



Innovation and Technology Transfer Centre
University of Miskolc

XXVI. microCAD International Scientific Conference 29-30 March 2012



PROGRAMME

WELCOME FROM THE RECTOR

The University of Miskolc, which is the legal successor of the Mining Academy (Bergschule) founded in 1735 in Selmechánya (Banska Stiavnica) and which – in the 2009/10 academic year – celebrated its 275th academic year on account of the continuity of mining and metallurgical education, extends its greetings to the Reader on the occasion of organising the *XXVI. microCAD International Scientific Conference*.

You are holding the program booklet of the *XXVI. microCAD International Scientific Conference* in your hands. At the Conference, experts in engineering, economics, humanities and health science present and discuss their scientific results. During this event, the professional and personal relations between the experts will remarkably contribute to the efficient co-operation between participants and institutions as well.

In this year, special attention is given to publishing and disseminating the results of the scientific researches within the framework of the “Improvement of quality in higher education based on development of excellence centres in the strategic research fields of the University of Miskolc” (TÁMOP-4.2.1.B-10/2/KONV-2010-0001) project. In this respect, the engineering areas are organised into symposiums on the basis of the structure of the four Excellence Centres of the project, while the scientific results of the different workshops are placed in the traditional conference sections.

Over the last 25 years, the microCAD Conference has become the most significant multidisciplinary conference and meeting of professionals at the University of Miskolc.

Participants coming from 12-16 different countries return to the conference every year to present their latest scientific results.

More than 7200 presentations, 38 thousand pages of publications, 102 international agreements signed between universities and numerous academic and research proposals witness the achievements of the last 25 years.

I recommend you the program of the *XXVI. microCAD International Scientific Conference* in the hope that the presentations, professional discussions and social events of the *Conference* will give you a golden opportunity to cherish and widen your professional relations. I truly believe that your presence, either as a speaker or as a participant, will contribute to the success of the *XXVI. microCAD International Scientific Conference*.

Prof. Gyula PATKÓ
Rector of the
University of Miskolc

SCIENTIFIC COMMITTEE OF THE CONFERENCE

Chairman:	Mihály DOBRÓKA	Pro-Rector for International Relations and Scientific Affairs
Secretary:	Péter BIKFALVI	Head of Department of Research Management and International Relations
Members:	László TIHANYI	Dean of the Faculty of Earth Science and Engineering
	Zoltán GÁCSI	Dean of the Faculty of Materials and Metallurgical Engineering
	Béla ILLÉS	Dean of the Faculty of Mechanical Engineering and Information Science
	Miklós SZABÓ	Dean of the Faculty of Law
	György KOCZISZKY	Dean of the Faculty of Economics
	Mária KOVÁCS ILLÉS	Dean of the Faculty of Humanities
	László BARKAI	Dean of the Faculty of Health Sciences

DETAILED PROGRAMME

of the XXVI. microCAD International Scientific Conference
University of Miskolc, 29-30 March 2012

29 March (Thursday) 2012

10⁰⁰ – 10¹⁰ **International Scientific Conference**
Opening address
Gyula PATKÓ – professor, Rector of the University of Miskolc
Venue: Lecture hall XXXVII., Bld. A/7, groundfloor

PLENARY SESSION

Venue: Lecture hall XXXVII., Bld. A/7, groundfloor

10¹⁰ – 10⁴⁵ **Karl-Heinz PAQUÉ** professor, dean, Otto-von-Guericke University
Magdeburg, Germany
*Technological Knowledge and Economic Growth: Some Recipes for
Catching Up*

10⁴⁵ – 11²⁰ **Leszek WOJNAR** professor, dean, Cracow University of Technology, Poland
Contribution of Experience in Mechanical Engineering to Medical Imaging

11²⁰ – 11⁵⁵ **László BARKAI** professor, dean, University of Miskolc, Hungary
Diabetes as a Global Burden: New Ways in the Management and Treatment

11⁵⁵ – 12¹⁵ Break

12¹⁵ – 13³⁰ **Reception**
Venue: Main Building A/4. Assembly Hall (Entry: only with invitation cards)

13³⁰ – 14⁰⁰ Break

14⁰⁰ – 18⁰⁰ **Presentations in the sections**
Venue: as listed in the section table

19⁰⁰ – 21³⁰ **microCAD 2012 Party**
Venue: Main Building A/4. Assembly Hall (Entry: only with invitation cards)

30 March (Friday) 2012

9⁰⁰ - 12⁰⁰ **Presentations in the sections**
Venue: as listed in the section table

12⁰⁰ - 14⁰⁰ Lunch break

14⁰⁰ - 18⁰⁰ **Presentations in the sections**
Venue: as listed in the section table

OPTIONAL PROGRAMME

30 March 2012 13³⁰ - 22⁰⁰ **Excursion to EGER**

REGISTRATION FOR THE CONFERENCE

Venue: The Registration Desk is opposite the entrance in Main Building A/4.

Registration desk open:

28 March (Wednesday) 2012	---	12 ⁰⁰ - 20 ⁰⁰
29 March (Thursday) 2012	8 ⁰⁰ - 12 ³⁰	13 ³⁰ - 17 ⁰⁰
30 March (Friday) 2012	8 ⁰⁰ - 12 ⁰⁰	----

ORGANISATIONAL COMMITTEE OF THE CONFERENCE

The organiser of the Conference is the **UNIVERSITY OF MISKOLC**

Address of the Scientific and Organisational Committee:
Miskolci Egyetem Tudományos Szervezési és Nemzetközi Osztály
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

SECTIONS AND VENUES OF THE CONFERENCE

Sign	Name	Venue	
Plenary	Plenary session	Lecture hall XXXVII.	Bld. A/7. groundfloor
A	Environmental and Energy Management	Lecture hall VII.	Bld. A/1. 1 st floor, 102.
B	Earth Science and Engineering	Lecture hall XIII.	Bld. A/3. 3 rd floor, 317.
C	Metal Extraction and Processing	Room 312.	Bld. B/1. 3 rd floor, 312.
D	Applied Materials Science and Technologies	Káldor Mihály Room	Bld. B/1. groundfloor
E	Mathematics and Computer Science	Room 341.	Bld. A/4. 3 rd floor, 341.
F	Physics and Physics Education	Room 225.	Bld. A/1. 2 nd floor, 225.
G	Automation and Telecommunication	Room 312.	Bld. A/1. 3 rd floor, 312.
H	Electrical Engineering	Room 206.	Bld. A/3. 2 nd floor, 206.
I	Applied Information Engineering	Room 105.	Bld. A/1. 1 st floor, 105.
J	Material Flow Systems. Logistical Information Technology and Technical Language	Room 106.	Bld. A/5. 1 st floor, 106.
K	Machine and Construction Design	Department of Machine Construction Design	Bld. A/3. 1 st floor, 115.
L1	Production Engineering and Manufacturing Systems	Room 1.	Bld. C/1. groundfloor, 1.
L2	Production Engineering and Manufacturing Systems	Lecture hall XV.	Bld. C/1. 1 st floor, 101.
M	Material Processing Technologies	Room 13.	Bld. A/1. mezzanine 13.
N	Fluid and Heat Engineering	Lecture hall X.	Bld. A/1. 2 nd floor, 218.
O	Applied Mechanics	Room 439.	Bld. A/4. 4 th floor, 439.
P	Legal Science	Room 216.	Bld. A/6. 2 nd floor, 216.
Q	Economic Challenges in the 21 st Century	Room 113.	Bld. A/1. 1 st floor, 113.
R	Humanities and Social Sciences	Room 11.	Bld. A/1. mezzanine 11.
S	Medical and Health Science	Room 227.	Bld. A/1. 2 nd floor, 227.

SUSTAINABLE NATIONAL RESOURCES MANAGEMENT SYMPOSIUM

Chairman: István LAKATOS *professor*

A: ENVIRONMENTAL AND ENERGY MANAGEMENT

VENUE: Lecture hall VII., Bld. A/1. 1st floor, 102.

Chairman: József FAITLI *assoc. professor*

Secretary: Gábor MUCSI *assist. professor*

Date: March 29, 2012

- 14.00 **Éva Boros, Gábor Márton, István Szűcs, Sándor Nagy** University of Miskolc, Hungary
Analyzing the Combustible Components of Domestic and Municipal Waste
- 14.20 **Roland Cseh, Csaba Póliska** University of Miskolc, Hungary
Combustion Characteristics of Pellet Raw Materials
- 14.40 **Ljudmilla Bokányi¹, János Emmer¹, Gábor Leskó^{1,2}, Terézia Varga¹** University of Miskolc¹,
EMK Ltd.², Hungary
Investigation of the Removal of Drugs and their Metabolites from Waste Water
- 15.00 **Ljudmilla Bokányi, Terézia Varga, Beáta Soltész** University of Miskolc, Hungary
Investigation of Biogas Producing Capacity of Organic Wastes from Vaskút
- 15.20 *Break*
- 15.40 **Gábor Nagy, Ágnes Wopera Serédi, Zita Lovrity** University of Miskolc, Hungary
Production and Characteristic of Biogas of Animal Origin
- 16.00 **Csaba Takács, Ágnes Wopera Serédi** University of Miskolc, Hungary
Energetical Recovery of Landfill Gas
- 16.20 **Éva Kun** University of Miskolc, Hungary
Determinaton of MIC of Essential Oils for Blending Naturally Degradable PLA Packaging
- 16.40 *Summary*

SUSTAINABLE NATIONAL RESOURCES MANAGEMENT SYMPOSIUM

Chairman: István LAKATOS *professor*

A: ENVIRONMENTAL AND ENERGY MANAGEMENT

VENUE: Lecture hall VII., Bld. A/1. 1st floor, 102.

