University of Miskolc, Hungary

MultiScience - XXIX. microCAD
International Multidisciplinary Scientific Conference
9-10 April 2015

PROGRAMME
WELCOME ADDRESS FROM THE RECTOR

The University of Miskolc, which is the legal successor of the Academy of Mining and Metallurgy (Bergschule) founded in 1735 in Selmecbánya (Banska Stiavnica), extends its greetings to the Reader on the occasion of organising the \textit{XXIXth MultiScience - microCAD International Multidisciplinary Scientific Conference}.

The scope of this conference is exceptionally wide. Experts in engineering, economics, humanities and health sciences present and discuss their scientific results. Having completed profound scientific investigations and having reached interesting conclusions, all the active participants should be proud of their achievements and all the colleagues and guests should be interested in the scientific value behind the research teams. It is also our hope that the professional and personal relations between the experts will remarkably contribute to the efficient co-operation between participants and institutions as well.

Over the last 28 years, this annual international conference has become the most significant meeting of professionals at the University of Miskolc.

More than 7700 presentations from about 15 different countries, 41 thousand pages of publications and many agreements signed between universities and numerous academic and research proposals witness the achievements of the last 28 years.

I recommend you the program of the \textit{XXIXth MultiScience - microCAD International Multidisciplinary Scientific Conference} in the hope that the presentations, discussions and social events will give you a golden opportunity to cherish and widen your professional relations. I truly believe that your presence, either as a proud speaker or as an interested participant, will contribute to the success of this great scientific event.

Prof. András TORMA
Rector of the
University of Miskolc
SCIENTIFIC COMMITTEE OF THE CONFERENCE

Chairman: Tamás KÉKESI Pro-Rector for International Relations and Scientific Affairs

Members: Péter SZÜCS Dean of the Faculty of Earth Science and Engineering

Árpád Bence PALOTÁS Dean of the Faculty of Materials and Metallurgical Engineering

Edgárd BERTÓTI Dean of the Faculty of Mechanical Engineering and Informatics

Ákos FARKAS Dean of the Faculty of Law

Mariann SOMOSI VERES Dean of the Faculty of Economics

Mária KOVÁCS ILLÉS Dean of the Faculty of Humanities

Emőke KISS-TÓTH Dean of the Faculty of Health Sciences
DETAILED PROGRAMME
of the MultiScience - XXIX. microCAD International Multidisciplinary Scientific Conference
University of Miskolc, 9-10 April 2015

9 April (Thursday) 2015

10\textsuperscript{30} – 10\textsuperscript{35}  International Scientific Conference
Opening address
András TORMA – professor, Rector of the University of Miskolc
Venue: Lecture hall, Bld.

PLENARY SESSION
Venue: Lecture hall, Bld.
10\textsuperscript{35} – 11\textsuperscript{05}  Pál TARDY professor, Association of the Hungarian Steel Industry
Climate Policy of the EU and the Steel Industry

11\textsuperscript{05} – 11\textsuperscript{35}  György SÁRKÖZI director, Észak-magyarországi Közlekedési Központ Zrt.
Effects of Global Megatrends within the Hungarian Automotive Industry

11\textsuperscript{35} – 12\textsuperscript{05}  Tamás KÉKESI vice-rector, University of Miskolc
Development and Recycling Environment Friendly Soldering Materials for
the Automotive Industry

12\textsuperscript{05} – 12\textsuperscript{15}  Break

12\textsuperscript{15} – 13\textsuperscript{30}  Reception
Venue: Main Building A/4. Assembly Hall (Entry: only with invitation cards)

13\textsuperscript{30} – 14\textsuperscript{00}  Break

14\textsuperscript{00} – 18\textsuperscript{00}  Presentations in the parallel sessions
Venue: as listed in the section table

19\textsuperscript{00} – 21\textsuperscript{30}  Gala Dinner
Venue: University Dining Hall (Entry: only with invitation cards)

10 April (Friday) 2015

9\textsuperscript{00} – 12\textsuperscript{00}  Presentations in the parallel sessions
Venue: as listed in the section table

OPTIONAL PROGRAMME

10 April 2015
13\textsuperscript{00} – 22\textsuperscript{00}  Excursion to TOKAJ
REGISTRATION FOR THE CONFERENCE

Venue: The Registration Desk is opposite to the entrance of the Main Building (A/4.)

