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PREFACE

Dear Colleague!

On behalf of the organizing committees and the host Faculty of Mechanical Engineering it is a great pleasure for me to welcome you in Gödöllő at the **Synergy 2013 International Conferences on Engineering, Agriculture, Waste management, and Green Industry Innovation** dealing with “*Synergy in the Technical Development*”.

Our conference is organised by CIGR Hungarian National Committee, Faculty of Mechanical Engineering of Szent István University, Agricultural Engineering Committee of the Hungarian Academy of Sciences, together with EurAGEng, CIGR Section IV., Hungarian Society of Agricultural Sciences, Hungarian Chamber of Engineers, Hungarian Waste Management Agency, Hungarian Electrotechnical Association, Hungarian Institute of Agricultural Engineering, and the Scientific Society for Mechanical Engineering.



The main objective of the Conference is to bring together experts from different geographic regions with similar scientific interdisciplinary interest and research activities and to share ideas and developments in the various fields of engineering. I am convinced that presentations and discussions by the participants from a wide range of countries will create synergy between focus areas of engineering, agriculture, waste management, and green industry innovation, collaborative research and international knowledge transfer. The conference addresses relevant topics such as crop and horticultural production systems, post harvest technologies, animal husbandry, automation and measuring technologies, fundamental research, multidisciplinary modelling, economics of agricultural production, computer aided engineering, renewable energy utilisation, machinery management, and maintenance. As an intensively growing scientific area the nanotechnology is also in the focus of some papers that will be presented this year. Researchers during the numerous plenary-, parallel- and poster sessions can share their latest findings, technical expertise and experience making this Conference a much-anticipated international event.

Social activities are planned and integrated to the program to offer participants an exceptional opportunity to experience the „Hungarian hospitality”, and to discover some memorable places of Gödöllő and a significant part of our country. Special study tours are organized to get in-depth information about solutions and technologies used in Hungary.

I look forward to seeing you at the different sessions of the Conference and wish you an unforgettable stay in Gödöllő!

Prof. István Szabó

Chairman

Conference organizing committee



The Faculty of Mechanical Engineering

Historical background

The current training profile of the Faculty has been developed from courses adapted to the technical needs of agricultural production and processes. The activities of the school and its predecessors have more than a 200-year-old history. The Faculty of Mechanical Engineering was founded more than 50 years ago.

The specialization in the profile of today is extended by training fields such as environmental techniques, engineer-mathematician, and information technology engineering, which are offered in addition to the subjects of the traditional mechanical engineering curriculum (product and manufacturing development, machine design, logistics, vehicle techniques, etc.). The mission of the Faculty is to educate mechanical engineers and experts who respect and protect natural resources and cultural values, work in the spirit of sustainable growth and participate in rural development.

Institutes and facilities of the Faculty

The Faculty consists of six Institutes and other Centres and Facilities

- Institute of Process Engineering
- Institute of Management and System Engineering
- Institute of Industrial Technologies
- Institute of Mechanics and Machinery
- Institute of Mathematics and Informatics
- Institute of Environmental Systems

In addition, the Center for Computer Aided Engineering, the Workshops for Vocational Training, the Museum of Agricultural Machinery and the modern "Integrated Engineering Information Technology Training Center" and Knowledge Transfer Centre at the School serve the training objectives of all the programs and specialization, because they introduce the integrated logistical process of design, manufacturing, distribution and machine use, thus making the mechanical training of Gödöllő unique.

Educational system

The Faculty of Mechanical Engineering offers BSc, MSc, PhD courses and postgraduate training in Hungarian and English in different fields of engineering, like Mechanical Engineering, Mechanical Engineering in Agriculture and Food Industry, Mechatronical Engineering and Engineering Management and Building Engineering. Some of the specializations are: .

- Applied Information Technologies
- Logistics
- Manufacturing
- Agricultural Production Technology
- Food Processing
- Vehicle Mechatronics
- Mechatronics of Communication Systems
- Quality and Technology Management
- Marketing Management

Research

Among the main multidisciplinary research and applied research areas of the faculty the primary ones relate to traditional agricultural engineering and sustainable agriculture technology, computer-aided engineering activities and analysis, environmental engineering, alternative energy sources, drying technology, development of quality assurance systems and theory of machine design.

