

C: MATHEMATICS AND APPLICATION

VENUE: Room 341., Bld. A/4.3rd floor
Chairman: Attila HÁZY *assoc. professor*
Secretary: Szilvia Szilágyi LENGYEL *assoc. professor*

Date: 12 October, 2023

- 13.30 Tamás Glavosits, Attila Glavosits, Péter Erdei *University of Miskolc, Hungary*
Variations on a theme
- 13.45 Attila Házy, Judit Makó *University of Miskolc, Hungary*
Counterexamples to the Breckner-convexity
- 14.00 Zsolt Karácsony, Tamás Glavosits *University of Miskolc, Hungary*
On Pexider additive functional equations
- 14.15 Szilvia Szilágyi, Enikő Palencsár *University of Miskolc, Hungary*
An Evolutionary approach to developing supporting software for the design of card deck-based mathematical didactic games
- 14.30 Judit Tóthné Makó, Attila Házy *University of Miskolc, Hungary*
Bernstein--Doestch type theorem for Breckner convex functions
- 14.45 József Túri *University of Miskolc, Hungary*
On a functional equation and there solution
- 15.00 *Break*
- 15.15 József Túri *University of Miskolc, Hungary*
On random graphs and its application
- 15.30 Ferenc János Szabó *University of Miskolc, Hungary*
Grapho- Analytical Optimization of Key Joints
- 15.45 *Summary*

D: ENERGETICAL AND MECHANICAL DESIGN

VENUE: Room 201., Bld. A/3.2nd floor
Chairman: László KÖNÖZSY *assist. professor*
Secretary: Viktória KÁLLAI *research assistant*

Date: 13 October, 2023

- 9.00 Attila Aradi University of Miskolc, Hungary
Lessons learned from comparison on underwater noise radiation of electrical boat propulsion on lake Balaton using field measurements
- 9.15 Lushun Fan University of Miskolc, Hungary
Flow structures around the Burj Khalifa in 2D and 3D
- 9.30 Issa Omle, Endre Kovács University of Miskolc, Hungary
Multi-objective optimization and simulation for multiple models of Walls to estimate heat gain using Artificial Neural Network model
- 9.45 Viktória Kállai, L. Gábor Szepesi University of Miskolc, Hungary
Sensitivity analysis of heat flow of heat exchangers in ethanol-water distillation column
- 10.30 Gyula Krámer, Zoltán Siménfalvi, L. Gábor Szepesi University of Miskolc, Hungary
Mathematical investigation of sealing inefficiencies of hot air engines and other piston machines
- 10.45 *Break*
- 11.00 László Könözy, Mohammed Ashraf Hossain Cranfield University, Great Britain
A Multiphase Approach for Predicting Chemical Reactions at a Given Height of a Structured Packed Bed to Reduce Greenhouse Gas Emission
- 11.15 László Könözy, Mohammed Ashraf Hossain Cranfield University, Great Britain
Application of a Three-Dimensional CFD Model to Study Effect of Heat Transfer in Carbon Remova
- 11.30 Aimen Tanougast, Krisztián Hriczó University of Miskolc, Hungary
Numerical study of the vortex generators effects in a corrugated channel for turbulent flow
- 11.45 László Rónai University of Miskolc, Hungary
Measuring the Pressure-flow Characteristics of a Proportional Pilot Operated Pressure Relief Valve
- 12.00 Benedek Kulcsár, Bernadett Spisák University of Miskolc, Hungary
The small punch test: an overview on previous research
- 12.15 *Break*

D: ENERGETICAL AND MECHANICAL DESIGN

VENUE: Room 201., Bld. A/3.2nd floor
Chairman: **László KÖNÖZSY** *assist. professor*
Secretary: **Viktória KÁLLAI** *research assistant*

Date: **13 October, 2023**

12.30 Ákos József Lengyel, István Ecsedi, Dávid Gönczy *University of Miskolc, Hungary*
Neutral inhomogeneity in circular cylinder subjected to prescribed boundary displacement

12.45 Ákos József Lengyel, István Ecsedi, Attila Baksa *University of Miskolc, Hungary*
Pure bending of curved beam with non-uniform cross section

13.00 Abderrazek Messaoudi, László Péter Kiss *University of Miskolc, Hungary*
Investigations on the limit-point buckling of curved beams

13.15 *Summary*

E: DESIGN AND MANUFACTURING

VENUE: Room 1., Bld. C/1. groundfloor
Chairman: Gyula VARGA *assist. professor*
Secretary: Viktória FERENCSEK *research assistant*

