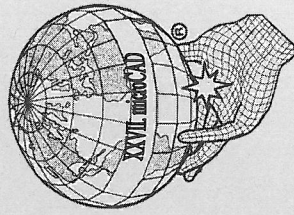
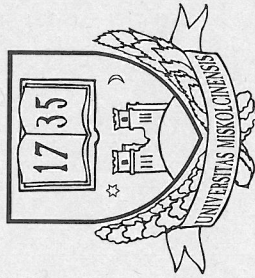


„A felsőoktatás minőségének javítása kiválósági
központok fejlesztésére alapozva a Miskolci Egyetem
stratégiai kutatási területein”

TÁMOP-4.2.1.B-10/2/KONV-2010-0001



University of Miskolc,
Hungary



"A konferencia a TÁMOP-4.2.1.B-10/2/KONV-2010-0001 jelű projekt részeként az Európai
Unió támogatásával, az Európai Szociális Alap társfinanszírozásával valósul meg"

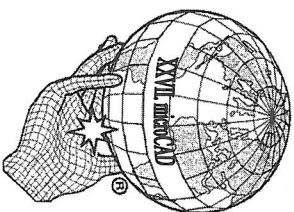


A projekt az Európai Unió támogatásával, az Európai
Szociális Alap társfinanszírozásával valósul meg.

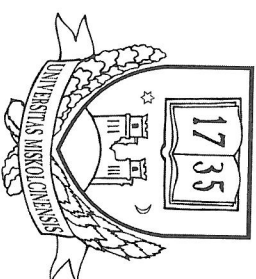


XXVII. microCAD International Scientific Conference 21-22 March 2013

PROGRAMME



University of Miskolc,
Hungary



XXVII. microCAD
International Scientific Conference
21-22 March 2013

PROGRAMME

WELCOME ADDRESS FROM THE RECTOR

The University of Miskolc, which is the legal successor of the Mining Academy (Bergschule) founded in 1735 in Selmecbánya (Banská Štiavnica) and which – in the next academic year – will celebrate its 280th academic year on account of the continuity of mining and metallurgical education, extends its greetings to the Reader on the occasion of organising the *XXVII. microCAD International Scientific Conference*.

You are holding the program booklet of the *XXVII. microCAD International Scientific Conference* in your hands. At the Conference, experts in engineering, economics, humanities and health sciences 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 26 years, the microCAD Conference has become the most significant multidisciplinary conference and meeting of professionals at the University of Miskolc.

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

More than 7500 presentations, 40 thousand pages of publications, 102 international agreements signed between universities and numerous academic and research proposals witness the achievements of the last 26 years.

I recommend you the program of the *XXVII. 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 *XXVII. 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 Informatics
	András TORMA	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 XXVII. microCAD International Scientific Conference
University of Miskolc, 21-22 March 2013

21 March (Thursday) 2013

10³⁰ – 10⁴⁰

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

10⁴⁰ – 11²⁰

A. G. MAMMALIS professor, project scientific director, National Center Scientific Research "Demokritos", Greece
Macro- to Nanoscale Materials Processing under Static and Dynamic Loading

11²⁰ – 12⁰⁰

B. Árpád PALOTÁS professor, University of Miskolc, Hungary
Latest Development in Soot Micro-Structure Characterization

12⁰⁰ – 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 2013 Party
Venue: Main Building A/4, Assembly Hall (Entry: only with invitation cards)

22 March (Friday) 2013

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

22 March 2013

13³⁰ – 22⁰⁰

Excursion to TOKAJ REGION

REGISTRATION FOR THE CONFERENCE

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

Registration desk open:

