Bęć, E. Błazik-Borowa, J. Szer**
Analysis of the Harmonic Excitation of Scaffolding Structures
- 9.40-9.55 **P. Sorn, M. Sondej, J. Górski**
Sensitivity of Stresses and Deformations of Underground Tanks to Non-Standard Actions
- 9.55-10.10 **R. Bredow, M. Kamiński**
Random Response of Steel Hall Subjected to the Dynamic Excitation by the Generalized Iterative Stochastic Perturbation Technique
- 10.10-10.45 **Coffee Break**

Session no 2 – Chairman: dr Jacek Szafran

- 10.45-11.00 **M. Ostrowski, B. Blachowski, G. Mikułowski, L. Jankowski**
Parametric Identification of Uncertain Bolted Connections with Bayesian Approach
- 11.00-11.15 **J. Majtka, M. Gajdzicki, L. Supel**
Comparative Analysis of the Resistances of Uniplanar Joints in Lattice Structures
- 11.15-11.30 **M. Grzywiński, T. Dede, B. Atmaca**
Optimum Design of Barrel Vaults Structures Using Rao Algorithm
- 11.30-11.45 **M. Kamiński, R. Błoński**
Analytical and Numerical Reliability Analysis of the Pratt Steel Truss
- 11.45-12.00 **M. Redzyna, E. Kubacka, A. Wirowski**
Static and Dynamic Analysis of Bar Structures Using VPL on the Example of Steel Dome
- 12.00-12.45 **Coffee Break**

Session no 3 – Chairman: prof. Leszek Malyszko

- 12.45-13.10 **M.P. Repetto, M.T. Mengistu**
The Effect of Thunderstorm Extreme Winds on Lightweight Structures – General Lecture
- 13.10-13.30 **P. Tazowski, B. Blachowski, J. Logo**
First-Order Approach for Structural Topology Optimization with Low-Cycle Fatigue Constraints - Invited Lecture
- 13.30-13.45 **M. Łasecka-Plura, Z.M. Pawlak, M. Żak-Sawiak**
Influence of the Rotational Flexibility of Supports on the Dynamic Parameters of the Arch Structure
- 13.45-14.00 **I. Wójcik-Grząba**
Optimal Cable Net as an Initial Stage of Design – Force Density Method Approach
- 14.00-14.15 **R. Tarczewski**
Application of traditional cost-estimation systems to information classification in BIM models
- 14.15-14.45 **Coffee Break**

Session no 4 – Chairman: prof. Leszek Malyszko

- 14.45-15.00 **M.Z. Obrębski**
Risk Analysis Vs. Commercial Investment Completion Deadline. A Case Study
- 15.00-15.15 **M. Strąkowski, M. Kamiński**
Probabilistic Analysis of the 6061 Aluminium Alloy Tensile Test with Random Initial Microdefects
- 15.15-15.30 **J. Szafran, A. Matusiak**
Polyurea Coatings as a Possible Structural Reinforcement System
- 15.30-15.45 **J. Szafran, J. Telega**
Reinforcement of Lattice Tower Legs Made of Angle Sections
- 15.45-16.00 Closing Ceremony
- 16.00-16.45 Meeting of IASS Polish Chapters
- 17.00 **Farewell Dinner**