Date: 13 October, 2023

- 9.00 Sulaiman Mustafa Al-Timmimi, Szabolcs Szávai *University of Miskolc, Hungary*
Deep drawing for the aluminum alloy sheet (AA2024-T4) by using a hybrid Metal Matrix Composites punch
- 9.15 Viktória Ferencsik *University of Miskolc, Hungary*
Modelling of the Impact of Burnishing Force on Average Surface Roughness
- 9.30 Krisztina Kun Bodnár, Csaba Felhő, Zsolt Maros, István Sztankovics *University of Miskolc, Hungary*
Analysis of the rim turning of aluminium aerosol cans based on tool edge geometry
- 9.45 István Sztankovics *University of Miskolc, Hungary*
Study on the roughness parameters describing surface functionality in bore honing
- 10.00 Gyula Varga, Viktória Ferencsik *University of Miskolc, Hungary*
Investigations of selected topography parameters of diamond burnished stainless-steel specimens
- 10.15 *Break*
- 10.30 Dávid Bodnár, Károly Jármái *University of Miskolc, Hungary*
Optimisation of robot structures
- 10.45 György Hegedűs, Sándor Apáti *University of Miskolc, Hungary*
Investigation and Simulation of a Scotch Yoke Mechanism
- 11.00 Iskandar Alaa, Béla Kovács *University of Miskolc, Hungary*
Curriculum learning for deep reinforcement learning in swarm robotic navigation task
- 11.15 István Tüske, György Hegedűs *University of Miskolc, Hungary*
Direct kinematic of tilting table using Denavit – Hartenberg convention
- 11.30 Mahmood Alhafadhi, Bernadett Spisák, Zoltán Bézi *University of Miskolc, Hungary*
Prediction of Residual Stresses due to Welding of Butt Joints in Pressure Vessels
- 11.45 *Break*
- 12.00 Salman Brbhan, Viktória Mannheim *University of Miskolc, Hungary*
Improving building Life Cycle Assessment through integrated approaches
- 12.15 Salman Brbhan, Viktória Mannheim *University of Miskolc, Hungary*
Improving of Building Life Cycle Assessment based on the Investigating Ways: a Review Study
- 12.30 Levente Tugyi, Zoltán Siménfalvi, L. Gábor Szepesi *University of Miskolc, Hungary*
Hazardous area classification for waste water treatment plants using by decree and standard
- 12.45 Levente Tugyi, Zoltán Siménfalvi, L. Gábor Szepesi *University of Miskolc, Hungary*
Hazardous areas classification for in flammable liquid storage tanks
- 13.00 *Summary*

F: COMPUTER SCIENCE AND APPLICATIONS

VENUE: Room 114., Library of the Institute of Information Sciences

Chairman: **László KOVÁCS** *professor*

Secretary: **Waleign Tewabe SEWUNETIE** *PhD Student*

Date: **13 October, 2023**

- 9.00 Ali Habeeb, Endre Kovács, Betti Bolló *University of Miskolc, Hungary*
Multi objective optimization for house roof by using Artificial Neural Network model
- 9.15 Szabina Molnár-Zékány, Szilvia Árvai-Homolya *University of Miskolc, Hungary*
Three-dimensional reconstruction and evaluation of decubitus using a 3D scanner
- 9.30 Ihab Razzaq Sekhi *University of Miskolc, Hungary*
Selecting the suitable guarantee for the user by evaluating the QOS availability provided by Cloud service providers
- 9.45 Waleign Tewabe Sewunetie, László Kovács *University of Miskolc, Hungary*
ChatGPT based Automatic Question Generation
- 10.00 Elke Glistau¹, Norge Isaias Coelho Machado², Sebastian Trojahn³ *Otto-von-Guericke-Universität Magdeburg, Germany¹, Universidad Central „Marta Abreu” de Las Villas, Cuba², Anhalt University of Applied Sciences Bernburg, Germany³*
Logistics thinking: methods and interdisziplinarity
- 10.15 *Break*
- 10.30 Mustafa Hasan, Krisztián Hriczó *University of Miskolc, Hungary*
Thermal performance estimation of a V-corrugated solar air heater using ANN techniques
- 10.45 Tamás Bence Venczel, László Berényi, Krisztián Hriczó *University of Miskolc, Hungary*
Evaluation methods of risk factors in the automotive industry
- 11.00 Tamás Bence Venczel, László Berényi, Krisztián Hriczó *University of Miskolc, Hungary*
Investigation of automotive risk factors using Q-method at an international automotive Tier-1 supplier in Poland
- 11.15 *Summary*