Chairman: József FAITLI *assoc. professor*

Secretary: Gábor MUCSI *assist. professor*

Date: March 30, 2012

- 9.00 **Corina Mihaela Panfil, Ion Mirel, Alina Girbaci** “Politehnica” University of Timisoara, Romania
Alternative Sewage Wastewater from Residential Areas Located Near Population Centers
- 9.20 **Gabriela Gherman, Teodor Eugen Man, Vasile Daniel Gherman** “Politehnica” University of Timisoara, Romania
Environmental Protection in the Context of Sustainable Rural Development for Former Mining Areas
- 9.40 **Lindita Mukaj, Dorian Kristiqi** Faculty of Integrated Studies with Practice, Albania
The Energy Park and Its Impact on Environment Porto Romano Case Study, Durrës, Albania
- 10.00 **Konradin Weber¹, R. Reichard¹, A. Vogel¹, C. Fischer¹, H.M. Mosser¹, J. Eliasson²**
University of Applied Sciences Düsseldorf, Germany¹, University of Iceland, Iceland²
Computer Assisted Tracking the Ash Plume Emitted by the Last Eruption of the Volcanoe Eyjafjallajökull by Means of Aircraft Measurements
- 10.20 *Break*
- 10.40 **Zsuzsa Stipta** University of Miskolc, Hungary
Authorization Processes Concerning Biomass Heating Plants in Hungary
- 11.00 **Ferenc Kovács, Richárd Tompa** University of Miskolc, Hungary
Carbon Supplies in the World and Our Country
- 11.20 **Ferenc Kovács, Richárd Tompa** University of Miskolc, Hungary
Carbon Dioxide and Global Warming Relationship
- 11.40 **Csongor Báthory, Tamásné Szemmelveisz** University of Miskolc, Hungary
Modern Heating Systems Heat for the Provision of Family Houses
- 12.00 *Summary*

SUSTAINABLE NATIONAL RESOURCES MANAGEMENT SYMPOSIUM

Chairman: István LAKATOS *professor*

A: ENVIRONMENTAL AND ENERGY MANAGEMENT

VENUE: Lecture hall VII., Bld. A/1. 1st floor, 102.

Chairman: József FAITLI *assoc. professor*

Secretary: Gábor MUCSI *assist. professor*

Date: March 30, 2012

14.00 **Zsolt Dobó¹, Árpád Bence Palotás¹, Dávid Felhős²** University of Miskolc¹, Knorr-Bremse Ltd.², Hungary

Magnetic Measurements on Residential Gas Meters

14.20 **Alex Nemes, Árpád Bence Palotás, István Szűcs, Gábor Nagy, Zsolt Dobó** University of Miskolc, Hungary

Potential Solution for Venting Urban Contaminated Air

14.40 **Krisztina Kalicz Papp** University of Miskolc, Hungary

Air-Classifiers – Laboratory Research Work with Gayco M-92 Air-Classifier

15.00 *Break*

15.20 **Zoltán Szamosi, Károly Lakatos, Zoltán Siménfalvi** University of Miskolc, Hungary

Manufacturing of the Strawpellet: Is it Sustainable?

15.40 **Lili Béres, Árpád Bence Palotás** University of Miskolc, Hungary

Sustainable Energy Security of Settlements

16.00 **Zsuzsanna Hutkai Göndör, Olivér Bánhidi** University of Miskolc, Hungary

Experiences Gained by the Evaluation of the Environmental Status of Csernely

16.20 *Summary*

SUSTAINABLE NATIONAL RESOURCES MANAGEMENT SYMPOSIUM

Chairman: István LAKATOS *professor*

B: EARTH SCIENCE AND ENGINEERING

VENUE: Lecture Hall XIII., Bld. A/3. 3rd floor, 317.

Chairman: Éva HARTAI *assoc. professor*

Secretary: Norbert NÉMETH *assist. professor*

Date: March 29, 2012

- 14.00 Péter Chován FGSZ Zrt., Hungary
Condition Monitoring System of Natural Gas Pipeline
- 14.20 Éva Eszter Tolnai, Ákos Gyulai University of Miskolc, Hungary
The Application of Joint Inversion Method in Geophysical Explorations
- 14.40 Hajnalka Szegedi, Katalin Kormos University of Miskolc, Hungary
Two Dimensional Fourier-transform Algorithm Using Inversion Tools
- 15.00 Péter Szűcs¹, Beáta Siska Szilasi¹, Margit Virág² University of Miskolc¹, VIZITERV Environ Ltd.², Hungary
Results of Complex Geostatistical and Hydrogeological Investigation at Felső-Tisza Region
- 15.20 *Break*
- 15.40 László Kompár, Zoltán Fejes, Péter Szűcs, Pál Szlabóczky University of Miskolc, Hungary
Thermal Water Research for Geothermal Energy Use in the Szerencs Area
- 16.00 László Kompár¹, Péter Szűcs¹, László Palcsu², József Deák³ University of Miskolc¹, Institute of Nuclear Research of the Hungarian Academy of Sciences², GWIS Ltd.³, Hungary
Environmental Tracer as a Tool for the Recharge Estimation
- 16.20 Bernadeta Alvarez University of Rzeszów, Poland
The Impact of Acid Precipitation on Soil Acidification Process Developed from Brown Boulder Clay
- 16.40 Csaba Vörös University of Miskolc, Hungary
Investigation of Chemicals for Increasing the Viscosity of Carbon Dioxide
- 17.00 *Summary*

APPLIED MATERIALS SCIENCE AND NANOTECHNOLOGY SYMPOSIUM

Chairman: István LAKATOS *professor*

C: METAL EXTRACTION, PROCESSING AND ENERGY UTILIZATION

VENUE: Room 312., Bld. B/1. 3rd floor, 312.

Chairman: Tamás KÉKESI *professor*

Secretary: Viktor OROSZ *research assistant*

Date: March 29, 2012

- 14.00 **Gerald Schneeberger, Jürgen Antrekowitsch, Stefan Steinlechner** University of Leoben, Austria
Implementation of a Previous Purification Step in Course of the Recycling of Filter Dusts from the Iron and Steel Industry
- 14.20 **Rene Rumpold, Jürgen Antrekowitsch** University of Leoben, Austria
Recycling of PGMs from Spent Automotive-Catalysts: State of the Art and Future Perspectives
- 14.40 **Stefan Steinlechner, Jürgen Antrekowitsch, Gerald Schneeberger** University of Leoben, Austria
Influence of Temperature and Treatment Time on the Halide Removal Yield During Clinkering
- 15.00 **Gergő Rimaszéki, Tibor Kulcsár, Csilla Máté, Tamás Kékesi** University of Miskolc, Hungary
Recovery of High Purity Tin from Soldering Scrap by Periodical Current Electrorefining in HCl Solutions
- 15.20 *Break*
- 15.40 **Zsolt Dobó, Tibor Kulcsár, Tamás Kékesi** University of Miskolc, Hungary
Electromechanical System with Alternative Current Supply for the Electrorefining of Tin in HCl Solutions
- 16.00 **Viktor Orosz, Tamás István Török, Zoltán Fekete, Georgina Szirmai** University of Miskolc, Hungary
Electroplating Thin Copper Layers onto Steel Substrates in Hull Cell from Pyrophosphate Solution
- 16.20 **Gábor Matejka, Tamás Kékesi, Tamás Török** University of Miskolc, Hungary
Electrodeposition of Zinc from the Acid Solutions of Common Zinc-Manganese Dioxide Battery Scrap
- 16.40 **Péter Baumli** University of Miskolc, Hungary
Production of Metal Matrix Composites by Casting Methods
- 17.00 *Summary*

APPLIED MATERIALS SCIENCE AND NANOTECHNOLOGY SYMPOSIUM

Chairman: András ROÓSZ *professor*

C: METAL EXTRACTION, PROCESSING AND ENERGY UTILIZATION

VENUE: Room 312., Bld. B/1. 3rd floor, 312.

Chairman: Tamás TÖRÖK *professor*

Secretary: Mónika TOKÁR *Phd Student*

Date: March 30, 2012

- 9.00 **Tamás Kékesi, András Bárdos, Csaba Walczer** University of Miskolc, Hungary
Metallurgical Characteristics Causing Defects in Copper Rotors Cast from Remelted Material
- 9.20 **Olivér Bánhidi** University of Miskolc, Hungary
Examination of the Interference Effects in the Course of ICP-AES Determination of Strontium Content in Aluminium Alloys
- 9.40 **Dániel Molnár¹, Attila Simcsák¹, Csaba Walczer²** University of Miskolc¹, Kienle+Spiess Hungary Ltd.², Hungary
High Pressure Die Casting of Rotor Geometries
- 10.00 **Tünde Mezzöl Sinka¹, Jenő Dúl²** Bosch-Hungária Kft.¹, University of Miskolc², Hungary
Automotive Ductile Iron Castings Structural Inhomogeneity and Their Inspections
- 10.20 *Break*
- 10.40 **András Gergely¹, Tamás Török², Tibor Kulcsár², Erika Kálmán¹** Hungarian Academy of Sciences, Research Centre for Natural Sciences¹, University of Miskolc², Hungary
Corrosion Protection of Cold-Rolled Steel with Zinc-Rich Epoxy Paint Coatings Compositated with Nano-Size Polypyrrole-Deposited Alumina Particles
- 11.00 **Gréta Gergely¹, Olivér Bánhidi², Arnold Rónaföldi², Jenő Kovács², András Roósz², Lajos Daróczy³, Zoltán Gácsi²** Hungarian Academy of Sciences¹, University of Miskolc², University of Debrecen³, Hungary
The Summarized Effect of Strontium Content and Melt Stirring on the Structure of the A356 Alloy
- 11.20 **Anett Kósa, Jenő Dúl, Zoltán Gácsi** University of Miskolc, Hungary
Effects of Strontium on the Microstructure of Al-Si Casting Alloys
- 11.40 **Monika Tokár¹, Anna Szombatfalvy¹, György Fegyverneki², Jenő Dúl¹** University of Miskolc¹, NEMAK Győr Alumíniumöntöde Ltd.², Hungary
Optimization of the Properties of the Melting Used in Automotive Al Castings
- 12.00 *Summary*

APPLIED MATERIALS SCIENCE AND NANOTECHNOLOGY SYMPOSIUM

Chairman: András ROÓSZ *professor*

C: METAL EXTRACTION, PROCESSING AND ENERGY UTILIZATION

VENUE: Room 312., Bld. B/1. 3rd floor, 312.