Ready to cooperate

The Faculty of Mechanical Engineering is an active partner in several international research and development projects and has also been involved in creating joint educational programs. The staff members of the Faculty are acknowledged experts in different fields of technical sciences as well as in educational methodology (e-learning, adult education).



SYNERGY
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Technical Development



ORGANISING INSTITUTIONS



SZENT ISTVÁN
UNIVERSITY



FACULTY OF MECHANICAL ENGINEERING, GÖDÖLLŐ

Szent István University
Faculty of Mechanical Engineering



CIGR
Hungarian National
Committee



Hungary Academy
of Sciences
Agricultural Engineering Board



Hungarian Electrotechnical
Association



National Waste Management
Agency



Scientific Society for
Mechanical Engineering



European Society of Agricultural
Engineers



Hungarian Chamber of
Agricultural Engineers



Hungarian Chamber of
Agriculture

National Development Agency

www.ujszechenyiterv.gov.hu

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HUNGARY'S RENEWAL



The project is supported by the European Union
and co-financed by the European Social Fund.

TÁMOP-4.2.1.B-11/2/KMR-2011-0003

Improvement of Research and Education Standard of Szent István University



SYNERGY INTERNATIONAL CONFERENCES

Engineering, Agriculture, Waste Management and Green Industry Innovation

**III. International Conference of CIGR Hungarian National
Committee, The Faculty of Mechanical Engineering of the
Szent István University,**

&

**XXXVI. R&D Conference of Hungarian Academy of Sciences,
Committee of Agricultural and Biosystems Engineering**

“Synergy and Technical development”

Topics

Focusing on technical and technological development, the conference discusses the synergy between agriculture and industry, energetics, environment, education, and research. Topics include crop and horticultural production systems, postharvest technologies, animal husbandry, food technology and processing, agri-food economy, logistics, automatization and measurement technologies, biomathematics, information technologies, environmental modelling, geomathematics, renewable energy resources, hybrid power-plants of regenerative energies, green industry innovation, waste management, environmental technologies, machinery, production systems, basic and applied research for agricultural engineering, forest engineering, and mechanical engineering.

The purpose of Synergy 2013, following the footsteps of the previous events, is to promote activities in various areas of engineering by providing a forum for exchange of ideas, presentation of technical achievements, and discussion of future directions.

Through the parallel sections, poster presentations, study tours and other joint professional programmes the conferences bring together an international community of experts to discuss the state-of-the-art technology, new research results, perspectives of future developments, and innovative applications relevant to engineering, agriculture, waste management, green industry and the related areas.

Supported by:

EurAgEng, CIGR Section IV, National Waste Management Agency, Hungarian Society of Agricultural Sciences, Hungarian Chamber of Engineers, Hungarian Chamber of Agriculture, Hungarian Electrotechnical Association, Scientific Society for Mechanical Engineering.



SCIENTIFIC COMMITTEE

Chair:

SZABÓ, István, dean

Members:

Cengiz AKDENIZ (Turkey),

János BEKE (Hungary),

Franz-Josef BOCKISCH (Germany),
gary),

Radu COTETIU (Romania),

Patrick DEBAETS (Belgium),

István FARKAS (Hungary),

László FENYVESI (Hungary),

Reinhard HAAS (Austria),

István HUSTI (Hungary),

István JÓRI J. (Hungary),

Yuriy. F. LACHUGA (Russia),

Zoltán LÁNG (Hungary),

Sándor MOLNÁR (Hungary),

Miklós NEMÉNYI (Hungary),

Zoltán SIBALSZKY (Hungary),

László SIKOLYA (Hungary),

György SITKEI (Hungary),

Bart SONCK (Belgium),

Gábor SZABÓ (Hungary),

Péter SZENDRŐ (Hungary),

László TÓTH (Hungary),

Antal VÉHA (Hungary),

Georg WENDL (Germany).