20 March (Wednesday) 2013	---	12 ⁰⁰ - 20 ⁰⁰
21 March (Thursday) 2013	8 ⁰⁰ - 12 ³⁰	13 ³⁰ - 17 ⁰⁰
22 March (Friday) 2013	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 Tudományszervezési 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. Bid. A/7. groundfloor
A	Environmental and Energy Management	Lecture hall VI. Bid. A/1. 1 st floor, 101.
B	Earth Science and Engineering	Lecture hall VIII. Bid. A/1. 1 st floor, 115.
C-D	Applied Materials Science and Technologies	Káldor Mihály Room Bid. B/1. groundfloor
E	Mathematics and Computer Science	Room 341. Bid. A/4. 3 rd floor, 341.
F	Physics and Physics Education	Room 13. Bid. A/1. mezzanine 13.
G	Automation and Telecommunication	Room 112. Bid. A/1. 1 st floor, 112.
H	Electrical Engineering	Room 220. Bid. A/1. 2 nd floor, 220.
I	Applied Information Engineering	Lecture hall IV. Bid. A/1. mezzanine 1.
J	Material Flow Systems, Logistical Information Technology and Technical Language	Room 106. Bid. A/5. 1 st floor, 106.
K	Machine and Construction Design	Department of Machine and Construction Design Bid. A/3. 1 st floor, 115.
L	Production Engineering and Manufacturing Systems	Room 1. Bid. C/1. groundfloor, 1.
M	Material Processing Technologies	Room 307. Bid. A/1. 3 rd floor, 307.
N	Fluid and Heat Engineering	Lecture hall X. Bid. A/1. 2 nd floor, 218.
O	Applied Mechanics	Room 439. Bid. A/4. 4 th floor, 439.
P	Legal Science	Faculty of Law Bid. A/6. groundfloor 31.
Q	Economic Challenges in the 21 st Century	Lecture hall V. Bid. A/1. mezzanine 3-4.
R	Humanities and Social Sciences	Room 11. Bid. A/1. mezzanine 11.
S	Medical and Health Science	Room 12. Bid. A/1. mezzanine 12.

SUSTAINABLE NATIONAL RESOURCES MANAGEMENT SYMPOSIUM

Chairman: István LAKATOS *professor*

A: ENVIRONMENTAL AND ENERGY MANAGEMENT

VENUE: Lecture hall VI., Bld. A/1, 1st floor, 101.

Chairman: József FAITLI *assoc. professor*

Secretary: Gábor MUCSI *assoc. professor*

Date: March 22, 2013

- 9.00 Ferenc Kovács, Péter Kovács University of Miskolc, Hungary
Cool Rates in Electricity Production. The Reality of Climate Causes
- 9.20 Ferenc Kovács, Richárd Tompa University of Miskolc, Hungary
Geological and Industrial Coal Resources in Leading Coal Producer Countries
- 9.40 Sorin Mihai Radu, Sorina Stanila, Razvan Cretan University of Petrosani, Romania
Solutions to Increase the Energetic Efficiency of Compressed Air Distribution Networks
- 10.00 Break
- 10.20 Aron Peanta, Silviu Marin Nan, Adrian Bogdan Simon, Dan Liviu Dandea University of Petrosani, Romania
Theoretical and Experimental Research Regarding the Design and Construction of Monitoring Systems for Potentially Explosive or Toxic Environments
- 10.40 István Lakatos, Péter Kőrös, Viktor Nagy Széchenyi István University, Hungary
Definition of Standard Parameters of a PM₁₀ Using Similarity Principles Designed for Road Vehicle Drive
- 11.00 Summary

SUSTAINABLE NATIONAL RESOURCES MANAGEMENT SYMPOSIUM

Chairman: István LAKATOS *professor*

B: EARTH SCIENCE AND ENGINEERING

VENUE: Lecture Hall VIII., Bld. A/1, 1st floor, 115.

Chairman: Éva HARTAI *assoc. professor*

Secretary: Réka HORVÁTH *fiatal kutató*

Date: March 21, 2013

- 14.00 Szandra Pekete, Réka Horváth, Attila Horváth University of Miskolc, Hungary
Exploration of Critical Elements, Especially Rare Earths Elements (REE), Germanium (Ge), Magnesium (Mg) and Beryllium (Be) in Hungary
- 14.20 László Kompar, Endre Dobos University of Miskolc, Hungary
Pedological Investigations on the Duna-Tisza Range for the Natural Recharge Estimation
- 14.40 László Oláh¹, Gergely Gábor Barnaföldi¹, Gergő Hamar², Hunor Gergely Meleg³, Gergely Surányi⁴, Dezső Varga¹ Edöves Loránd University¹, Wigner RCP of the HAS², Budapest University of Technology and Economics³, Geological, Geophysical and Space Science Research Group of the HAS⁴, Hungary
Portable Cosmic Particle Detector for Investigation of Underground Rock Inhomogeneities
- 15.00 László Kis University of Miskolc, Hungary
Temperature Distribution of the Circulating Drilling Mud
- 15.20 Break
- 15.40 Péter Szűcs, Zoltán Fejes University of Miskolc, Hungary
Potential Lukewater and Warm Water Exploration in Tokaj Mountain
- 16.00 Ádám Koncez University of Miskolc, Hungary
Binary Geothermal Electricity Production: Thermodynamic Efficiency Development in the Last Years
- 16.20 Tibor Szabó University of Miskolc, Hungary
Environmental Challenges of Geothermal Drilling Operations
- 16.40 Summary