Chairman: György KAPTAY *professor*

Secretary: Dániel MOLNÁR *assist. professor*

Date: March 30, 2012

- 14.00 **György Kaptay** University of Miskolc, Hungary
The Essence of Equilibrium of Materials in 17 Short Statements
- 14.20 **Ádám Czibik, Péter Barkóczy, Árpád Kovács, Klára Pflischl** University of Miskolc, Hungary
Examination of the Microstructure and Production Technology of Findings from the Copper and Bronze Ages
- 14.40 **Lilla Pásztor, István Ringer, Péter Barkóczy, Árpád Kovács** University of Miskolc, Hungary
Metallographical Description of the Findings from Cannon Foundry Sárospatak
- 15.00 **Katalin Tünde Takács¹, Mihály Vlaszák¹, László Marosi¹, Péter Barkóczy², Kinga Kállai²**
Metallogobus Ltd.¹, University of Miskolc², Hungary
Development of Low Melting Point Alloys for Miniatures
- 15.20 *Break*
- 15.40 **Koppány Levente Juhász, Péter Baumli, György Kaptay** University of Miskolc, Hungary
Fabrication of Carbon Fibers Reinforced Aluminium Matrix Composites
- 16.00 **József Szabó, Orsolya Nagy, György Kaptay** University of Miskolc, Hungary
Feasibility of In-situ Stabilization of Liquid Metallic Emulsions
- 16.20 **József Pálkovács, Péter Baumli, György Kaptay** University of Miskolc, Hungary
Investigation of Wettability by Molten Salt/Carbon System
- 16.40 **Ádám Végh, Csaba Mekler, György Kaptay** University of Miskolc, Hungary
Optimization of the Ga-Bi Monotectic System and Modelling of Surface Phase Transition Line
- 17.00 *Summary*

APPLIED MATERIALS SCIENCE AND NANOTECHNOLOGY SYMPOSIUM

Chairman: András ROÓSZ *professor*

D: APPLIED MATERIALS SCIENCE AND TECHNOLOGIES

VENUE: Káldor Mihály Room, Bld. B/1. groundfloor

Chairman: Valéria MERTINGER *assoc. professor*

Secretary: Sándor KOVÁCS *research fellow*

Date: March 29, 2012

- 14.00 **Viorel Gheorghita, Joachim Strittmatter, Paul Gümpel** University of Applied Sciences, HTWG Konstanz Germany
Shape Memory Wires with Activation Times Less Than One Second
- 14.20 **Viorel Gheorghita¹, Paul Gümpel¹, Heitz Thomas², Joachim Strittmatter¹** University of Applied Sciences, HTWG Konstanz Germany¹, Thyssenkrupp Presta AG, Lichtenstein, Switzerland²
Shape Memory Alloy Actuators in Steering Columns
- 14.40 **Csaba Mekler, Zoltán Tarcsa** University of Miskolc, Hungary
Comparison of Two Nickel Based Brazing Pastes
- 15.00 **Barbara Bernáth, Péter Barkóczy** University of Miskolc, Hungary
Development a Furnace for Directional Recrystallization
- 15.20 **Ádám Filep, Valéria Mertinger** University of Miskolc, Hungary
Comparative Study of the Heat Treatment of Dual Phase Steels
- 15.40 **Tamás Mikó, Péter Barkóczy** University of Miskolc, Hungary
Determination of Mechanical Properties of 8006 Aluminium Alloy on Elevated Temperatures
- 16.00 *Break*
- 16.20 **Márton Benke, Valéria Mertinger, Péter Barkóczy** University of Miskolc, Hungary
Texture Evaluation in Rolled Al Sheets
- 16.40 **Tamás Baleda, Valéria Mertinger, Szilvia Gyöngyösi, Péter Barkóczy** University of Miskolc, Hungary
Recrystallization Behaviour of Cold Rolled Dc05 Sheet
- 17.00 **Tibor Hegyes, Péter Barkóczy** University of Miskolc, Hungary
Examination of Hot Deformation of 8006 Aluminium Alloy
- 17.20 **Kinga Mizser-Tomolya, Dóra Janovszky** University of Miskolc, Hungary
Investigation of Ag₈Al₈Cu₃₆Zr₄₈ Amorphous/Nanocrystalline Structure Produced by Casting and Milling
- 17.40 **Judit Pázmán, Zoltán Gácsi** University of Miskolc, Hungary
Studying of the Microstructure in AlCuSiMg/SiC(Ni)_p Composites
- 18.00 **Gábor Szakács** University of Miskolc, Hungary
Al-Al₃Ni Eutectic Alloy Directionally Solidified Under Infulance of Rotating Magnetic Field
- 18.20 *Summary*

APPLIED MATERIALS SCIENCE AND NANOTECHNOLOGY SYMPOSIUM

Chairman: András ROÓSZ *professor*

D: APPLIED MATERIALS SCIENCE AND TECHNOLOGIES

VENUE: Káldor Mihály Room, Bld. B/1. groundfloor

Chairman: Kálmán MAROSSY *professor*

Secretary: Gabriella ZSOLDOS *research fellow*

Date: March 30, 2012

- 9.00 **Tamás Szivós, Tamás Szabó** University of Miskolc, Hungary
Evaluation of Neccesity of Biodegradable Polypropylene Products and Determination of Baseline Values
- 9.20 **Alexandru Savici¹, Iosif Malaescu², Adrian Cotoraci¹** "Vasile Goldis" West University¹, West University of Timisoara², Romania
Low Frequency Behavior of Magnetic Fluids in Thermal Gradient
- 9.40 **Stefan Rung, Hellmann Ralf** Aschaffenburg University of Applied Science, Germany
Laser Scribing of Metallized Transparent Conductive Oxide – A Comparative Study Using Top-Hat and Gaussian Beam Profiles -
- 10.00 **Georg Koller, Steffen Hessler, Manuel Rosenberger, Stefan Belle, Ralf Hellmann**
Aschaffenburg University of Applied Science, Germany
Optical Waveguide Fabrication in PMMA Using Low Frequency Reactive Ion Etching
- 10.20 *Break*
- 10.40 **Maiko Girschikofsky, Manuel Rosenberger, Stefan Belle, Ralf Hellmann** Aschaffenburg University of Applied Science, Germany
Surface Modification of Planar Bragg Grating Refractive Index Sensors for Gas Detection
- 11.00 **Andrea Simon, Zoltán Gácsi** University of Miskolc, Hungary
Investigation the Hardness and Wear Properties of Al-SiC_p Composites
- 11.20 **István Kocserha, Bálint Györffy, Gábor Menyhért, Dávid Szunyog** University of Miskolc, Hungary
Effects of Additives on the Properties of Fired Clay Products
- 11.40 **Mariann Kollár** University of Miskolc, Hungary
Thermomechanical Properties of Heterogeneous Polymer Blends. Examination of the Glass Transition Temperature in the Immiscible Polymer Blends
- 12.00 **Gabriella Zsoldos, Judit Oláh** University of Miskolc, Hungary
Evaluation of Aging of UHMWPE Acetabular Cups using DSC Methods
- 12.20 *Summary*

APPLIED MATERIALS SCIENCE AND NANOTECHNOLOGY SYMPOSIUM

Chairman: András ROÓSZ *professor*

D: APPLIED MATERIALS SCIENCE AND TECHNOLOGIES

VENUE: Káldor Mihály Room, Bld. B/1. groundfloor

Chairman: Péter BARKÓCZY *assoc. professor*

Secretary: Tamás MIKÓ *PhD Student*

Date: March 30, 2012

- 14.00 **Szilvia Gyöngyösi, Péter Barkóczy, Adrienn Hlavács** University of Miskolc, Hungary
Scaling of a One-Dimensional Cellular Automaton
- 14.20 **Ionut Claudiu Roata, Radu Iovanas, Daniela Maria Iovanas** Transilvania University of Brasov, Romania
Determination of Electric Loads Influence on the Layers that Are Sprayed with Flame and Powder Using the Finite Element Analysis
- 14.40 **Dániel Molnár, Imre Budavári** University of Miskolc, Hungary
Computer Simulation of a High Pressure Die Automotive Casting Part
- 15.00 **Csaba Nagy, András Roósz, Arnold Rónaföldi, László Gyulai** University of Miskolc, Hungary
Numerical Simulation of the Stirring of Melts by Magnetic Field
- 15.20 **Zsolt Dugár¹, Bata Attila¹, Barkóczy Péter²** College of Kecskemét¹, University of Miskolc², Hungary
Examination of Recrystallization of Aluminum Alloys by DMTA Technique
- 15.40 **Gergely Körösy, Tamás Mende, András Roósz** University of Miskolc, Hungary
Estimation of the Al-Rich Corner of the Al-Fe-Si Alloy System by Estphad Method
- 16.00 *Break*
- 16.20 **Melinda Godzsák¹, Jenő Sólyom¹, Árpád Kovács¹, Péter Pekker², Zoltán Gácsi¹** University of Miskolc¹, Bay Zoltán Applied Research Nonprofit Ltd.², Hungary
Examination of Precipitation Hardening of AlSi10MgCu0,5 Alloyed Automotive Castings
- 16.40 **Dániel Koncz-Horváth, Zoltán Gácsi** University of Miskolc, Hungary
Investigation of a 6-Part Lead-Free Solder Alloy
- 17.00 **Ádám Radányi, Alíz Molnár, Anna Sycheva** University of Miskolc, Hungary
Growth of Tin Whisker in Pb-Free Solder Technology
- 17.20 **László Nyekse** University of Miskolc, Hungary
Microstructure Evolution Behaviour of High Pressure Die Casting Alloy (Din 226) during Semi-Solid Rheocasting
- 17.40 **Attila Polyák, Valéria Mertinger, Péter Barkóczy** University of Miskolc, Hungary
Effects of Rolling Temperature in Thermomechanical Rolling of Aluminium Wire
- 18.00 *Summary*

MECHATRONICS AND LOGISTICS SYMPOSIUM

Chairman: Béla ILLÉS *professor*

E: MATHEMATICS AND COMPUTER SCIENCE

VENUE: Room 341. Bld. A/4. 3rd floor, 341.

Chairman: Attila HÁZY *assoc. professor*

Secretary: Attila KÖREI *assoc. professor*

Date: March 29, 2012

14.00 **Péter Raisz** University of Miskolc, Hungary
Cox-regession and Simulation

14.15 **Bettina Porvázsnyik** University of Debrecen, Hungary
A Generalized Allocation Scheme

14.30 **Renáta Vas¹, István Fazekas¹, Zsolt Karácsony²** University of Debrecen¹, University of Miskolc², Hungary
A Central Limit Theorem for Spatial Observations

14.45 **Zsolt Karácsony¹, István Fazekas², Renáta Vas²** University of Miskolc¹, University of Debrecen², Hungary
Joint Asymptotic Normality of Kernel Type Density Estimator for Spatial Observations

15.00 **József Túri, István Fazekas, Alexey Chuprunov** University of Miskolc, Hungary
Some Limit Theorems for Random Allocations and an Inequality

15.15 *Break*

15.40 **Ferenc Nagy** University of Miskolc, Hungary
Some Results in Random Program Testing

15.55 **Csilla Csendes** Corvinus University of Budapest, Hungary
A Simulation Study about Stable Distributions

16.10 **Gabriella Mészáros** University of Miskolc, Hungary
Solving Nonlinear Constrained Minimization Problems with Zone Function

16.25 **Attila Körei** University of Miskolc, Hungary
Determining the Box Extents of a Formal Context

16.40 *Break*

MECHATRONICS AND LOGISTICS SYMPOSIUM

Chairman: Béla ILLÉS *professor*

E: MATHEMATICS AND COMPUTER SCIENCE

VENUE: Room 341. Bld. A/4. 3rd floor, 341.