ORGANISING COMMITTEE

President:

SZABÓ, István, dean

Members:

Zoltán BÁRTFAI,
Zoltán BLAHUNKA,
Balázs BOJSZKÓ,
Dezső FAUST,
Titusz FEKETE,
Zoltán GERGELY,
Gábor GÉCZI,
Károly HENTZ,
Gábor KALÁCSKA,
Péter KORZENSZKY,
Imre KOVÁCS,
Zoltán KURJÁK,
László MAGÓ,
Károly PETRÓCZKI,
Norbert SCHREMPF,
Zoltán SIBALSZKY,
Ferenc SOMOGYI,
László TÓTH.



CONFERENCE PROGRAM

October 13, Sunday	
15:00 – 18:00	Information and Registration
19:00 -	Welcome Party

October 14, Monday	
8:00 – 18:00	Registration
9:00 – 11:00	Plenary Session
11:00 – 11:20	Coffee break
11:20 – 13:00	Working Sessions I.
13:00 – 14:20	Lunch
14:20 – 16:00	Working Sessions II.
17:30 – 20:00	Cultural Program

October 15, Tuesday	
9:00 – 10:40	Working Sessions III.
10:40 – 11:00	Coffee break
11:00 – 12:40	Working Sessions IV.
12:40 – 14:00	Lunch
14:00 – 16:00	Working Sessions V. (parallel sections)
19:30 -	Banquet

October 16, Wednesday	
9:00 – 10:30	Poster Session
10:30 – 12:00	Closing Session
12:30 – 13:30	Lunch

October 17, Thursday	
8:00 –	One Day Study Tour (included in conference fee)

October 18, Friday	
8:00 –	One Day Study Tour (optional)



THE AGENDA OF THE PLENARY SESSION

Monday, 14 October 2013, 9:00-11:00

Place: Knowledge Transfer Centre 9. Lecture Hall

Programme

9 ⁰⁰ - 9 ⁰⁵	Rector's welcome	Dr János TŐZSÉR rector
9 ⁰⁵ - 9 ¹⁰	Dean's welcome	Dr. István SZABÓ dean, president of the Organizing Committee
9 ¹⁰ -9 ¹⁵	Major's welcome	Dr. György GÉMESI major of Gödöllő
9 ¹⁵ - 9 ²⁰	CIGR representative's Welcome	Dr. Zoltán SIBALSZKY
9 ²⁰ - 9 ²⁵	Welcome of the Golden Class sponsor	Viktor WINKLER Claas Hungary Ltd.
9 ²⁵ - 9 ³⁰	Welcome of the Golden Class sponsor	Zsolt HARSÁNYI Axiál Ltd.
9 ³⁰ -9 ³⁵	Welcome of the Golden Class sponsor	Lajos KLUG FKF Corp.
9 ³⁵ - 10 ⁰⁰	Plenary lecture	DESSEVRE Dominique Michelin Corp.
10 ⁰⁰ - 10 ²⁵	Plenary lecture	Dr. György SITKEI Hungarian Academy of Sciences
10 ²⁵ - 10 ⁵⁰	Plenary lecture	Jan-Hendrik MOHR Claas GmbH
10 ⁵⁰ - 11 ¹⁰	Honorary Professor inauguration ceremony	Dr. István SZABÓ, dean Faculty of Mechanical Engineering
	Bánházi Gyula Medal giving ceremony	Dr. László FENYVESI Hung Institute of Agricultural Engineering



THE AGENDA OF THE CLOSING SESSION

Wednesday, 16 October 2013, 10:30-12:00

Place: Knowledge Transfer Centre 9: Lecture Hall

Programme

10 ³⁰ - 11 ⁰⁰	Conclusion of the sections	Chairs of the sections
11 ⁰⁰ - 11 ²⁰	Activity of Scientific Committee on Agricultural Engineering: Results and Challenges	Dr. BEKE, János chair of Scientific Committee on Agricultural Engineering
11 ²⁰ - 11 ³⁵	Prize delivery	Chairs of the Conference Committees
11 ³⁵ - 12 ⁰⁰	Summary and closing of the conference	Chairs of the Conference Committees



SYNERGY
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SESSIONS



Working Sessions I.