Registration is open:

<table>
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<th>Date</th>
<th>Time</th>
<th>Date</th>
<th>Time</th>
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<td>8 April (Wednesday) 2015</td>
<td>--- 12:00 - 19:00</td>
<td>9 April (Thursday) 2015</td>
<td>8:00 - 12:30 13:30 - 17:00</td>
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<td>8:00 - 11:00</td>
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ORGANISATIONAL COMMITTEE OF THE CONFERENCE

The organiser of the Conference is the UNIVERSITY OF MISKOLC

Address of the Scientific and Organisational Committee:
University of Miskolc, Rector’s Office, International Affairs Team
H-3515 Miskolc Egyetemváros
Phone: (36-46) 565-111/ ext. 1016
Fax: (36-46) 563-423
E-mail: microcad@uni-miskolc.hu
www.uni-miskolc.hu/~microcad
### SESSIONS AND VENUES OF THE CONFERENCE

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<td>Plenary</td>
<td>Plenary session</td>
<td>Lecture hall XXI. Bld. A/6. groundfloor, 32.</td>
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<tr>
<td>A</td>
<td>Environment- and Energy Management</td>
<td>Lecture hall VII. Bld. A/1. 1&lt;sup&gt;st&lt;/sup&gt; floor, 102.</td>
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<td>B</td>
<td>Applied Materials Science and Nanotechnologies</td>
<td>Room 312. Bld. B/1. 3&lt;sup&gt;rd&lt;/sup&gt; floor, 312.</td>
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<td>C1</td>
<td>Logistics</td>
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<td>C3</td>
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<td>Room 311. Bld. A/1. 3&lt;sup&gt;rd&lt;/sup&gt; floor, 311</td>
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<td>D3</td>
<td>Innovative mechanical engineering design</td>
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<td>Humanities and Social Sciences</td>
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<td>H</td>
<td>Health and Medical Sciences</td>
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SUSTAINABLE NATIONAL RESOURCES MANAGEMENT SYMPOSIUM

Chairman: Gábor MUCSI assoc. professor

A: ENVIRONMENT- AND ENERGY MANAGEMENT

VENUE: Lecture hall VII., Bld. A/1. 1st floor, 102.
Chairman: Ljudmilla BOKÁNYI assoc. professor
Secretary: Ádám RÁCZ research assistant

Date: April 9, 2015

14.00 Roland Dócs University of Miskolc, Hungary
   Determination of Connate Water Saturation Using Gas Displacement Method

14.20 Marin-Silviu Nan, Tomus Ovidiu-Bogdan, Ungur Andreea, Popescu Razvan University of Petrosani, Romania
   Comparative Analysis of Transportation Flow Regulating Systems in Oil Pipelines

14.40 Katalin Bohács, Zoltán Pap, Tamás Magyar, Zoltán Molnár University of Miskolc, Hungary
   Some Segments of the Project Criticel

15.00 László Kis University of Miskolc, Hungary
   Mechanical Net Torque Optimization of Sucker-Rod Pumping Units

15.20 Break

15.40 Richárd Tompa¹, László Ézsiás² University of Miskolc¹, Colas Északkő Ltd.², Hungary
   New Testing Equipment to Determine the Swelling Clay Content in Central Laboratory of Colas Északkő Ltd., Tályya

16.00 Claudia Butean¹, Cristina Miha³i¹, Angela M. Michnea², Zoita M. Berinde³, Anamaria Gavra², Mirela Simionescu² Technical University of Cluj Napoca, North University Center of Baia Mare¹, Maramures Environmental Protection Agency², Romania
   Nitrogen Species in Wet Atmospheric Deposition in Maramures County

16.20 Ádám Koncz University of Miskolc, Hungary
   Innovative Developments in Sucker Rod Pumped Well Analysis

16.40 Attila Garani Ministry of National Development, Hungary
   Petroleum Coke Fired Steam Power Plant at the Danube Refinery

17.00 Summary
SUSTAINABLE NATIONAL RESOURCES MANAGEMENT SYMPOSIUM

Chairman: Gábor MUCSI assoc. professor

A: ENVIRONMENT- AND ENERGY MANAGEMENT

VENUE: Lecture hall VII., Bld. A/1. 1st floor, 102.
Chairman: Ljudmilla BOKÁNYI assoc. professor
Secretary: Ádám RÁCZ research assistant

Date: April 10, 2015

9.00 Zoltán Fejes, Péter Szűcs, Zsombor Fekete, Endre Turai, Mátyás Krisztián Baracza
University of Miskolc, Hungary
A Geothermal System on the Western Slopes of the Tokaj Mountains

9.20 Csaba Ilyés, László Kompár
University of Miskolc, Hungary
Interpretation of Monitoring Data from the Miskolc University Meteorological Station

9.40 Sorin Mihai Radu, Andras Iosif
University of Petrosani, Romania
Improved Mechanised Extraction Technologies in Underground Hardcoal Mines from Jiul Valley-Romania