SUSTAINABLE NATIONAL RESOURCES MANAGEMENT SYMPOSIUM

Chairman: István LAKATOS *professor*

B: EARTH SCIENCE AND ENGINEERING

VENUE: Lecture Hall VIII., Bld. A/1, 1st floor, 115.
Chairman: János FÖLDESSY *professor*
Secretary: Réka HORVÁTH *fiatal kutató*

Date: March 22, 2013

- 9.00 Tamás Magyar University of Miskolc, Hungary
Investigation of Fly Ash Based Backfilling Material in Acid Environment
- 9.20 Zoltán Molnár, Gábor Muesi, Barnabás Csöke University of Miskolc, Hungary
Review of Mechanical Activation Effect on Fly Ash Based Geopolymers
- 9.40 Eugene Reisinis, John Demetrious National Technical University of Athens, Greece
Flow Velocities over Triangular Weir
- 10.00 József Kovács, Dumitru Jula, Ovidiu Bogdan Tomus, Diana Sălăşan University of Petroşani, Romania
The Mechanical Rock Cutting Behavior of Different Coal and Rock in Underground and Open Pit Mining
- 10.20 *Break*
- 10.40 Krisztina Kaliczné Papp University of Miskolc, Hungary
"Fish-hook" Effect – The Special Phenomenon in the Air-classification
- 11.00 Nóra Gonda, Balázs Kovács University of Miskolc, Hungary
Vacuum Enhanced Bearing Capacity of Resk Type Flotation Slurry
- 11.20 Zoltán Papp University of Miskolc, Hungary
Research Perspectives in the Field of Magnetic Enrichment Technologies
- 11.40 Iosif Andras, Stela Dinescu, Andrei Andras University of Petroşani, Romania
Computer Aided Simulation of Complex Technological Systems for Coal Extraction
- 12.00 *Summary*

APPLIED MATERIALS SCIENCE AND NANOTECHNOLOGY SYMPOSIUM

Chairman: András ROÓSZ *professor*

C-D: APPLIED MATERIALS SCIENCE AND TECHNOLOGIES

VENUE: Káldor Mihály Room, Bld. B/1, ground floor
Chairman: Péter BARKÓCZY *assoc. professor*
Secretary: Zsolt DUGÁR *PhD Student*

Date: March 21, 2013

- 14.00 Markus Brehm, Malte Girschikofsky, Ralf Hellmann University of Applied Sciences
 Aschaffenburg, Germany
Optical Planar Bragg Grating Sensor for pH-Measurements
- 14.20 Steffen Hessler, Manuel Rosenberger, Stefan Belle, Ralf Hellmann University of Applied Sciences
 Aschaffenburg, Germany
Characterization of UV-written Optical Waveguides in PMMA by Phase-shifting Mach-Zehnder-Interferometry
- 14.40 Stefan Rung, Mai Rexhepi, Ralf Hellmann University of Applied Sciences Aschaffenburg, Germany
Beam Shaping for Enhanced Throughput of Laser Ablation of Transparent Conductive Films
- 15.00 Zsolt Kriston, László Kuzsella, Imre Kállai University of Miskolc, Hungary
Mechanical Testing of PVC Based Extruded Foams
- 15.20 *Break*
- 15.40 János Erdélyi, Ágnes Szemán University of Miskolc, Hungary
EDGE Stress, and Longitudinal Dish and Bow Measurements of Float Glass
- 16.00 János Fajger¹, András Gergely², Tamás Török² Fajger Műnki Iroda Ltd.¹, University of Miskolc², Hungary
New Development of the Chromium Free Post Treatment Usage on Zn Coated Surface
- 16.20 Szabolcs Jónás, Szabolcs Szávai, Péter Rózsashegyi, Róbert Belezai Bay Zoltán Nonprofit Ltd.
 Institute for Logistics and Production Engineering, Hungary
Determination of Material Properties Using Small Punch Test
- 16.40 Katalin Szűcs, László Kuzsella, János Lukács University of Miskolc, Hungary
Physical Simulation as an Ultimate Tool to Discover the Weldabilities
- 17.00 Erzsébet Nagy, Valéria Mertinger, Márton Benke, Ferenc Tranta University of Miskolc, Hungary
Twip Effect in FeMnCr Alloys
- 17.20 *Summary*