Monday, 14 October 2013, 11:20-13:00

AGRIFOOD ECONOMY AND LOGISTICS (S1)

Chair: Dr. István Husti

Co-Chair: Dr. Miklós Daróczy

Place: 10. auditorium

Time	Name(s)	Title
11:20-11:35	I. Husti	THE AGRICULTURAL CHARACTERISTICS EFFECTING THE INNOVATIVE PRODUCTION
11:35-11:50	L. Magó	ACTUAL TRENDS OF AGRICULTURAL MACHINE DISTRIBUTION IN THE HUNGARY
11:50-12:05	M. Daróczy, V. Medina, A. Bak, A. Lágymányosi B. Bojszókó	PROJECT MANAGEMENT WITHOUT BORDERS BASED ON THE HUSK PROGRAM
12:05-12:20	G. Gulyás	CHANGES IN LOGISTIC CHAINS
12:20-12:35	L. Magó	EXAMINATION OF THE COST OF POST-HARVEST LOGISTICAL TASKS IN THE CARROT PRODUCTION
12:35-12:50	R. Tóth, M. Daróczy	SIMULATION OF GRAIN HARVESTING



Working Sessions I.

Monday, 14 October 2013, 11:20-13:00

FUNDAMENTAL RESEARCH (S7)

Chair: Dr. László Fenyvesi

Co-Chair:
um

Place: 11. auditorium

Time	Name(s)	Title
11:20-11:40	J. Gazzola, K. C. Cardoso, M. V. G. Silva, A. C. L. Lino I. M. Dal Fabbro	APPLICATION OF PHASE SHIFT MOIRÉ METHOD TO MEASURE OUT OF PLANE DEFORMATION
11:40-12:00	J. Gazzola, M. V. G. Silva, K. C. Cardoso, I. M. Dal Fabbro	APPLICATION OF PHASE SHIFT MOIRÉ METHOD IN DETERMINING STRESS DISTRIBUTION ON DOUBLE CLAMPED BEAM UNDER FLEXURAL LOADING
12:00-12:20	W. Brachaczek	INFLUENCE OF CELLULOSE ETHERS ON THE MECHANICAL PROPERTIES OF RENOVATION PLASTERS USING STATISTICAL METHODS
12:20-12:40	K. D. Szalay, J. Deákvári, G. Bércesi, Á. Csorba, D. Polyák, Z. Bellus, L. Fenyvesi	POSSIBLE REDUCTION OF MEASURING UNCERTAINTIES IN LABORATORY SPECTROSCOPY
12:40-13:00	L. Máthé, G. Magdics	INVESTIGATION OF FRICTION COEFFICIENT BETWEEN VEHICLE BODY AND SOIL



Working Sessions I.

Monday, 14 October 2013, 11:20-13:00

COMPUTER AIDED ENGINEERING (S3)

Chair: Dr. István Jóri J

Co-Chair: Dr. László Kátai

Place: 12. auditorium

Time	Name(s)	Title
11:20-11:40	K. Kotroczy, Gy. Kerényi	INVESTIGATION OF SOILRIGID WHEEL CONTACT UNDER THREE DIFFERENT CIRCUMSTANCES USING DISCRETE ELEMENT METHOD
11:40-12:00	I. Szabó, L. Kátai R. Csomai-Kürtössy	3D GEOMETRY ANALYSIS OF GRAIN
12:00-12:20	I. Oldal, F. Safranyik	DISCRETE ELEMENT MODEL OF PARTICLE OUTFLOW
12:20-12:40	K. Tamás, J. Rádics, I. Jóri J.	DEVELOPING A PRECISE SOIL MODEL BY DEM
12:40-13:00	L. Gurmai	TESTING OF TOWLED VEHICLES

JOINT PROGRAMME: “TRANS-TRIO SCIENCES” I PART

ROUND TABLE DISCUSSION

Chair: Dr. Gábor Kalácska

Place: GÉTI Workshop

Co-Chair: Dr. Patrick De Baets
Room

Exam Centre

Time	Title
11:20-13:00	Gödöllő - Baia Mare - Gent Round table discussion, GTE Tribology Modelling and Solution of Industrial Tribology Related Problems Review of the research facilities at Institute for Mechanical Engineering Technology, SZIU - Running topics at Gent, Gödöllő, Baia Mare



Working Sessions II.