10.00 László Kompár¹, Péter Szűcs¹, László Palecsu², József Deák
University of Miskolc¹, Institute for Nuclear Research, Hungarian Academy of Sciences², GWIS Ltd.³, Hungary
Tritium Peak Method and 3H/3HE Dating Technique use for Estimating Shallow Groundwater Recharge

10.20 Dorin Tataru, Stanci Andreea Cristina, Stanci Aurora, Radu Sorin Mihai
University of Petrosani, Romania
Computer Simulation of Slag and Fly Ash Dust Transmission Around the Cet Paroseni Tailing Ponds

10.40 Break

11.00 Ildikó Bölkény, József Konyha
University of Miskolc, Hungary
Prevention of Hydrate Formation On Gas Well

11.20 Andreea Cristina Stanci, Aurora Stanci, Dorin Tataru, Nan Marin Silviu
University of Petrosani, Romania
Use of Curved Panels for the Noise Reduction Produced by Belt Conveyors from Oltenia Energy Complex

11.40 Roland Szabó, Gábor Mucsi
University of Miskolc, Hungary
Generally About Geopolymer Foams

12.00 László Kompár¹, Péter Szűcs¹, László Palecsu², Mihály Braun²
University of Miskolc¹, Institute for Nuclear Research, Hungarian Academy of Sciences², Hungary
Complex Isotopehydrochemical Method to Investigate Shallow Groundwater Recharge

12.20 Péter Kókai, Csaba Pólishka, Bernadett Csordás
University of Miskolc, Hungary
An Assessment of the Correlation Between Fuels and Depositions in the Combustion Chamber of the Miskolc Biomass Heating Plant

12.40 Summary
Chairman: Tamás TÖRÖK professor

B: APPLIED MATERIALS SCIENCE AND NANOTECHNOLOGY

VENUE: Room 312, Bld. B/1. 3rd floor, 312.
Chairman: Tamás TÖRÖK professor
Co-chairman: László VARGA assoc. professor
Secretary: Imre BUDAVÁRI PhD Student

Date: April 9, 2015

14.00 Ali H. Hasan Al-Azzawi, Péter Baumli, Gábor Mucsi University of Miskolc, Hungary
Mechanical Alloying and Milling

14.15 Jürgen Antrekowitsch, Gernot Rösler Montanuniversitaet Leoben, Chair of Nonferrous Metallurgy –
CD Laboratory for Heavy Metal Recycling, Austria
Steel Mill Dust Recycling in the 21st Century

14.30 Gernot Rösler, Jürgen Antrekowitsch Montanuniversitaet Leoben, Chair of Nonferrous Metallurgy –
CD Laboratory for Heavy Metal Recycling, Austria
Product Upgrade of Waelz Oxide Using an Alternative Resource

14.45 Wolfram Bernhart METSO, Austria
Processing of Tungsten Bearing Ores - Mineral Processing and Metallurgy

15.00 Zoltán Harangi, Gábor Nagy, Tamás Kékesi University of Miskolc, Hungary
Leaching Behavior of the Anode Slime Generated by the Electrefining of Sn-Ag-Cu Alloys

15.15 Break
APPLIED MATERIALS SCIENCE AND NANOTECHNOLOGY SYMPOSIUM

Chairman: Tamás TÖRÖK professor

B: APPLIED MATERIALS SCIENCE AND NANOTECHNOLOGY

VENUE: Room 312, Bld. B/1. 3rd floor, 312.
Chairman: Tamás TÖRÖK professor
Co-chairman: László VARGA assoc. professor
Secretary: Imre BUDAVÁRI PhD Student

Date: April 9, 2015

15.30 Peter Futáš¹, Alena Pribulová¹, Stefan Niznik¹, Gabriel Dúl¹, László Varga² Technical University Košice, Slovakia¹, University of Miskolc, Hungary²
The Elimination of Unfavourable Influence of the Steel Scrap in the Charge on the Cast Iron Quality

15.45 Noémi László, Pál Tóth University of Miskolc, Hungary
3D Reconstruction of Turbulent Flames by Stereoscopic Photography

16.00 Imre Budavári, László Varga, Dániel Molnár University of Miskolc, Hungary
Improvement the Gating- and Feeding System of the ASTM-B 108 Tensile Test Bar Using Control Volume Simulation

16.15 Majoros Csaba Csaba Metál Zrt., Hungary
Nyomásos Alumínium-öntvény Gyártástechnológiája és Optimalizálása

16.30 Laura Mádi, Jenő Dúl, Csaba Császár University of Miskolc, Hungary
Strength Properties Variation of Resin Bonded Core Materials Affected by Thermal Load