Chairman: Attila HÁZY *assoc. professor*

Secretary: Attila KÖREI *assoc. professor*

Date: March 29, 2012

17.00 **Zoltán Csáti, Gabriella Vadász Bognár** University of Miskolc, Hungary
Iterative Transformation Method for the Generalized Blasius Equation

17.15 **Krisztián Hriczó, Gabriella Vadász Bognár, Zoltán Csáti** University of Miskolc, Hungary
Laminar Thermal Boundary Layer of a Power-law Fluid over a Flat Plate with a Convective Surface Boundary Condition

17.30 **Csaba Barcsák, Nutefe Kwami Agbeko** University of Miskolc, Hungary
Some Application of Optimal Average in Raytracing Based Volume Visualization

17.45 **Attila Házy** University of Miskolc, Hungary
On (k,h) -convex Functions

18.00 *Summary*

MECHATRONICS AND LOGISTICS SYMPOSIUM

Chairman: Béla ILLÉS *professor*

F: PHYSICS AND PHYSICS EDUCATION

VENUE: Room 225. Bld. A/1. 2nd floor, 225.

Chairman: Béla PARIPÁS *professor*

Secretary: János MAJÁR *assist. professor*

Date: March 29, 2012

- 14.00 **Réka Trencsényi¹, Endre Kovács², Gulácsi Zsolt¹** University of Debrecen¹, University of Miskolc², Hungary
Comparison of Exact Ground States of Different Hubbard Hexagon Chains
- 14.20 **Béla Paripás, Béla Palásthy** University of Miskolc, Hungary
A Short Review of Our (e,2e) Coincidence Experiments for Studying the Post-collision Interaction
- 14.40 **Béla Paripás¹, Béla Palásthy¹, Zitnik Matjaz²** University of Miskolc, Hungary¹, J.Stefan Institute, Ljubljana, Slovenia²
Experimental Aspects of State to State Interference by Electron Spectroscopy
- 15.00 **János Majár** University of Miskolc, Hungary
Spin-orbit Contributions to the Angular Dynamics of Compact Binary Systems
- 15.20 *Break*
- 15.40 **József Vida** Eszterházy Károly College, Hungary
Physics and Astronomy Week in Berekfürdő Transfer of the Magic Tower (Eger) Scientific Programmes
- 16.00 **Mihályné Dobróka** University of Miskolc, Hungary
Evolution of the Stars
- 16.20 **Gábor Pszota** University of Miskolc, Hungary
Black Hole and Neutron Star X-ray Transients
- 16.40 **László Ujfaludi** Eszterházy Károly College, Hungary
Utilization of Solar Energy – Historical Aspects and Perspectives
- 17.00 *Summary*

MECHATRONICS AND LOGISTICS SYMPOSIUM

Chairman: Béla ILLÉS *professor*

G: AUTOMATION AND TELECOMMUNICATION

VENUE: Room 312., Bld. A/1. 3rd floor, 312.

Chairman: László CZAP *assoc. professor*

Secretary: K. Attila VARGA *assist. lecturer*

Date: March 30, 2012

- 9.00 **Viktor Kovács, Gábor Tevesz** Budapest University of Technology and Economics, Hungary
Evaluation of a Method for Improving Viewpoint Invariance
- 9.20 **Ildikó Bölkény** University of Miskolc, Hungary
Overview of Control of Underground Gas Storage Using Artificial Intelligence
- 9.40 **Attila Gáti¹, Csaba István Ferenc¹, András Pungor²**, University of Miskolc¹, University of Debrecen², Hungary
Software Development for Low Cost Multifunctional Medical Diagnostic Device
- 10.00 **Attila Gáti¹, Roland Bartók¹, András Pungor²** University of Miskolc¹, University of Debrecen², Hungary
Application Development for Android OS Connected to a Multifunctional Medical Test Device
- 10.20 *Break*
- 10.40 **László Blázovics, Kristóf Csorba, Bertalan Forstner, Charaf Hassan, Balázs Ilsinszki, Péter Gerencsér** Budapest University of Technology and Economics, Hungary
Autonomous Swarm Robot System
- 11.00 **László Blázovics, Kristóf Csorba, Bertalan Forstner, Charaf Hassan, Balázs Ilsinszki, Péter Gerencsér** Budapest University of Technology and Economics, Hungary
Multi-robot Target Tracking System
- 11.20 **Vesna Radonjić, Aleksandra Kostić-Ljubisavljević, Valentina Radojičić, Snežana Mladenović** University of Belgrade, Serbia
Pricing Policy for Next Generation Networks Interconnection
- 11.40 *Summary*

MECHATRONICS AND LOGISTICS SYMPOSIUM

Chairman: Béla ILLÉS *professor*

H: ELECTRICAL ENGINEERING

VENUE: Room 206. Bld. A/3, 2nd floor, 206.

Chairman: Ernő KOVÁCS *assoc. professor*

Secretary: Csaba BLÁGA *assoc. professor*

Date: March 29, 2012

14.00 *Opening Speech*

14.05 **Arthur Matyas, Claudia Martis, Karoly Biro** Technical University of Cluj-Napoca, Romania
Thermal Analysis of a Six-phase Permanent Magnet Synchronous Motor for Electrical Power Assisted Steering Systems

14.20 **Viliam Fedak, Godem A. Ismeal** Technical University of Kosice, Slovakia
Overview of Control Algorithms for DC Motor Drive as a Basis for Development of GUI in Matlab

14.35 **Richárd Bátorfi, Angéla Váradi Szarka** University of Miskolc, Hungary
Analysing Power Parameters of Single Phase Nonsinusoidal Power Network

14.50 **Kornél Sarvajcz** University of Miskolc, Hungary
Analysis of a Power Saver Equipment's Efficiency Using Instrument with GPRS Communication

15.05 **Attila Unhauzer** University of Miskolc, Hungary
New Results in the Examination of Heat-Storage Power Profiles

15.20 *Break*

15.35 **Lajos Tóth** University of Miskolc, Hungary
Improvement of Analysis Capabilities of Virtual Instrumentation

15.50 **Gábor Zoltán Marcsák** University of Miskolc, Hungary
Introducing the NFC Technology

16.05 **Tamás Bodolai** University of Miskolc, Hungary
Development of a Research Supporting Application for Line Scan Measurements

16.20 **Ernő Kovács, Viktor Füvesi** University of Miskolc, Hungary
Process Model Based Fault Detection with LLNF Model – An Overview and Case Study

16.35 **Levente Szalontai, Ernő Kovács** University of Miskolc, Hungary
Basic Concept to a Novel EDGE Detection Method

16.50 *Break*

MECHATRONICS AND LOGISTICS SYMPOSIUM

Chairman: Béla ILLÉS *professor*

H: ELECTRICAL ENGINEERING

VENUE: Room 206. Bld. A/3, 2nd floor, 206.

Chairman: Ernő KOVÁCS *assoc. professor*

Secretary: Csaba BLÁGA *assoc. professor*

Date: March 29, 2012

- 17.05 **Lajos Tóth** University of Miskolc, Hungary
Wavelet Analysis of Ball Bearing with Inner Race Fault
- 17.20 **Csaba Blága** University of Miskolc, Hungary
Reactive Power Analysis of Single Phase Power Control – The 4th Part
- 17.35 **László Szentirmai, Ernő Kovács, László Radács** University of Miskolc, Hungary
How Science and Technology Serves Knowledge-Driven Economy
- 17.50 **László Szentirmai, Ernő Kovács, László Radács** University of Miskolc, Hungary
Scientific Research and Technological Development for Improving Knowledge Society
- 18.05 **Gábor Fekete** University of Miskolc, Hungary
Investigating Electrical Machines and Drives on Novel Basis
- 18.20 *Summary*

MECHATRONICS AND LOGISTICS SYMPOSIUM

Chairman: Béla ILLÉS *professor*

I: APPLIED INFORMATION ENGINEERING

VENUE: Room 105., Bld. A/1. 1st floor, 105.

Chairman: László DUDÁS *assoc. professor*

Secretary: Olivér HORNYÁK *assoc. professor*

Date: March 29, 2012

- 14.00 **Ádám Csapó, Péter Baranyi** Hungarian Academy of Sciences, Hungary
Cognitive Infocommunications: The Foundations of a New Interdisciplinary Research Field
- 14.20 **Péter Martinek, Attila Tamás Bartók** Budapest University of Technology and Economics, Hungary
Monitoring Quality of Service in Distributed Environment
- 14.40 **Péter Martinek, Balázs Villányi** Budapest University of Technology and Economics, Hungary
Weighted Related Terms Set Comparison in Semantic Integration Scenarios
- 15.00 **Krisztián Fekete, Marcell Fehér, Kristóf Csorba, Zoltán Dávid** Budapest University of Technology and Economics, Hungary
Route Segmentation Methods in the KMDM Data Mining System
- 15.20 **Ferenc Kovács, Zoltán Dávid** Budapest University of Technology and Economics, Hungary
Knowledge Modeler and Data Miner Framework
- 15.40 **Krisztián Pándi** Budapest University of Technology and Economics, Hungary
Performance Measurement Architecture for Mobile Software Systems
- 16.00 *Break*
- 16.20 **Dávid Zakál, László Lengyel** Budapest University of Technology and Economics, Hungary
Domain-Specific Software Antipatterns
- 16.40 **Zsolt Csuka, László Lengyel** Budapest University of Technology and Economics, Hungary
A Case Study for Comparing the Quality of Competing Open Source Solutions
- 17.00 **Dmitriy Dunaev, László Lengyel** Budapest University of Technology and Economics, Hungary
Applying Obfuscation Techniques
- 17.20 **Péter Fehér, László Lengyel** Budapest University of Technology and Economics, Hungary
Introduction of the Model Transformation Languages – A Case Study
- 17.40 **László Deák, Bence Kővári** Budapest University of Technology and Economics, Hungary
Performance Monitoring and Logging Architecture in Windows Azure Cloud
- 18.00 *Summary*

MECHATRONICS AND LOGISTICS SYMPOSIUM

Chairman: Béla ILLÉS *professor*

I: APPLIED INFORMATION ENGINEERING

VENUE: Room 105., Bld. A/1. 1st floor, 105.