APPLIED MATERIALS SCIENCE AND NANOTECHNOLOGY SYMPOSIUM

Chairman: András ROÓSZ *professor*

C-D: APPLIED MATERIALS SCIENCE AND TECHNOLOGIES

VENUE: Káldor Mihály Room, Bld. B/1. groundfloor
Chairman: Péter BARKÓCZY *assoc. professor*
Secretary: Zsolt DUGÁR *PhD Student*

Date: March 22, 2013

- 9.00 Cornelia Gligor University of Oradea, Romania
Continuous Improvement Processes as a Tool for Performance/process Performance Turnaround in Metallurgical Industry
- 9.20 Christoph Pichler, Gerald Schneeberg, Jürgen Antrekowitsch University of Leoben, Austria
Utilization of Residues from the Iron and Steel Industry with Main Focus on Filter Dusts
- 9.40 Gerald Schneeberger, Christoph Pichler, Jürgen Antrekowitsch University of Leoben, Austria
Investigations in the Behaviour of Quasi-Ternary Slag Systems during Recycling of Residues from Steel Industry
- 10.00 Monika Tokár, György Fegyverneki, Jenő Dul, Valéria Mertinger University of Miskolc, Hungary
Designing and Testing the Casting die with Variable Wall Thickness for Studying of the Al-Si Foundry Alloys
- 10.20 Gegeely Balint, Tóth, Zoltán Harangi, Tibor Kulcsár, Tamás Kekesi University of Miskolc, Hungary
Metal Content of Drosses Arising from the Melting of Aluminium Alloy Scrap
- 10.40 Break
- 11.00 Cornelia Gligor University of Oradea, Romania
D.M.A.I.C. and Six Sigma Tools Used in Conjunction with Metallurgical Conversion Process
- 11.20 Máté Szűcs¹, György Krátlics¹, János Lenárd² University of Miskolc, Hungary¹, University of Waterloo, Canada²
Experiments and Simulation of Asymmetrical Rolling
- 11.40 Zsolt Dugar¹, Péter Barkóczy², Gábor Bérés¹, David Kis¹ College of Kecskemét¹, University of Miskolc², Hungary
Examination of Recrystallization of Copper Specimen Using Dma Measurement Technique
- 12.00 Tibor Bakondi, Gábor Frigyh, László Kuszella University of Miskolc, Hungary
Examination of Oxy-Hydrochloride Reactor's Failed Elements
- 12.20 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: Zsolt KARÁCSONY *assoc. professor*

Date: March 21, 2013

- 14.00 Péter Bakucz¹, Annamária Várkonyiné Kocz² University of Óbuda, Hungary²
Detection of Atrial Fibrillation by Filtered X-LMS Algorithm
- 14.20 Renáta Vas¹, István Fazekas¹, Zsolt Karácsony² University of Debrecen¹, University of Miskolc², Hungary
Kernel Type Estimator of a Bivariate Average Growth Function
- 14.40 Bettina Porvásznyik, István Fazekas University of Debrecen, Hungary
Scale-Free Property for Degrees and Weights in a Preferential Attachment Random Graph Model
- 15.00 Attila Házzy University of Miskolc, Hungary
Bernstein-Doetsch Type Results for Approximately (h, h)-Convex Functions
- 15.20 Break
- 15.40 Zoltán Csáti, Gabriella Bognár, Krisztián Hritzó University of Miskolc, Hungary
Investigation of the Boundary Layer over a Vertical Plate Embedded in Porous Medium
- 16.00 Zoltán Csáti, Gabriella Bognár University of Miskolc, Hungary
Iterative Transformation Method for the Generalized Sakaiadis Problem
- 16.20 Imre Pillér University of Miskolc, Hungary
Tag Suggestion Methods of Tag Based Document Management System
- 16.40 Imre Pillér, Sándor Fegyverneki University of Miskolc, Hungary
Estimation for Dimension of Superfinished Surfaces
- 17.00 Summary