16.45 Dávid Angel¹, Márton Benke², Dávid Cseh¹, Valéria Mertinger¹ University of Miskolc¹, MTA-ME Material Science Research Group, University of Miskolc², Hungary
Residual Stress Evolution During the Production of an Automotive Component

17.00 Zoltán Kéri¹, Zsolt Leskó² University of Miskolc¹, Nemak Győr Ltd.², Hungary
Analyses of Aluminium High Pressure Die Casting Alloys’ Mechanical Properties

17.15 Viktória Dargai¹, Hartmut Polzin², László Varga¹, Jenő Dúl¹ University of Miskolc, Hungary¹, Bergakademie Freiberg, Germany²
Öntőei homokok granulometriai tulajdonságainak meghatározása képelemzéssel

17.30 Summary
MECHATRONICS AND LOGISTICS SYMPOSIUM

Chairman: Béla ILLÉS professor

C1: LOGISTICS

This section is organized by the University of Miskolc and the Czestochowa University of Technology

VENUE: Room 106., Bld. A/5. 1st floor, 106
Chairman: Béla ILLÉS professor
Secretary: Péter TELEK assist. professor

Date: April 9, 2015

14.00 Opening Ceremony

14.05 Julio César Cancio Ferrer ambassador, Republic of Cuba
Hungarian-Cuban-German Cooperation in the Field of Logistics Research and Higher Education

14.20 Gábor Bohács, Angéla Rinkács Budapest University of Technology and Economics, Hungary
Adaptive Simulation-Based Concept for Construction Logistics

14.35 Péter Telek University of Miskolc, Hungary
Computer Design of Materials Handling Equipment

14.50 Beáta Borodavko¹, Béla Illés², Ágota Bánya³ University of Miskolc, Hungary
The Sensibility Inspection of Supply Chains Based on Logistic Aspects

15.05 Corneliu Alexandrescu, Marin-Silviu Nan, Aurelian Nicola, Ioan Cucu University Politehnica Bucuresti. Romania
Comparative Study on the Influence of Road Traffic on the Air Quality

15.20 József Kovács, Andrei Andras University of Petrosani, Romania
Reliability Analysis of the Belt Conveyors at Vulcan Mine Plant, Jiu Valley, Romania

15.35 Béla Illés, János Németh University of Miskolc, Hungary
Analysis of the Statically Forces of Belt Conveyors in Case of More than One Driving Points

15.50 Break
MECHATRONICS AND LOGISTICS SYMPOSIUM

Chairman: Béla ILLÉS professor

C1: LOGISTICS

This section is organized by the University of Miskolc and the Czestochowa University of Technology

VENUE: Room 106., Bld. A/5, 1st floor, 106
Chairman: Béla ILLÉS professor
Secretary: Péter TELEK assist. professor

Date: April 9, 2015

16.05 Elke Glistau¹, Michael Schenk¹, Norge Isaias Coello Machado² Otto von Guericke University, Germany¹, Central University ”Marta Abreu” of Las Villas, Santa Clara, Cuba²
Logistics Strategies and Tools

16.20 Heike Mrech Hochschule Merseburg - University of Applied Sciences, Germany
STEM Education and the Talent Crisis in Logistics in Germany

16.35 Béla Illés¹, József Gál², Antal Véha² University of Miskolc¹, University of Szeged², Hungary
Some Aspects of e-Commerce in Agriculture

16.50 Marta Kadłubek Czestochowa University of Technology, Poland
Theoretical Aspects of Sustainable Development in Transport and Logistics

17.05 Katarzyna Sukiennik, Katarzyna Grondys, Iga Kott, Oksana Seroka-Stolka Czestochowa University of Technology, Poland
The Importance of Supplier Selection Process in Business Relationships

17.20 Katarzyna Sukiennik, Beata Skowron-Grabowska, Tomasz Szczepanik Czestochowa University of Technology, Poland
Growth of Transport Industry and Economic Development in Poland

17.35 János Korponai¹², Ágota Bányainé Tóth², Béla Illés² Contitech Fluid Automotive Hungária Kft.¹, University of Miskolc², Hungary
Analyses of the Key Performance Indicators in the Logistics System

17.50 Péter Veres, Tamás Bányai, Béla Illés University of Miskolc, Hungary
Design of Networking Service Systems

18.05 Summary
MECHATRONICS AND LOGISTICS SYMPOSIUM

Chairman: Béla ILLÉS professor

C2: NATURAL SCIENCE

Chairman: Béla PARIPÁS professor
Secretary: Péter KÖRTESI assoc. professor

Date: April 9, 2015

14.00 Opening Ceremony

14.05 György Vikor Guardian Orosháza Ltd., Hungary
Optical Properties of Dielectric Mirrors, Produced by Large Area Glass PVD Coating Technology