Monday, 14 October 2013, 14:20-16:00

EMERGING ENERGY RESOURCES (S4)

Chair: Dr. István Farkas

Co-Chair: Dr. István Seres

Place: 10. auditorium

um

Time	Name(s)	Title
14:20-14:45	P. V. R. Kovács, S. Beszédes, L. Ludányi, C. Hodúr G. Keszthelyi-Szabó	ENERGETIC INVESTIGATION OF MICROWAVE TREATMENT
14:40-15:00	P. Víg I. Farkas	VOLUMETRIC FLOW RATE EFFECT ON ENERGY PRODUCTION OF VACUUM TUBE SOLAR COLLECTOR
15:00-15:20	B. Gombos, M. Montvájszki P. Köles	CLIMATIC POTENTIAL OF MICROALGAL PRODUCTION IN HUNGARY
15:20-15:40	I. Kocsány, I. Seres, I. Farkas	SPECTRAL SENSITIVITY OF PV MODUL
15:40-16:00	H. Domanovszky, I. Szalkai, Z. Bártfai	BIO-LNG VALUE CHAIN IN THE AGRICULTURE CASE STUDY



Working Sessions II.

Monday, 14 October 2013, 14:20-16:00

ENVIRONMENTAL TECHNOLOGIES (S5)

Chair: Dr. László Tóth

Co-Chair: Dr. István Patay

Place: 11. auditorium

Time	Name(s)	Title
14:20-14:45	S. Beszédes, P.V.R. Kovács, Sz. Kertész, G. Szabó, C. Hodúr	EXPERIENCES WITH MICROWAVE PRE-TREATMENTS OF SWEET WHEY PRIOR TO MESOPHILIC ANAEROBIC DIGESTION
14:40-15:00	Z. Dodog	THERMAL PERFORMANCE OF DIFFERENT EXTERIOR BUILDING BOUNDARIES
15:00-15:20	N. Schrempf, L. Tóth, I. Patay	WIND ENERGY POTENTIAL ESTIMATION IN HUNGARY
15:20-15:40	N. Schrempf, L. Tóth, J. Beke	THE STAND OF THE ENERGY EFFICIENCY PLAN IN 2013
15:40-16:00	M. Malustyik	SEASONAL HEAT STORAGE



Working Sessions II.

Monday, 14 October 2013, 14:20-16:00

JOINT PROGRAMME: “TRANS-TRIO SCIENCES” II PART

ROUND TABLE DISCUSSION

Chair: Dr. Gábor Kalácska
Co-Chair: Dr. Patrick De Baets
Room

Place: GÉTI Workshop
Exam Centre

Time	Title
14:00-16:00	<p>Gödöllő - Baia Mare - Gent Round table discussion, GTE Tribology Modelling and Solution of Industrial Tribology Related Problems Tribology research summaries from: materials, failure processes, technologies, maintenance and prevention.</p> <p>New co-operative partners:</p> <ul style="list-style-type: none">- Faculty of Mechanical Engineering, Technical University Budapest- Faculty of Military Sciences and Officer Training, National University of Public Service



JOINT PROGRAMME:

„ENGINEERING MANAGER’S EDUCATION”

Monday, 14 October 2013, 14:00-18:00

Location: Szent István University
Gödöllő, Páter K. Street 1,
Knowledge Transfer Centre (Machinery Museum),
Room No. TK 225

Schedule:

- | | | |
|-------------|---|--|
| 14:00-14:10 | Greeting & Introduction | <i>Dr. Miklós Daróczy,</i>
Associate Professor,
Director of Institute of
Engineering Management |
| 14:10-17:00 | Panel Discussion
Invited Participants from
several Hungarian Higher
Education Schools | Moderator: <i>Dr. István Husti,</i>
Professor,
Head of Applied Management
Department |
| 17:00-18:00 | Closing remarks and
Buffet | |





Working Sessions III.