Chairman: László DUDÁS *assoc. professor*

Secretary: Olivér HORNYÁK *assoc. professor*

Date: March 30, 2012

- 9.00 Csaba Noszály University of Debrecen, Hungary
Experiments on Distance of Two-Dimensional Samples
- 9.20 Olivér Hornyák, Károly Nehéz University of Miskolc, Hungary
Department of Information Engineering in the Cloud
- 9.40 Gabriella Daróczy University of Miskolc, Hungary
Affective Dimension in Computing Metaphors
- 10.00 László Dudás University of Miskolc, Hungary
Developing an Intelligent Service Provider Application Based on Semantic Distance of Input Sentences
- 10.20 Gyula Kulcsár, Mónika Kulcsár Forrai University of Miskolc, Hungary
Detailed Scheduling Based on Simulation
- 10.40 *Break*
- 11.00 Csaba Barcsák, Károly Jármái University of Miskolc, Hungary
Optimization with an Improved PSO Algorithm
- 11.20 Péter Bikfalvi, Ferenc Erdélyi, Tibor Tóth University of Miskolc, Hungary
Multi-Objective Approach for Performance Management of Manufacturing Systems
- 11.40 Pál Simon University of Miskolc, Hungary
The Use of Graphics Processors for Image Processing Tasks
- 12.00 *Break*
- 12.20 Gábor Sáfrány¹, Olivér Hornyák² Evopro Ltd.¹, University of Miskolc², Hungary
Searching for Identical Sequences in Structured Text Codes
- 12.40 Krisztián Mihály¹, Olivér Hornyák² SAP Hungary Ltd.¹, University of Miskolc², Hungary
Using Graphical Processing Units for Deterministic Single Machine Scheduling Problems
- 13.00 Zsolt Tóth, László Kovács University of Miskolc, Hungary
Meta: A Novel Grammar Induction and Text Mining Framework
- 13.20 *Summary*

MECHATRONICS AND LOGISTICS SYMPOSIUM

Chairman: Béla ILLÉS *professor*

J: MATERIAL FLOW SYSTEMS. LOGISTICAL INFORMATION TECHNOLOGY AND TECHNICAL LANGUAGE

VENUE: Room 106.. Bld. A/5. 1st floor, 106

Chairman: Béla ILLÉS *professor*

Secretary: Péter TELEK *assist. professor*

Date: **March 29, 2012**

14.00 *Opening Ceremony*

14.10 **Elke Glistau¹, Norge Coello Machado², Béla Illés³** Otto-von-Guericke University Magdeburg, Germany¹, Central University "Marta Abreu" of Las Villas, Santa Clara, Cuba², University of Miskolc, Hungary³
Process Capability and Process Improvement

14.25 **Rerngtiwa Tippayasak** Otto-von-Guericke University Magdeburg, Germany
Proactive Planning for Flexible In-plant Logistics Structure

14.40 **Fabian Schenk¹, Elke Glistau¹, Thomas Düllo²** Otto-von-Guericke University Magdeburg¹, Berlin University of the Arts, GWK, Berlin², Germany
Different Understandings of Space and Time - Recommendations on Logistics

14.55 **Gunter Wolbank, Landschützer Christian, Jodin Dirk** Graz University of Technology, Austria
Performance of Autonomous Carrier Systems in Respect of Collisions

15.10 **Michael Ettl** Otto-von-Guericke University of Magdeburg, Germany
Layout Based Order Steering

15.25 **György Sárközi¹, Béla Illés²** Borsod Volán Public Transport Co.¹, University of Miskolc², Hungary
Actualities and Challenges for Telematics in Public Transport in Hungary

15.40 *Break*

MECHATRONICS AND LOGISTICS SYMPOSIUM

Chairman: Béla ILLÉS *professor*

J: MATERIAL FLOW SYSTEMS. LOGISTICAL INFORMATION TECHNOLOGY AND TECHNICAL LANGUAGE

VENUE: Room 106.. Bld. A/5. 1st floor, 106

Chairman: Béla ILLÉS *professor*

Secretary: Péter TELEK *assist. professor*

Date: March 29, 2012

- 15.55 **Peter Kostál, Andrea Mudriková, Daynier Rolando Delgado Sobrino** Slovak University of Technology, Slovakia
Material Flow in the Laboratory of Flexible Manufacturing
- 16.10 **Peter Bigos, Michal Puskar** Technical University of Košice, Slovakia
Logistics for Monitoring of Combustion Engine Operational Parameters
- 16.25 **Corneliu Gligor** University of Oradea, Romania
D.M.A.I.C. and Six Sigma Tools Used in Conjunction with Metallurgical Conversion Process
- 16.40 **Corneliu Gligor¹, Crainic Nicolae²** University of Oradea¹, Technical University of Timisoara², Romania
Continuous Improvement Processes as a Tool for Performance/Process Performance Turnaround in Metallurgical Industry
- 16.55 **Ildikó Balázs, László Duma** Budapest Business School¹, Corvinus University of Budapest², Hungary
The Data in Supply Chain Management
- 17.10 **O.V. Grigorov, S.O. Gubsky, A.O. Okun** National Technical University “Kharkiv Polytechnic Institute”, Ukraine
Ways of Considering Thickness Metal on Indicators Coercive Force
- 17.25 **O.V. Grigorov, V.V. Stryzhak, Y.I. Zaytsev** National Technical University “Kharkiv Polytechnic Institute”, Ukraine
Optimal Control of Weight Lifting Crans
- 17.40 **Peter Bigos, Jozef Kulka, Michal Puskar** Technical University of Košice, Slovakia
Optimisation of Fuel Flowing in Two-Stroke Combustion Engine
- 17.55 **Peter Bigos, Melichar Kopas** Technical University of Košice, Slovakia
Specific Problems in Logistics of Bulk Material Transport with Regard to Storing in Silos
- 18.10 *Debate/Summary*

MECHATRONICS AND LOGISTICS SYMPOSIUM

Chairman: Béla ILLÉS *professor*

J: MATERIAL FLOW SYSTEMS. LOGISTICAL INFORMATION TECHNOLOGY AND TECHNICAL LANGUAGE

VENUE: Room 106.. Bld. A/5. 1st floor, 106
Chairman: György KOVÁCS *assoc. professor*
Secretary: Péter TAMÁS *researcher*

Date: March 30, 2012

- 8.30 **Béla Illés, János Németh** University of Miskolc, Hungary
Design of Bumpers of Dual Track Overhead Conveyor Cars
- 8.45 **Tamás Bányai** University of Miskolc, Hungary
Modelling of Automatised Sorting System
- 9.00 **Ágota Bányai** University of Miskolc, Hungary
Comissioning Process Optimisation of Pick-to-Sequence Milk Run in the Case of Just-in-Sequence Assembly
- 9.15 **Péter Telek** University of Miskolc, Hungary
Computer Analysis of Discharging Process of Silos Operated by a Pneumatic Actuator
- 9.30 **Adél Anett Szabó, Ágota Bányai, Béla Illés** University of Miskolc, Hungary
Supplier Evaluation Methods in Corporate Practice
- 9.45 **Sándor Lajos** University of Miskolc, Hungary
Converting VRML Models to VR Environment
- 10.00 **Richárd Ladányi¹, Béla Illés², János Németh²** Bay Zoltán Applied Research Nonprofit Ltd.¹, University of Miskolc², Hungary
Approximation of the Filling of Selective Collection Containers and GIS Based Planning of Selective Collection Systems
- 10.15 **Attila Olasz, Tamás Szabó** University of Miskolc, Hungary
Kinematic and Dynamic Analysis of a Hydraulic Manipulator
- 10.30 *Break*

MECHATRONICS AND LOGISTICS SYMPOSIUM

Chairman: Béla ILLÉS *professor*

J: MATERIAL FLOW SYSTEMS. LOGISTICAL INFORMATION TECHNOLOGY AND TECHNICAL LANGUAGE

VENUE: Room 106.. Bld. A/5. 1st floor, 106
Chairman: György KOVÁCS *assoc. professor*
Secretary: Péter TAMÁS *researcher*

Date: March 30, 2012

- 10.45 **Péter Telek** University of Miskolc, Hungary
Integrated Design of Materialflow Systems
- 11.00 **Róbert Skapinyecz, Béla Illés** University of Miskolc, Hungary
The Use of Quality Parameters in the Evaluation of Virtual Logistics Systems
- 11.15 **Tamás Tomkovics, László Kovács** University of Miskolc, Hungary
Viewpoints of Planning Sorting- and Direction Strategies of Product Sorter Systems
- 11.30 **Richárd Ladányi¹, János Németh²** Bay Zoltán Applied Research Nonprofit Ltd.¹, University of Miskolc², Hungary
Planning of Second Raw Material Collection System at the New Hungarian Audi Factory by Using Geographic Information System
- 11.45 **Mária Illés Kovács, Csilla Dobos** University of Miskolc, Hungary
The Language of Logistics
- 12.00 **Csilla Dobos** University of Miskolc, Hungary
General Features of Logistic Vocabulary and Terminology
- 12.15 **Erika Kegyes, Mária Kovács** University of Miskolc, Hungary
Terminology of Logistics and How it is Used in the Specialised Papers
- 12.30 **Renáta Kriston** University of Miskolc, Hungary
About a New Multilingual Logistics Learner's Dictionary
- 12.45 *Debate / Summary*

INNOVATIVE MECHANICAL DESIGN AND TECHNOLOGY SYMPOSIUM

Chairman: Károly JÁRMAI *professor*

K: MACHINE AND CONSTRUCTION DESIGN

VENUE: Department of Machine and Construction Design, Bld. A/3. 1st floor, 115.

Chairman: János Ferenc SZABÓ *assoc. professor*

Secretary: Zoltán BIHARI *assist. professor*

Date: March 29, 2012

- 14.00 Gratiela Dana Boca¹, Mutlu Uzun², Mustafa Refik Metlioğlu², Hasan Gokkaya² North University of Baia Mare, Romania¹, Karabuk University, Turkey²
The Effect of Machining Parameters on the Chip Formation in the Drilling Operation
- 14.15 Gratiela Dana Boca¹, Mustafa Refik Metlioğlu², Mutlu Uzun², Hasan Gokkaya² North University of Baia Mare, Romania¹, Karabuk University, Turkey²
The Effects of Machining Parameters on Surface Roughness in the Drilling of Hardox 400
- 14.30 József Péter, Csaba Dömötör University of Miskolc, Hungary
Principles of the Design Theory and the Nature
- 14.55 Attila Szilágyi, Gyula Patkó, Tibor Csáki, Balázs Barna University of Miskolc, Hungary
Dynamical Analysis of a Superfinishing Device
- 15.20 Attila Szilágyi, Tibor Csáki, Ildikó Makó University of Miskolc, Hungary
An Up-to Date Method of Dimension Control of Freeform Surfaces
- 15.45 Péter Demeter, József Tajnafői, György Takács University of Miskolc, Hungary
The Application of Some Parts of the Methodical Way of Construction for the Design of Special Driven Tool Capable of Being Clamped by the Turret of a CNC-Lathe
- 16.10 Tamás Fekete University of Miskolc, Hungary
Applying Diaphragms in the Alternating Current Synchronous Hydraulic Drives
- 16.35 *Break*
- 16.50 Zoltán Bihari, József Szente University of Miskolc, Hungary
Force Analysis of Roller Freewheels with Outer Starwheel
- 17.15 László Kelemen, József Szente University of Miskolc, Hungary
Lubrication of Flexible Couplings
- 17.40 Ferenc János Szabó University of Miskolc, Hungary
Dangerous Error Possibilities during Finite Element Modelling and Optimization I.
- 18.05 *Summary*

INNOVATIVE MECHANICAL DESIGN AND TECHNOLOGY SYMPOSIUM

Chairman: Károly JÁRMAI *professor*

L1: PRODUCTION ENGINEERING. MANUFACTURING SYSTEMS

VENUE: Room 1., Bld. C/1. groundfloor, 1.