14.20 Béla Paripás, Béla Palásthy University of Miskolc, Hungary
Angular Dependent Measurement and Evaluation of Autoionization Spectra of Helium

14.35 Csaba Takács¹, I. Bárány² University of Miskolc¹, Kecskemét College², Hungary
Numerical Evaluation of Relativistic Shock Waves in a Magnetized Plasma Dominated by Radiation

14.50 László Ujfaludi Eszterházy Károly College, Hungary
Physics and Fine Arts - An Approach with System’s Concept

15.05 Endre Kovács¹, Michael Forrester², Feodor Kusmartsev² University of Miskolc, Hungary¹, Loughborough University, United Kingdom²
Indications of Possible Chaos in Arrays of Single-domain Nanomagnets

15.20 Break

15.35 Attila Körei University of Miskolc, Hungary
Cell Formation Algorithms Based on Formal Concepts

15.50 Péter Körtesi¹, Desislava Georgieva² University of Miskolc, Hungary¹, "Anghel Kanchev” University of Ruse, Bulgaria²
Development of Mathematical Skills with Commonly used Computer Software

16.05 Summary
MECHATRONICS AND LOGISTICS SYMPOSIUM

Chairman: Béla ILLÉS professor

C3: ELECTRICAL ENGINEERING AND INFORMATICS

VENUE: Room 311., Bld. A/1. 3rd floor 311.
Chairman: Csaba BLÁGA assoc. professor
Secretary: Dávid VINCZE assist. lecturer

Date: April 9, 2015

14.00 Opening Ceremony

14.05 Balázs Villányi, Roland Juhos, Máté Benyó Budapest University of Technology and Economics, Hungary
The Significance of the Application of Column-Oriented Database, SAP HANA Platform and Prediction Methods in Motorsports

14.20 Tamás Fekete¹, Gergely Mezei² Evosoft Hungary Ltd.¹, Budapest University of Technology and Economics², Hungary
Using GPGPU for Graph Transformations – An Introductory Survey

14.35 Tamás György, Károly Ágoston Biró, Tamás Szabó Technical University of Cluj-Napoca, Romania
An Experimental Comparison of Stereo Vision Algorithms Using Middlebury Dataset

14.50 Csaba Vörös University of Miskolc, Hungary
Development of Water Quality Monitoring Station

15.05 Gábor Knyihár Hungary
Intelligent Research Robot

15.20 Zsolt Péter Pázmándi Hungary
Particle Detection with Time-Projection Chamber and Data Acquisition System

15.35 Break

15.50 Peter Bober Technical University of Kosice, Slovakia
Measurement of BLDC Motor Efficiency for Commutation Angle Optimisation

16.05 Marin-Silviu Nan, Ovidiu-Bogdan Tomus, Razvan Popescu, Andreea Ungur University of Petrosani, Romania
Analysis and Evaluation of Optimum Operational Status of Electrical Stations

16.20 Tamás György, Áron Attila Popp, Károly Ágoston Biró Technical University of Cluj-Napoca, Romania
Supplementary Iron Losses in Asynchronous Machines with External Rotor

16.35 Nándor Kiss University of Miskolc, Hungary
Special Induction Motor Driving

16.50 Gábor Fekete University of Miskolc, Hungary
Definition of the Energy and Force Based on the Unified Theory of Energy (UTE, UNITHE)

17.05 Summary
INNOVATIVE MECHANICAL DESIGN AND TECHNOLOGY SYMPOSIUM

Chairman: Károly JÁRMAI professor

D1: INNOVATIVE MECHANICAL ENGINEERING TECHNOLOGIES

VENUE: Room 1. Bld. C/1. ground floor, 1.
Chairman: János KUNDRÁK professor
Co-Chairman: Wojciech ZEBALA professor
Secretary: István SZTANKOVICS assist. lecturer

Date: April 9, 2015

14.00 Numan M. Durakbasa, Gökcen Bas Vienna University of Technology, Austria
An Analysis of the Metrology Techniques to Improve Quality and Accuracy

14.20 Anatoly I. Grabchenko, Vladimir L. Dobroskok, Yaroslav N. Garashchenko, Andrei N. Shpilka National Technical University “Kharkiv Polytechnic Institute”, Ukraine
Morphological Analysis of Triangulated Models of Grinding Wheels Working Surfaces