Tuesday, 15 October 2013, 9:00-10:40

FOOD ENGINEERING (S6)

Chair: Dr. József Felföldi

Co-Chair: Dr. Antal Véha

Place: 10. auditorium

Time	Name(s)	Title
9:00-9:20	T. Antal, B. Kerekes L. Sikolya	PHYSICAL PROPERTIES OF FREEZE DRIED VEGETABLES BY DIFFERENT CHEMICAL PRE-TREATMENTS
9:20-9:40	E. Várvolgyi, L. D. Dénes, J. Soós, L. Baranyai, Z. Kovács, J. Felföldi	MONITORING THE ROASTING PROCESS OF ARABICA COFFEE BY VISION SYSTEM, NIR AND ELECTRONIC TONGUE METHODS
9:40-10:00	J. Soós, E. Várvolgyi, L. D. Dénes, D. Szöllősi, Z. Kovács, J. Felföldi	COMPARISON OF WHITE WINES FROM DIFFERENT WINE REGIONS USING ELECTRONIC TONGUE
10:00-10:20	Gy. Csima, E. Vozáry	EFFECT OF MEASURE SETTINGS ON CREEP-RECOVERY TEST RESULTS OF CANDY GUMS



Working Sessions III.

Tuesday, 15 October 2013, 9:00-10:40

AUTOMATISATION AND MEASUREMENT TECHNOLOGIES (S2)

Chair: Dr. János Beke

Co-Chair: H.-P. Schwarz

Place: 11. auditorium

Time	Name(s)	Title
9:00-9:20	H.-P. Schwarz, Ph. Rüger, R. Töpfer, A. Kicherer	DEVELOPMENT OF AN AUTONOMOUS DRIVEN ROBOTIC PLATFORM USED FOR HT- PHENOTYPING IN VITICULTURE
9:20-9:40	I. Péter Szabó, P. Szendrő, G. Szabó	ANALYZING SOLAR COLLECTORS WITH OWN-DESIGNED EXPERIMENTAL DEVICE
9:40-10:00	Z. Gergely, L. Tóth, K. Petróczki, G. Bércesi	RENEWABLE ENERGY ASSISTED AIR CONDITIONING SYSTEM INSTRUMENTATION
10:00-10:20	T. Riegler, C. Rechberger, F. Handler, H. Prankl	CHARACTERIZING QUALITY OF TILLAGE BY MEANS OF STEREO VISION
10:20-10:40	Z. Blahunka, Z. Bártfai, D. Faust	MEASUREMENT OPTIMALIZATION BY INFORMATICAL ENTROPY



Working Sessions IV.

Tuesday, 15 October 2013, 11:00-12:40

MULTIDISCIPLINARY MODELING (S9)

Chair: Dr. Sándor Molnár

Co-Chair: Dr. Zoltán Varga

Place: 10. auditorium

Time	Name(s)	Title
11:00-11:20	J.R. Gallego, I. López, M. Gámez, T. Cabello, Z. Varga J. Garay	SIMULATION MODEL APPLIED TO BIOLOGICAL PEST CONTROL BY ENTOMOPHAGOUS SPECIES IN COMERCIAL TOMATO GREENHOUSES
11:20-11:40	É. Dékány, L. Székely, P. Víg, Zs. Farkas, I. Seres A. Veres	ON PREPARATION COURSES ON MATHEMATICS AND PHYSICS FOR BSC STUDENTS IN MECHANICAL ENGINEERING
11:40-12:00	R. Toth, M. F. Farkas, G. Valkó	INTERPRETATION AND MEASURING OF RESOURCE SCARCITY
12:00-12:20	G. Valkó, M. F. Farkas, R. Toth	INDICATORS OF SUSTAINABLE AGRICULTURE
12:20-12:40	M. Molnár, S. Molnár, J. Molnár	DEPLETABLE RESOURCES IN ECONOMIC MODELS



Working Sessions IV.