Chairman: János KUNDRÁK *professor*

Co-chairman: Zebala WOJCHIECH *professor*

Secretary: István SZTANKOVICS *technical teacher*

Date: March 29, 2012

- 14.00 **Wojciech Zębala, Malgorzata Kowalczyk, Otko Tadeusz** Cracow University of Technology, Poland
Analysis of Shape Accuracy after Ti Alloy Turning
- 14.15 **Csaba Gyenge, Annamaria Rafa** Technical University of Cluj-Napoca, Romania
Mathematical Algorithm Developed for Modified Profile Gears Manufacturing
- 14.30 **Tadeusz Otko, Wojciech Zębala, Jozef Gawlik, Andrzej Matras** Cracow University of Technology, Poland
Roundness Researches after Hard Turning
- 14.45 **György Hegedűs, Gyula Patkó, György Takács** University of Miskolc, Hungary
Determination of Tool Profile for Ballnut Grinding by Surface-Surface Intersections
- 15.00 **Péter Tállai, Sándor Csuka, Sándor Sipos** Óbuda University, Hungary
Environment-friendly Thread Forming of a Difficult-to-Machine Steel
- 15.15 **Ioan Solovastru¹, Tiberiu Rusu², Ferencz Peti³, Attila Sarossy¹** SC CIE R&D ROM SRL Targu-Mures¹, Technical University of Cluj-Napoca², SC CIE Matricon SA, Targu-Mures³, Romania
Temperatures in a Die Cast Mold
- 15.30 **Ferenc Dömötör, Andras Szilágyi, Zoltan Weltsch** Budapest University of Technology and Economics, Hungary
Diagnostic Test of the Cutting Process of Metal Composite Materials, Using Vibration Measurements and Thermography
- 15.45 **Illés Dudás, Gergely Dezső, Péter Kósa, Attila Százvai** College of Nyíregyháza, Hungary
Study on Size Accuracy of 3D Printing
- 16.00 **Anatoly I. Grabchenko, Vladimir L. Dobroskok, Sergey I. Tchernyshov, Yaroslav N. Garashchenko** National Technical University "Kharkiv Polytechnic Institute", Ukraine
The Morphological Analysis of 3D Models of Industrial Products
- 16.15 *Summary*

INNOVATIVE MECHANICAL DESIGN AND TECHNOLOGY SYMPOSIUM

Chairman: Károly JÁRMAI *professor*

L1: PRODUCTION ENGINEERING. MANUFACTURING SYSTEMS

VENUE: Room 1., Bld. C/1. groundfloor, 1.

Chairman: Anatoly GRABCHENKO *professor*

Co-chairman: Zsolt MAROS *senior lecturer*

Secretary: Renáta MONOSTORI *assist. lecturer*

Date: March 29, 2012

- 16.20 **Wojciech Zębala, Andrzej Matras, Robert Kowalczyk** Cracow University of Technology, Poland
Shape Errors and Surface Quality after Laser Cutting
- 16.30 **Illés Dudás, Sándor Bodzás** College of Nyíregyháza, Hungary
Mathematical Generation and Modeling of Face Gear Surface
- 16.40 **Ferenc Szigeti, Gergely Dezső** College of Nyíregyháza, Hungary
Physical Simulation of Metal Planning
- 16.50 **Dániel Kiss, Tibor Csáki, Ildikó Makó** University of Miskolc, Hungary
Examining the Possibilities of Ball Nut Hard Tuning
- 17.00 **Zoltán Mándy¹, Illés Dudás²** University of Miskolc¹, College of Nyíregyháza², Hungary
Defining of the Profile of Grinding wheel of Conical Worm Surfaces
- 17.10 **Csaba Felhő, Zsolt Maros** University of Miskolc, Hungary
Investigation of Surface Roughness in Diamond Turning of an Aluminium Alloy
- 17.20 **Szabolcs Biró¹, Richárd Horváth¹, Bogdan Slodki²** Óbuda University, Hungary¹, Cracow University of Technology, Poland²
Moderne Untersuchung Der Spanbruchfähigkeit von Drehwendeplatten
- 17.30 **Attila Kovács¹, Ferenc Szigeti¹, Gyula Varga²** College of Nyíregyháza¹, University of Miskolc², Hungary
Investigation of Tool Wear Under Environmentally Friendly Drilling
- 17.40 **Vladimir Fedorovich, Anatoly Grabchenko, Victor Rusanov, Yevgen Babenko** National Technical University "Kharkiv Polytechnic Institute", Ukraine
Nanodiamonds and Their Use in the Process of Grinding with Superhard Tools
- 17.50 **Renáta Monostori Hörcsik** University of Miskolc, Hungary
Examination of the Failure of the Socket
- 18.00 *Summary*

INNOVATIVE MECHANICAL DESIGN AND TECHNOLOGY SYMPOSIUM

Chairman: Károly JÁRMAI *professor*

L2: PRODUCTION ENGINEERING. MANUFACTURING SYSTEMS

VENUE: Lecture hall XV.. Bld. C/1. 1st floor, 101.

Chairman: György TAKÁCS *assoc. professor*

Co-chairman: Gyula VARGA *assoc. professor*

Secretary: Viktor MOLNÁR *assist. lecturer*

Date: March 29, 2012

- 16.20 János Kundrák, Károly Gyáni, István Deszpoth, Sándor Szabó University of Miskolc, Hungary
Hard Turning by Rotatory Feed Procedure
- 16.30 Ottó Szabó University of Miskolc, Hungary
Modelling of Material Removal at Lapping with Two Dises
- 16.40 István Sztankovics, János Kundrák University of Miskolc, Hungary
Experimental Investigation on Machined Surface of Aluminium Alloy During Skiving
- 16.50 János Kundrák, Károly Gyáni, István Deszpoth University of Miskolc, Hungary
New Research Results for the Optimal Choice of Hard Turning Procedure
- 17.00 Gyula Varga, István Pásztor University of Miskolc, Hungary
Examination of Cylindricity Error in Environmentally Friendly Milling Procedures
- 17.10 Gergely Szabó University of Miskolc, Hungary
Influence of the Tool Geometry on Residual Stresses in Case of Hard Turning of 16MnCr5 Case Hardened Steel
- 17.20 Katalin Szakács University of Miskolc, Hungary
Accuracy Examination of Hard Machined Bore Holes
- 17.30 Fruzsina Eszter Csernyák University of Miskolc, Hungary
The Comparison of the Material Removal Rate and the Surface Rate for Hard Turning and Grinding
- 17.40 Krisztián Hlavács, János Kundrák University of Miskolc, Hungary
Comparitive Analysis of Roghness of Hardened Holes
- 17.50 László Ráczkövi University of Miskolc, Hungary
Definition of PCBN Tool Wear by Artificial Neural Network
- 18.00 Yuriy Gutsalenko National Technical University “Kharkiv Polytechnic Institute”, Ukraine
Fracture Features of Metal Binding when Diamond-spark Grinding
- 18.10 Tatyana E. Tretyak, Yuriy G. Gutsalenko, Aleksander L. Mironenko, Natalya V. Kryukova
National Technical University “Kharkiv Polytechnic Institute”, Ukraine
Simulation Modeling of Running Cutters for Shaping of Noninvolute Tooth Gears with Improved Functional Properties
- 18.20 Summary

INNOVATIVE MECHANICAL DESIGN AND TECHNOLOGY SYMPOSIUM

Chairman: Károly JÁRMAI *professor*

M: MATERIAL PROCESSING TECHNOLOGIES

VENUE: Room 13., Bld. A/1. mezzanine 13.

Chairman: Miklós TISZA *professor*

Secretary: Marcell GÁSPÁR *PhD Student*

Date: March 29, 2012

- 14.00 **Gábor Somoskői** Froweld Ltd., Hungary
Using of CMT Process Cladding in the Energetic Industry
- 14.20 **András Molnár¹, Gábor Búza², András Balogh³** Micromet NMA Ltd.¹, Bay Zoltán Applied Research Nonprofit Ltd.², University of Miskolc³, Hungary
Mechanical Properties and Microstructures of NiCrBSi Coatings Manufactured FS, HVOF Process and Laser Remelting
- 14.40 **Marcell Gyula Gáspár, András Balogh** University of Miskolc, Hungary
Experimental Investigation on the Effect of Controlled Linear Energy Applied to the Welding of High Strength Steels
- 15.00 **Ákos Meilinger, Imre Török** University of Miskolc, Hungary
Application and Development Opportunities of Friction Stir Welding
- 15.20 **Miklós Tisza, Péter Zoltán Kovács, Zsolt Lukács** University of Miskolc, Hungary
New Method for the Determination of FLD for Single Point Incremental Sheet Metal Forming
- 15.40 **Andrea Szilágyi Biró, Miklós Tisza** University of Miskolc, Hungary
Applying of Ferritic Nitrocarburising on Case Hardening Steels
- 16.00 **Constantin Grigore Ceorapin-Torok, Radu Iovanas, Daniela Maria Iovanas** Transilvania University of Brasov, Romania
Modeling and Finite Elements Simulation of the Resistance Spot Welding Process
- 16.20 *Summary*

INNOVATIVE MECHANICAL DESIGN AND TECHNOLOGY SYMPOSIUM

Chairman: Károly JÁRMAI *professor*

N: FLUID AND HEAT ENGINEERING

VENUE: Lecture hall X.. Bld. A/1. 2nd floor, 218.