MECHATRONICS AND LOGISTICS SYMPOSIUM

Chairman: Béla ILLÉS *professor*

F: PHYSICS AND PHYSICS EDUCATION

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

Chairman: Béla PARIPÁS *professor*

Secretary: János MAJÁR *assist. professor*

Date: March 21, 2013

- 14.00 Endre Kovács¹, Réka Trencsényi², Zsolt Gulács² University of Miskolc¹, University of Debrecen², Hungary
Ground State Solution for a Small Sample 2D Hubbard Model at Low Concentration: Emergence of Nano-grain Ferromagnetism
- 14.20 Béla Paripás, Béla Palásthy University of Miskolc, Hungary
Experimental PCI Studies in (a,3-1e) Coincidence: I. The Method
- 14.40 Béla Paripás, Béla Palásthy University of Miskolc, Hungary
Experimental PCI Studies in (a,3-1e) Coincidence: II. Results and Discussion
- 15.00 János Majár University of Miskolc, Hungary
A New Type of Gravitational Wave Sources: Binaries on Unbound Orbits
- 15.20 Gábor Pszota University of Miskolc, Hungary
Indications for Black Hole Spin from X-ray Spectra
- 15.40 *Summary*

MECHATRONICS AND LOGISTICS SYMPOSIUM

Chairman: Béla ILLÉS *professor*

G: AUTOMATION AND TELECOMMUNICATION

VENUE: Room 112., Bld. A/1, 1st floor, 112.

Chairman: László CZAP *assoc. professor*

Secretary: József VÁSÁRHELYI *assoc. professor*

Date: March 21, 2013

- 14.00 László Árvai Bay Zoltan Nonprofit Ltd. for Applied Research, Hungary
Design of the Ground Station Hardware for Unmanned Aerial Vehicle
- 14.20 Péter Kartus, Domokos Kiss Budapest University of Technology and Economics, Hungary
Designing the Hardware and Software System of a Robocup Robot Soccer Player
- 14.40 Ildikó Bölkeény, Gergő Szabó University of Miskolc, Hungary
Dosing Systems Used in Oil- and Gas Industry
- 15.00 Csaba Vörös, Károly Jónap, József Subert University of Miskolc, Hungary
Mobilized Gas Hydrate Investigation System
- 15.20 József Subert University of Miskolc, Hungary
Online Thermodynamic Models in the Industry: The 30,000 m³ Atmospheric Gas Tank of MOL PLC
- 15.40 David Szalóki, Kristóf Csorba, Domokos Kiss Budapest University of Technology and Economics, Hungary
The Robonaut Autonomous Mobile Robotics Contest
- 16.00 Bence Formanek¹, László Czap² CableWorld Ltd.¹, University of Miskolc², Hungary
Video Bitrate Reduction on Multicore DSP
- 16.20 *Summary*

MECHATRONICS AND LOGISTICS SYMPOSIUM

Chairman: Béla ILLÉS *professor*

H: ELECTRICAL ENGINEERING

VENUE: Room 220., Bld. A/1. 2nd floor, 220.
Chairman: ERNŐ KOVÁCS *assoc. professor*
Secretary: Csaba BLÁGA *assoc. professor*

Date: March 21, 2013

- 14.00 Andrei-Toader Filip, Radu-Petru Hangiu, Claudia-Steluta Martis, Károly Ágoston Biró Technical University of Cluj Napoca, Romania
Comparative Study of a Permanent Magnet Synchronous Machine with Different Magnet Design
- 14.20 Radu-Petru Hangiu, Andrei-Toader Filip, Claudia Martis, Károly Ágoston Biró Technical University of Cluj-Napoca, Romania
Permanent Magnet Synchronous Machines for Integrated Starter Alternator Applications
- 14.40 Viliam Fedák, Radovan Sivý, Peter Kensch Technical University of Kosice, Slovakia
Multi-Motor Drive Control System for Robotic Applications Developed in MATLAB GUI Environment
- 15.00 Viliam Fedák, Daniel Magura, Peter Kensch Technical University of Kosice, Slovakia
Physical Model of a Continuous Production Line for Learning Algorithms of Multi-Motor Drive Control
- 15.20 Mihai-Valentin Paunescu, Dan Paunescu, Ioan G. Tarnovan Technical University of Cluj-Napoca, Romania
Heating of Axial Flux Permanent Magnet Machines: An Overview
- 15.40 Break
- 16.00 Godem A. Ismeal, Viliam Fedák Technical University of Kosice, Slovakia
Optimisation of Cascade PID Controller for DC Drives Using Genetic Algorithms
- 16.20 Godem A. Ismeal, Viliam Fedák, Róbert Üveges Technical University of Kosice, Slovakia
3D Model of an Industrial Robot of the SF-25 SEF-Roboter Type with Simulation in Simmechanics Environment
- 16.40 Viktor Fűvesi, Ernő Kovács University of Miskolc, Hungary
Comparing Actuator Models
- 17.00 Lajos Tóth University of Miskolc, Hungary
Developing a Wavelet-Based Tool for Detecting Faults in Induction Motors
- 17.20 Csaba Blaga University of Miskolc, Hungary
Reactive Power Analysis of Single Phase Power Control - The 5th Part
- 17.40 Summary