14.40 Wojciech Zebala, Bogdan Slodki, Grzegorz Struzikiewicz Cracow University of Technology, Poland
Chip Breakage Control in Ti6Al4V Longitudinal Turning with HPC System

15.00 Ferenc Dömötör, Balázs Zsolt Farkas, Tibor Szalay, Zoltán Újvári Budapest University of Technology and Economics, Hungary
Condition Monitoring of Drilling Tools

15.20 Break

15.40 Balázs Mikó, Ágota Drégelyi-Kiss Óbuda University, Hungary
Case Study in Investigation of Accuracy of Hole Drilling

16.00 Viktória Ferencsik, Gyula Varga University of Miskolc, Hungary
Examination of Surface Roughness of Burnished Workpiece Surfaces

16.20 Dénes Tóth, Péter Zoltán Kovács, Miklós Tisza University of Miskolc, Hungary
3D Printing in the Vehicle Industry

16.40 István Sztankovics, János Kundrák University of Miskolc, Hungary
The Characteristics of Chip Removal in Rotational Turning

17.00 Zsuzsa Balajti University of Miskolc, Hungary
Up to Date Constructive Geometry to Dimensioning of Bearing Pattern of Cylindrical Worm Gear Driving Having a Profile Circle Arc in Axial Section

17.20 Summary
INNOVATIVE MECHANICAL DESIGN AND TECHNOLOGY SYMPOSIUM

Chairman: Károly JÁRMAI professor

D2: MECHANICAL ENGINEERING DESIGN AND TECHNOLOGIES, NUMERICAL MODELLING AND LABORATORY MEASUREMENTS


Chairman: Szilárd SZABÓ professor

Co-chairman: György SZEIDL professor emeritus

Secretary: Péter BENCS assist. lecturer

Date: April 9, 2015

14.00 György Szeidl, László Kiss University of Miskolc, Hungary
A Nonlinear Kinematical Model for Heterogeneous Circular Beams

14.20 Dávid Gönczi University of Miskolc, Hungary
Determination of Displacements and Stresses in Functionally Graded Hollow Spherical Bodies

14.40 Ákos József Lengyel, István Ecsedi University of Miskolc, Hungary
Composite Beam with Weak Shear Connection Subjected to Thermal Load

15.00 Dániel Burmeister University of Miskolc, Hungary
Buckling of Annular Plates with Shell-stiffening and Elastic Restrains on the Boundary

15.20 Krzysztof Jesionek1, Polko Krzysztof2, Badur Janusz2 Wroclaw University of Technology1, Institute of Fluid Flow Machinery PAS-ci, Gdańsk2, Poland
Condensing Heat Exchanger in Coal-Fired Power Plant

15.40 Break

16.00 József Nagy, Béla Tolvaj, Szilárd Szabó University of Miskolc, Hungary
Thermodynamic Properties of Refrigerants

16.20 Sándor Hajdú, Tibor Czibere, László Kalmár University of Miskolc, Hungary
Hydraulic Design of an Impeller of a Cross-Flow Turbine

16.40 Dávid Czeglédi, István Lakatos, József Polák Széchenyi István University, Hungary
Operation of Diesel Engines for Commercial Vehicles Using Alternative Fuels

17.00 Dávid Czeglédi, István Lakatos, József Polák Széchenyi István University, Hungary
Research of Electric Motor Mechanical Losses.

17.20 Summary
INNOVATIVE MECHANICAL DESIGN AND TECHNOLOGY SYMPOSIUM

Chairman: Károly JÁRMAI professor

D3: INNOVATIVE MECHANICAL ENGINEERING DESIGN

Chairman: Károly JÁRMAI professor
Secretary: László KOTA research fellow

Date: April 9, 2015

14.00 Alexandru-Ioan Pop, Mihai Radu Sorin University of Petrosani, Romania
Study Over the State of Stress and Displacements from the Structure of the Towers of the Hoist Devices Due to Operating Loads

14.20 Dumitru Jula, Stela Dinescu, Ovidiu-Bogdan Tomus University of Petrosani, Romania
Reliability Analysis of E3RC1400 Bucket Wheel Excavators Operating in Oltenia Lignite Open Pit Mines

14.40 Károly Jármaj, József Farkas University of Miskolc, Hungary
Overhead Travelling Crane Main Girder Design for Minimum Cost

15.00 Ioan Szava, Sorin Vlase, Botond-Pál Gálf, Raluca Dora Ionescu, Mircea Ivanoiu, Renata Ildikó Munteanu, Carol Ambrus, Péter Dani Transilvania University of Brasov, Romania
Testing Device for Evaluation of the Adhesives Mechanical Characteristics