Chairman: László BARANYI *professor*

Secretary: Péter BENCS *assist. lecturer*

Date: March 29, 2012

- 14.00 **Jiří Polanský, Roman Gáspár** University of West Bohemia, Czech Republic
CFD Optimization of a Radial Fan Stage
- 14.15 **Sándor Hajdú¹, Károly Lakatos²** Institute for Transport Sciences Non-Profit Ltd.¹, University of Miskolc², Hungary
Cross Flow Turbine as Savonius Turbine
- 14.30 **Dániel Fenyvesi** Óbuda University, Hungary
Design and Numerical Investigation on Sweep in Axial Flow Fan Rotor – Part I: Design with Prescribed Diffusion Factor Method
- 14.45 **Dániel Fenyvesi** Óbuda University, Hungary
Design and Numerical Investigation on Sweep in Axial Flow Fan Rotor – Part II: Numerical Study on Design Flow Rate
- 15.00 **László Baranyi, László Daróczy** University of Miskolc, Hungary
Floquet Stability Analysis of the Wake of a Circular Cylinder in Low Reynolds Number Flow
- 15.15 **László Baranyi¹, Betti Bolló¹, Gábor Janiga²** University of Miskolc, Hungary¹, Otto-von-Guericke University Magdeburg, Germany²
Three-dimensional Computations for Low-reynolds Number Flows Past a Cylinder
- 15.30 **László Kalmár¹, Hellmann Ralf², Tamás Rékert³, Zoltán Varga¹** University of Miskolc, Hungary¹, University of Applied Science, Aschaffenburg, Germany², von Karman Institute for Fluid Dynamics, Brussels, Belgium³
Numerical Investigation of Unsteady Heat Transport Procedure in High Power LED Module
- 15.45 *Break*

INNOVATIVE MECHANICAL DESIGN AND TECHNOLOGY SYMPOSIUM

Chairman: Károly JÁRMAI *professor*

N: FLUID AND HEAT ENGINEERING

VENUE: Lecture hall X.. Bld. A/1. 2nd floor, 218.

Chairman: László BARANYI *professor*

Secretary: Péter BENCS *assist. lecturer*

Date: March 29, 2012

- 16.00 **Andrea Handki, Béla Tolvaj** University of Miskolc, Hungary
Investigation of the Processes in a Stirling Machine with the Method of Characteristics
- 16.15 **László Daróczy¹, Gunnar Lindell², László Baranyi¹** University of Miskolc, Hungary¹, CERN, Geneva, Switzerland²
Safety Analysis of Cold Helium Releases in the CERN LHC Underground Tunnel Using CFD Simulations
- 16.30 **László Daróczy, László Baranyi** University of Miskolc, Hungary
Euler and Second-Order Runge-Kutta Methods for Computation of Flow Around a Cylinder
- 16.45 **Eugene Retsinis, John Demetriou** JD Research Hydrolab, Greece
A Two-Parametric Comparison among Three Particular Sluice Gates' Discharge Coefficients
- 17.00 **Eugene Retsinis, John Demetriou, Gerasimos Ballas** JD Research Hydrolab, Greece
Two-Parametric Geometry of Sluice Gates' Underflows within Inclined Open Channels
- 17.15 **István Lakatos** Széchenyi István University, Hungary
Modeling of a Naturally Aspirated Gasoline Engine in the GT-Suite Software Environment
- 17.30 **Péter Bencs, Szilárd Szabó, András Farkas** University of Miskolc, Hungary
Improvement of Thermovision Measurement Method for Analysis of Surface Temperature Distribution of a Body in Flow
- 17.45 *Summary*

INNOVATIVE MECHANICAL DESIGN AND TECHNOLOGY SYMPOSIUM

Chairman: Károly JÁRMAI *professor*

O: APPLIED MECHANICS

VENUE: Room 439. Bld. A4. 4th floor, 439.

Chairman: György SZEIDL *professor*

Secretary: Lajos KOCSÁN *assist. professor*

Date: March 29, 2012

- 14.00 **Lajos György Kocsán, Balázs Tóth** University of Miskolc, Hungary
A Note on Dual-mixed Cylindrical Shell Models
- 14.20 **Horatiu Teodorescu Draghicescu, Sorin Vlase, Ioan Szava, Ionatan Popa** Transilvania University of Brasov, Romania
Homogenised Mechanical Coefficients of a SMC
- 14.40 **Dániel Antal, Tamás Szabó, Attila Szilágyi** University of Miskolc, Hungary
Simplified Drop Test Modeling
- 15.00 **János Száva¹, Dániel Száva², Sorin Vlase¹, Botond-Pál Gálfi¹, Horatiu Teodorescu Draghicescu¹, Piroska Orbán³** Transilvania University of Brasov¹, University of Medicine and Pharmaceutics Targu-Mues², Domokos Kázmér Lyceum, Szováta³, Romania
Experimental Investigations on the Dental Filling Materials' Mechanical Characteristics
- 15.20 **Attila Baksa, István Ecsedi** University of Miskolc, Hungary
Torsional Vibration of Orthotropic Circular Rods
- 15.40 *Break*
- 16.00 **Sándor Szirbik, György Szeidl** University of Miskolc, Hungary
Hypersingular Integral Equations in the Dual System of Plane Elasticity
- 16.20 **Dániel Burmeister** University of Miskolc, Hungary
Stability of Shell-stiffened Annular Plates
- 16.40 **Dávid Gönczi** University of Miskolc, Hungary
Finite Element Analysis of Rubber Springs
- 17.00 **László Kiss, György Szeidl** University of Miskolc, Hungary
Stability of Heterogeneous Shallow Arches Subjected to a Concentrated Dead Load
- 17.20 **Ákos József Lengyel, István Ecsedi** University of Miskolc, Hungary
Application of the Ritz Method for the Linear Analysis of Composite Beams with Interlayer Slip
- 17.40 *Summary*

P: LEGAL SCIENCE

VENUE: Room 216. Bld. A/6. 2nd floor, 216.

Chairman: Zoltán NAGY *assoc. professor*

Secretary: Zoltán VARGA *assist. lecturer*

Date: March 29, 2012

- 14.00 *Opening Ceremony*
- 14.10 **Éva Erdős** University of Miskolc, Hungary
Harmful Tax Competition in the Hungarian Tax Law
- 14.25 **Zoltán Nagy** University of Miskolc, Hungary
Single Tax Law Aspects of the Natural Resource Management
- 14.40 **Ágnes Váradi** Széchenyi István University, Hungary
Financial Transactions Tax in the EU from the Legal and Economic Point of View
- 14.55 **Edit Zsuzsanna Tárczy** University of Miskolc, Hungary
Rules on the Unfair Commercial Practices in Germany and Austria
- 15.10 **Zsuzsa Stipta** University of Miskolc, Hungary
The Hungarian Legal Aspects of Plagiarism in the Field of Higher Education
- 15.25 **Andrea Bokros** University of Miskolc, Hungary
The Constitutional Court's Proceeding in Local Taxation
- 15.40 *Break*
- 16.00 **Zoltán Varga** University of Miskolc, Hungary
Analysis of the Changes in the Hungarian Pension System in 2011
- 16.15 **Tünde Forgács** University of Miskolc, Hungary
Virtual Freedom-fighters or the Legal Position of Open Source Software
- 16.30 **Gábor Ádám Kovács** Mayor's Office the City of Debrecen, Hungary
Changes and Effects of Medicament Economic Act on the Pharmaceutical Industry
- 16.45 **Nóra Rózsahegyi** University of Miskolc, Hungary
The Prosecutor in the Civil Procedural Law in Hungary and in the European Union
- 17.00 **Ágnes Virágh** University of Miskolc, Hungary
Pawnshops Nowadays
- 17.15 **Márk Gyovai** University of Miskolc, Hungary
Applicability of the Hand Formula in Hungarian Liability Rules
- 17.30 *Summary*

CHALLENGES OF INNOVATIVE PRODUCTION – SERVICE AND INSTITUTIONAL OPERATION IN THE FRAME OF INFORMATION SOCIETY SYMPOSIUM

Chairman: György KOCZISZKY *professor*

Q: ECONOMIC CHALLENGES IN THE 21st CENTURY

VENUE: Room 113., Bld. A/1. 1st floor, 113.

Chairman: Gyula FÜLÖP *professor*

Secretary: Ágnes RÁCZKÖVY *PhD Student*

Date: March 29, 2012

- 14.00 **Tamás Koltai, Rita Györkös** Budapest University of Technology and Economics, Hungary
Comparison of the Optimal Performance of Assembly Line Configurations with Simple Assembly Line Balancing Models
- 14.20 **Zoltán Sebestyén¹, Gergely Babos²** Budapest University of Technology and Economics¹, Termia Ltd.², Hungary
Project Monitoring System in It Environment Based on the Concept of Earned Scedule
- 14.40 **Zoltán Sebestyén, Szabolcs Balogh** Budapest University of Technology and Economics, Hungary
Quantitative Analysis of Schedule Delay Using Pert
- 15.00 **Akos Milicz** Corvinus University of Budapest, Hungary
Actual Challenges of State Performance and Control of Public Properties
- 15.20 **Dóra Tasner, Zoltán Kovács, PéterVolf** Pannon University, Hungary
Production Process Analysis Using Video Record
- 15.40 **Gábor Béla Süveges** University of Miskolc, Hungary
Activity-Based Costing in EU Applications

CHALLENGES OF INNOVATIVE PRODUCTION – SERVICE AND INSTITUTIONAL OPERATION IN THE FRAME OF INFORMATION SOCIETY SYMPOSIUM

Chairman: György KOCZISZKY *professor*

Q: ECONOMIC CHALLENGES IN THE 21st CENTURY

VENUE: Room 113., Bld. A/1. 1st floor, 113.

Chairman: Gyula FÜLÖP *professor*

Secretary: Ágnes RÁCZKÖVY *PhD Student*

Date: March 29, 2012

- 16.00 **Kamilla Varga** University of Miskolc, Hungary
Altered Balance of Power in the International Wine Market
- 16.20 **Ágnes Kádár Horváth** University of Miskolc, Hungary
Information Asymmetries in the Regulation of District Heating Prices
- 16.40 **Péter Sasvári** University of Miskolc, Hungary
The Penetration of Business Information Systems in Small and Medium-sized Enterprises in Italy and Hungary: A Comparative Study
- 17.00 **Andrea Sáfrány Gubik** University of Miskolc, Hungary
The Role of Support Institutions in SMEs Operation
- 17.20 **Ádámová Alzbeta** University of Miskolc, Hungary
The Role of Economics in Public Policy. The Great Depression and the Public Policy of the New Deal in the US
- 17.40 **Gyula Fülöp** University of Miskolc, Hungary
Corporate Sustainability – Strategic Alternatives and Methodology – Implementation
- 18.00 **Gabriell Máthé, Zoltán Néda, József Benedek** Babes-Bolyai University, Romania
The Modelling of Territorial Networks
- 18.20 *Summary*

CHALLENGES OF INNOVATIVE PRODUCTION – SERVICE AND INSTITUTIONAL OPERATION IN THE FRAME OF INFORMATION SOCIETY SYMPOSIUM

Chairman: György KOCZISZKY *professor*

Q: ECONOMIC CHALLENGES IN THE 21st CENTURY

VENUE: Room 113., Bld. A/1. 1st floor, 113.