MECHATRONICS AND LOGISTICS SYMPOSIUM

Chairman: Béla ILLÉS *professor*

I: APPLIED INFORMATION ENGINEERING

VENUE: Lecture hall IV., Bld. A/1. mezzanine 1.
Chairman: László DUDÁS *assoc. professor*
Secretary: Pál SIMON *PhD Student*

Date: March 21, 2013

- 14.00 Opening
- 14.05 Ákos Nagy, Bence Kóvári Budapest University of Technology and Economics, Hungary
A Framework to Aid Usability Testing and User Experience Measurement on Mobile Devices
- 14.30 Ákos Nagy, Bence Kóvári Budapest University of Technology and Economics, Hungary
Optimizing Communication of Web Services on the .NET Platform
- 14.55 Krisztián Fekete, Márton Venczel Budapest University of Technology and Economics, Hungary
Research on Power Consumption of Mobile Phones
- 15.20 Balázs Vilányi, Péter Martinek, Béla Salkora Budapest University of Technology and Economics, Hungary
Supervised Learning Based Schema Matching Using Component Results
- 15.45 Break
- 16.00 Róbert Angel, András Fekete Budapest University of Technology and Economics, Hungary
Innolearn Project: Innovative Mobile Educational Games Using Brain-Computer Interface
- 16.25 Péter Fehér, László Lengyel Budapest University of Technology and Economics, Hungary
Investigating the Performance of the VF2 Algorithm in Case of Symmetric Graphs
- 16.50 Silviu Marin Nan, Aron Poanta, Dan Liviu Dandea, Bogdan Simon University of Petrosani, Romania
Monitoring the Cutting Teeth Wear and the Working Plane of a Bucket Wheel Excavator Using Digital Vision Cameras
- 17.15 Szilárd Szapó University of Miskolc, Hungary
Data Acquisition and Control Softwares in Laboratory Environments
- 17.40 Summary

MECHATRONICS AND LOGISTICS SYMPOSIUM

Chairman: Béla ILLÉS *professor*

I: APPLIED INFORMATION ENGINEERING

VENUE: Lecture hall IV., Bld. A/1. mezzanine 1.

Chairman: László DUDÁS *assoc. professor*

Secretary: Pál SIMON *PhD Student*

Date: March 22, 2013

- 9.00 Péter Bikfalvi, Ferenc Erdélyi, Tibor Tóth University of Miskolc, Hungary
Some Considerations on Functional Analysis of Production Systems in the View of MES Applications
- 9.25 Péter Balázs Pribula, László Kovács University of Miskolc, Hungary
Embedded Mathematical Formulae for HTML Documents
- 9.50 Gábor Szabó, László Kovács University of Miskolc, Hungary
Solving the Forecasting Problem with Artificial Neural Networks
- 10.15 Break
- 10.30 Gábor Szemán, László Kovács University of Miskolc, Hungary
Text Mining in Legal Free Text Documents
- 10.55 Pál Simon University of Miskolc, Hungary
Exploration of TABU Search Algorithm Implementation Modes on GPU
- 11.20 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 21, 2013

- 14.00 Opening Ceremony
- 14.15 Elke Gilsrau¹, Norge Isaias Coelho Machado², Béla Illés³ Otto-von-Guericke University, Magdeburg, Germany¹, Central University "Marta Abreu" of Las Villas, Santa Clara, Cuba², University Miskolc, Hungary³
Evaluation in Logistics
- 14.30 György Sárközi¹, Béla Illés² Borsod Volán Public Transport Co.,¹ University of Miskolc,² Hungary
Telematics-Based Logistic Solutions for Demand Responsive Rural Public Transport in Hungary
- 14.45 Peter Bigos, Martin Manič, Melichar Kopas Technical University of Košice, Slovakia
Solution of Operational Problem during Transport of Bulk Solids in Logistic Centre
- 15.00 Iga Kořt, Bogusława Ziolkowska, Agnieszka Wójcik-Mazur Technological University of Częstochowa, Poland
Application of IT System in Logistics Customer Service
- 15.15 Norbert Tóth, Zsolt István, Ernő Garamvölgyi, Richard Ladányi Bay Zoltán Nonprofit Kft., Hungary
Transnational Logistics Development by the Use of Cloud Computing and an Innovative Cooperative Business Model
- 15.30 Break