15.20 Raluca Dora Ionescu, Sorin Vlase, Botond-Pál Gálfí, Mircea Ivanoiu, Renata Ildikó Munteanu, Péter Dani, Ioan Szava, Carol Ambrus Transilvania University of Brasov, Romania
Displacement Field Evaluation on a Reduced Scale Model of an Urban Vertical Axis Turbine Using Video Image Correlation

15.40 Summary
LEGAL SCIENCES SYMPOSIUM

Chairman: Csilla CSÁK  assoc. professor

E: LEGAL SCIENCES

VENUE: Faculty of Law, Bld. A/6, groundfloor 31.
Chairman: Csilla CSÁK  assoc. professor
Secretary: Zoltán VARGA assist. professor

Date: April 9, 2015

14.00 Csilla Csák University of Miskolc, Hungary
The Financial Securities of the Validation of the Environmental Law Responsibility

14.15 Judit Barta University of Miskolc, Hungary
The Current State of the Supplementary Private Pension Fund System from the Aspect of Contributors

14.30 Zoltán Angyal University of Miskolc, Hungary
New Cases in the Court of Justice of the European Union on Air Passenger Rights

14.45 Edit Zsuzsanna Tár czy Government Office of Szabolcs-Szatmár-Bereg Megye, Hungary
Problems of the Regulation of the Local Government Aid in the Local Government Ordinances of Szabolcs-Szatmár-Bereg Megye

15.00 Ágnes Váradi HAS Centre for Social Sciences Institute for Legal Studies, Hungary
Principles of a European Administrative Procedural Law (Procedural Principles in the Renewal Model Rules on EU Administrative Procedure)

15.15 Zoltán Nagy University of Miskolc, Hungary
Environmental Tax Reform

15.30 Break

15.45 Zoltán Rácz University of Miskolc, Hungary
Alternative Dispute Resolution in Hungary

16.00 Zoltán Varga University of Miskolc, Hungary
Financial Aspects of the Old-Age Pensions’ Coordination

16.15 Adrienn Jámbor University of Miskolc, Hungary
About Animal Protection in Education

16.30 Adrienn Jámbor University of Miskolc, Hungary
Animal Shelter Versus Flaying House - What is Next?

16.45 Gábor Mélypataki University of Miskolc, Hungary
Outdoor or Indoor - The Place of the Civil Service Law in the Hungarian Legal System

17.00 Annamária Zsiros University of Miskolc, Hungary
The Case of the United States V. Windsor in Consideration of the Judges’ Judgement

17.15 Annamária Zsiros University of Miskolc, Hungary
Recent Developments in Legalising Same-Sex Marriages in Europe

17.30 Break
F: ECONOMIC CHALLENGES IN THE 21st CENTURY

Chairman: Roland SZILÁGYI assoc. professor
Secretary: Dóra SZENDI PhD Student

Date: 9 April, 2015

14.00 Károly Kiss  Corvinus University of Budapest, Hungary
Rise and Fall of the Concept Sustainability

14.20 Gábor Kusper¹, Gábor Percze² Nikolett Menyhárt¹  Eszterházy Károly College¹, UniWeb Plusz Ltd², Hungary
Document Management Systems in Higher Education

14.40 Mirjana Hladika, Gulin Danimir, Mićin Marina  Faculty of Economics and Business, University of Zagreb, Croatia
Influence of the Accounting Models of Measurements at Historical Cost and Fair Value on the Quality of Financial Statements

15.00 Roland Szilágyi  University of Miskolc, Hungary
Estimation Based on Tendencies of Non-Response

15.20 Hrvoje Percevic, Unic Grsetic Jelena  University of Zagreb, Faculty of Economics and Business, Croatia
The Implementation of Activity Based Costing in Insurance Companies

15.40 Break

16.00 Roland Szilágyi  University of Miskolc, Hungary
Ranking of Sampling Designs

16.20 Bella Vatamány  University of Miskolc, Hungary
Employment of Women in the 21st Century

16.40 Dóra Szendi  University of Miskolc, Hungary
Differences in the Spatial Patterns of Selected German (NUTS3) Economic Factors, with Special Regards on GDP, Unemployment and Enterprises

17.00 Summary
HUMANITIES AND SOCIAL SCIENCES SYMPOSIUM

Chairman: Ágnes MAGNUCZNÉ GODÓ assoc. professor

G: HUMANITIES AND SOCIAL SCIENCES

Chairman: Ágnes MAGNUCZNÉ GODÓ assoc. professor
Secretary: Viktória KOPASZNÉ LÁNG research assistant

Date: April 9, 2015

14.00 Robert-Marius Mihalache Babes Bolyai University, Romania
The Collections of Pontifical Tithes from the Diocese of Oradea Between 1332-1337