Chairman: István KUNOS *assoc. professor*

Secretary: Katalin Anett LESKÓ *assist. lecturer*

Date: March 30, 2012

- 9.00 **Mária Illés Kovács, Tünde Bajzát** University of Miskolc, Hungary
Intercultural Aspects of Corporate Communication
- 9.20 **Csilla Dobos** University of Miskolc, Hungary
Oral and Written Forms of Corporate Communication
- 9.40 **Erika Kegyes, Mária Kovács** University of Miskolc, Hungary
The Forms and Methods of Defining Enterprise Communication Objectives as Instruments of Enterprise Imaging and Positioning
- 10.00 **László Barna** University of Miskolc, Hungary
Competency Framework of the Key Project Management Soft Competencies Research
- 10.20 **József Kotics** University of Miskolc, Hungary
Local Society and the Biomass Project in Csernely (Fault Lines in the Living Together of Roma and Non-Roma Hungarians)
- 10.40 **Gábor Biczó** University of Miskolc, Hungary
Anthropological Analysis on the Sociocultural Conditions of a Technical Innovation Model: The Csernely Biomass Project Case
- 11.00 **Ágnes Magnucz Godó** University of Miskolc, Hungary
Projecting a Corporate Image: Communicating Merits and Values on Websites
- 11.20 **Zsolt Harangozó** University of Miskolc, Hungary
Toyota Production System or Lean Manufacturing?
- 11.40 *Summary*

CHALLENGES OF INNOVATIVE PRODUCTION – SERVICE AND INSTITUTIONAL OPERATION IN THE FRAME OF INFORMATION SOCIETY SYMPOSIUM

Chairman: György KOCZISZKY *professor*

Q: ECONOMIC CHALLENGES IN THE 21st CENTURY

VENUE: Room 113., Bld. A/1. 1st floor, 113.

Chairman: Sándor BOZSIK *assoc. professor*

Secretary: Ágnes RÁCZKÖVY *PhD Student*

Date: March 30, 2012

- 14.00 **Gábor Réthi** University of Miskolc, Hungary
The Factors Influencing Corruption
- 14.20 **Zsuzsanna Dabasi Halász, Kinga Feksz** University of Miskolc, Hungary
Leeway of the Revitalization and its Repulsive Effect of the Labour Mobility, A Case Study in Diósgyőr
- 14.40 **Dániel Kuttor, Ágnes Hegyi-Kéri** University of Miskolc, Hungary
Contributions to the Sectorial and Spatial Analysis of the Structural Change in Manufacturing East Central Europe
- 15.00 **Krisztina Szegedi** University of Miskolc, Hungary
Practical Challenges of Business Ethics
- 15.20 **Sanja Broz Tominac, Vašiček Vesna** Faculty of Economics and Business, Croatia
Disclosure of Information on Credit Risk According to Supervisor's Requirements - Croatian Case
- 15.40 **Hrvoje Percevic, Danimir Gulin** Faculty of Economics and Business, Croatia
The Application of Derivative Financial Instruments in Croatian Banking Sector
- 16.00 **Goran Kutnjak, Matija Radović, Dario Zorić** University of Rijeka, Croatia
The Impact of Dominant Economic Activities in Achieving Primary Economic Goals
- 16.20 **Mirjana Hladika** University of Zagreb, Croatia
The Usefulness of Accounting Information in Credit Risk Management in the Banks
- 16.40 **Cucosel Constantin** North University of Baia Mare, Romania
Analysis of the Activity of Fiscal Control Carried Out by the General Directorate of Public Finance Maramures
- 17.00 **Cucosel Constantin** North University of Baia Mare, Romania
Surveillance and Control of the Duties and Taxes
- 17.20 **Vesna Radonjić, Aleksandra Kostić-Ljubisavljević, Mirjana Stojanović, Goran Marković**
University of Belgrade, Serbia
Economic Issues in Next Generation Telecom Networks
- 17.40 **László Molnár, István Piskóti, Szabolcs Nagy** University of Miskolc, Hungary
Influential Factors of Innovation on Corporate and Project Level
- 18.00 *Summary*

R: HUMANITIES AND SOCIAL SCIENCES

VENUE: Room 11., Bld. A/1. mezzanine 11.
Chairman: Sarolta SIMIG FENYŐ *assoc. professor*
Secretary: Levente LÉNÁRT *assoc. professor*

Date: March 29, 2012

14.00 *Opening of the session*

14.10 **Barbara Skoczyńska -Prokopowicz** The Higher School of Law and Administration in Rzeszów, Poland
Expectations of Older People towards Educational Offer of the Third Age University

14.30 **Levente Lénárt** University of Miskolc, Hungary
Memes Manipulated Twentieth Century Politics

14.50 **Sarolta Simig Fenyő** University of Miskolc, Hungary
Some Cultural Aspects of Nonverbal Communication

15.10 *Break*

15.30 **Eszter Bucher** University of Pécs, Hungary
Nongovernmental Organizations in the Southern Transdanubian Region, with Special Regard to Areal and Regional Development

15.50 **Erzsébet Virág Horváth** Szent István University, Hungary
To Read and To Be (Reader Attitude and Pedagogic Identity)

16.10 **Andrea Kovács Duró** University of Miskolc, Hungary
A Case Study of Social Services Group of Mitiszk

16.30 **Éva Livia Podlovics** University of Miskolc, Hungary
The Call of Conscience, As the Root of Authentic Behaviour in the Philosophy of Heidegger

16.50 *Summary*

S: MEDICAL AND HEALTH SCIENCE

VENUE: Room 227., Bld. A/1. 2nd floor, 227.

Chairman: Olivér RÁCZ *professor*

Secretary: Andrea LUKÁCS *lecturer*

Date: March 29, 2012

14.00 *Opening*

14.10 **M. Numan Durakbasa¹, Pinar Demircioglu², Gökçen Bas¹, Wolfgang Pirker³** Vienna University of Technology, Austria¹, Adnan Menderes University, Turkey², Face Your Face Tageschirurgie, Austria³

Micro-examination of Dental Samples to Enable the Quality Characteristics Required by the Clinical Experience using Biomedical Metrology

14.30 **Éva Dojcsák Kiss-Tóth, Adrienn Juhász Szalai, Péter Koska, János Szebeni, Bertalan Fodor, László Barkai** University of Miskolc, Hungary

Criteria of Application of Soft Nanoparticles Containing Sirna in Biological Systems

14.40 **Éva Dojcsák Kiss-Tóth, Adrienn Juhász Szalai, Péter Koska, Bertalan Fodor** University of Miskolc, Hungary

Difficulties in Therapeutic Application of Sirna

14.50 **Adrienn Juhász Szalai, Éva Dojcsák Kiss-Tóth, Péter Koska, Zita Lovrity, János Emmer, Bertalan Fodor** University of Miskolc, Hungary

The Characterization Methods of the Nanomaterials Developed for Clinical Use

15.00 **Adrienn Juhász Szalai, Éva Dojcsák Kiss-Tóth, Péter Koska, János Szebeni, Bertalan Fodor** University of Miskolc, Hungary

Possible Biological Application of the Different Nanomaterials

15.10 *Discussion / Break*

S: MEDICAL AND HEALTH SCIENCE

VENUE: Room 227., Bld. A/1. 2nd floor, 227.

Chairman: Olivér RÁCZ *professor*

Secretary: Andrea LUKÁCS *lecturer*

Date: March 29, 2012

- 15.30 Péter Koska, Éva Kiss-Tóth, Adrienn Juhász Szalai, Bertalan Fodor, László Barkai University of Miskolc, Hungary
ATP Sensitive Potassium Channel Orchestrate the Neuronal and Endocrin Mechanims of Glucose Homeostasis
- 15.40 Péter Koska, Éva Kiss-Tóth, Adrienn Szalai, László Barkai, Bertalan Fodor University of Miskolc, Hungary
Facilites of Gene Therapy in Cortex and Hippocampus
- 15.50 *Discussion / Break*
- 16.00 Ildikó Faragó¹, Sándor Márton², Gábor Nagy³, Ferenc Túry³, Hopcraft Matthew⁴, Melinda Madléna³ University of Miskolc¹, University of Debrecen², Semmelweis University³, Hungary, University of Melbourne, Australia⁴
Links between Oral Health and Personality among Students at a Law Enforcement Secondary School
- 16.10 Eleonóra Juhász, Katalin Bacskai University of Miskolc, Hungary
Therapeutical Experiences in the Thermal-cave at Miskolctapolca
- 16.20 Andrea Lukács, Krisztina Mayer, Iván Szalkai, László Barkai University of Miskolc, Hungary
Impact of Yoga Nidra on Students' Wellbeing
- 16.30 János Demeter, Endre Dobos University of Miskolc, Hungary
Mapping Potential Landing Areas for the Rescue Helicopter in the Bükk-Mountain Using Remote Sensing
- 16.40 *Discussion / Summary*

OPTIONAL PROGRAMME

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

microCAD Party

19.00, 29 March 2012

Venue: Main Building A/4. Assembly Hall (*Entry: only with invitation cards*)

Programme

<i>19⁰⁰ - 19²⁰</i>	<i>Musical Performance Offered by Students of Bartók Béla Institute for Music</i>
<i>19²⁰ - 19³⁵</i>	<i>Inauguration of the honorary members of the microCAD</i>
<i>19³⁵ - 19⁴⁵</i>	<i>Awarding the microCAD Memory Prize</i>
<i>19⁴⁵ - 21³⁰</i>	<i>Dinner</i>

Excursion to EGER

30 March 2012

<i>Departure:</i>	13.30
<i>Arrival in Miskolc:</i>	22.00
<i>Meeting place:</i>	outside the main building entrance of the university

Programme

First we plan to start with a visit to the Matyó Museum of Mezőkövesd. It takes about 1 hour. After this we head for Eger. It is the town of tradition, heroism, the atmosphere of baroque style and of fine wines. On arriving in Eger **the Castle of Eger** will be visited. Then **sightseeing in the inner city** of Eger (Minaret, Dobó Square, Széchenyi Street, the Basilica) followed by **wine tasting and dinner** at Kulacs Csárda, in the Valley of the Beautiful Woman.