14.20 Svjetlana Letinić¹, Mirjana Jelč Raguž², Dubravka Mahaček² Polytechnic in Pozega¹, Josip Juraj Strossmayer University of Osijek², Croatia
State of Social Justice in the Republic of Croatia

14.40 Andrea Kozáry National University of Public Service, Hungary
Conflict Resolution, Mediation, Restorative Justice and the Policing of Ethnic Minorities in Germany, Austria and Hungary (COREPOL)

15.00 Viktória Kopasz Láng University of Miskolc, Hungary
„Close Your Eyes, and Think of England” Ethics or Prudery: Moral Questions in Victorian England

15.20 Break

15.40 Krisztina Sándor University of Debrecen, Hungary
Implicit Knowledge, Explicit Knowledge and Their Relation to General Language Proficiency

16.00 Andrea Kovács Duró University of Miskolc, Hungary
The Lessons of a Value Preference Study

16.20 Ágnes Magnucz Godó University of Miskolc, Hungary
Raising Intercultural Awareness in English Teacher Training

16.40 Summary
HEALTH AND MEDICAL SCIENCES SYMPOSIUM

Chairman: Olivér RÁCZ, professor

VENUE: Room BOSCH, Bld. B3-B4, 2nd floor, 207.
Chairman: Olivér RÁCZ, professor
Secretary: Andrea LUKÁCS assist. professor

Date: April 9, 2015

14.00 Veronika Rajki¹, Henriett Éva Hirdi², Judit Mészáros³ Semmelweis University¹, National Tax and Customs Administration of Hungary Training², Hungary
Hungarian Health Care Workers’ Attitudes and Habits Regarding Blood Donation Based on a Survey

14.20 Veronika Rajki, Mária Csóka, Judit Mészáros Semmelweis University, Hungary
Professional Knowledge- and Practice Mapping Among Nurses Regarding Transfusion Therapy – National Study

14.40 Rita Dénes Budapest University of Technology and Economics, Hungary
Healthcare Quality Development in the Light of the Demographic Situation of Hungary

15.00 Krisztina Mayer, Andrea Lukács, Emőke Kiss-Tóth University of Miskolc, Hungary
Interrelation of Sensation Seeking, Resilience and Achievement Motivation with Risk-Taking Behaviour

15.20 Eva Sedláková¹, Jan Sedláč³, Olivér Rácz¹,³, Bertalan Fodor² Safarik University, Slovakia¹, East Slovakian Institute of Cardiovascular Diseases, Slovakia², University of Miskolc, Hungary³
MicroRNA and Their Possible Therapeutic Applications in Cardiovascular Disease

15.40 Break

16.00 Frantisek Nistiar¹, Olivér Rácz²,³, Agnesa Lukacinová¹, Jan Kolesár¹,³, Bertalan Fodor² Safarik University, Slovakia¹, University of Miskolc, Hungary²
The Role of Microbiome in Health and Disease

16.20 Olivér Rácz²,³, László Barkai²,³, Frantisek Nistiar² University of Miskolc, Hungary¹, Safarik University, Slovakia², Velkey László Center of Child Health, Miskolc, Hungary³
Advance in Stem Cell Research and the Perspectives of Diabetes Mellitus Cure

16.40 Denisa Maceková¹, Stefan Lukacin² Safarik University, Medical School¹, 1st Private Hospital Kosice-Saca Ltd.², Slovakia
Role of Oxidative Stress and Antioxidant Systems in Preeclampsia

17.00 Bertalan Fodor¹, Bettina Kovács², Anett Kovács Bartókné³, Andrea Lukács¹, Olivér Rácz¹,⁴, László Barkai¹,³ University of Miskolc¹, B-A-Z County Teaching Hospital², Velkey László Center of Child Health, Miskolc³, Hungary, Safarik University, Slovakia³
The Assessment of Glomerular Filtration Based on Serum Cystatin C

17.20 Virág Egri Hungary
In Vitro Analysis of Antibody-Based Immunotherapy of Cancer

17.40 Summary
OPTIONAL PROGRAMME

The Organisational Committee of the Conference would like to make your stay more pleasant by organising the

Gala Dinner
19.00, 9 April 2015

Venue: University Dining Hall (Entry: only with invitation cards)

Programme

1900 - 1930 Performance of the Bartók Béla Institute
1930 - 1940 Inauguration of the honorary members of the conference
2000 - 2130 Dinner

Excursion to TOKAJ

10 April 2015

Departure: 13.00
Arrival in Miskolc: 22.00
Meeting place: outside the Main Building entrance of the university