Tuesday, 15 October 2013, 11:00-12:40

MACHINERY AND PRODUCTION SYSTEMS (S8/1)

Chair: Dr. Gábor Kalácska

Co-Chair: Dr. Patrick DeBaets

Place: 11. auditorium

Time	Name(s)	Title
11:00-11:20	I. Barányi	INFLUENCE OF ABRASION WEAR PROCESS ON AMPLITUDE ROUGHNESS PARAMETERS
11:20-11:40	J. Sukumaran, V. Rodriguez, I. Siva, J.T. Winowlin Jappes, M. Ando, P. De Baets	EXPLORATION OF TRIBOLOGICAL CHARACTERISTICS OF NATURALLY WOVEN FIBER COMPOSITES
11:40-12:00	C. Almeida, I. M. Dal Fabbro, J. Gazzola, E. D. Cabrera	ELASTIC BEHAVIOR OF SUNFLOWER (<i>Helianthus annuus</i>) SEEDS UNDER CONSTRAINED COMPRESSION TESTS
12:00-12:20	J. De Pauw, P. De Baets, W. De Waele	ON THE INFLUENCE OF LASER SURFACE TEXTURE IN FRETTING FATIGUE TESTING
12:20-12:40	T. Pataki; A. Kári-Horvát, Z. Szakál,	DRAWING PROCESS OF CARBON NANOTUBE „Y” JUNCTIONS



Working Sessions V.

Tuesday, 15 October 2013, 14:00-16:00

MACHINERY AND PRODUCTION SYSTEMS (S8/2)

Chair: Dr. Gábor Kalácska

Co-Chair: Dr. Patrick DeBaets

Place: 10. auditorium

um

Time	Name(s)	Title
14:00-14:20	L. Zsidai, Z. Szakál	DEVELOPMENT OF A TRIBOLOGY MODEL SYSTEM FOR RESEARCH OF COMPOSITES BASED ON PA6 AND PEEK POLYMER MATRIX
14:20-14:40	A. Goda, A. Lajos, L. Zsidai	ANALYSED AREAS OF CORN HARVESTER ADAPTER PRODUCER COMPANIES'S PRODUCTION STARETG Y
14:40-15:00	T. S. Kornecki, A. J. Price, K. S. Balkcom	EFFECTS OF TERMINATING COVER CROPS WITH ROLLING/CRIMPING AND HERBICIDES ON COTTON POPULATION AND YIELD IN AN ALABANA NO-TILL SYSTEM
15:00-15:20	R.C. Akdeniz, S. Haghghat	THE EFFECT OF DIE DIMENSIONS, RAW MATERIAL MOISTURE CONTENT AND PARTICLE SIZE ON PELLETIZING CHARACTERISTICS OF OLIVE CAKE



Working Sessions V.

Tuesday, 15 October 2013, 14:00-16:00

WASTE MANAGEMENT (S10)

Chair: Dr. István Barótfi

Co-Chair: Dr. Gábor Géczy

Place: 11. auditorium

Time	Name(s)	Title
14:00-14:20	M. Kokkora, K. Petrotos, P. Gkoutzidis, Ch. Papaioannou, A. Manouras, A. Ntontos	COMPOSTING OF THE SOLID RESIDUE FROM A ROSE OIL PRODUCING PLANT
14:20-14:40	K. Songthanasak, A. Tassanaraphan, N. Santhammatone, P. Aueperapattana, P. Phattanapirom	PRELIMINARY STUDY ON HUMIC ACID CONTENTS FROM COMPOSTING USING DIFFERENT CARBON AND NITROGEN SOURCES
14:40-15:00	Á. Kolozsiné Ringelhann	HOW IS THE ENVIRONMENTAL PRODUCT CHARGE SYSTEM OPERATED IN HUNGARY



JOINT PROGRAMME:

PRELIMINARY ANNOUNCEMENT AND CALL FOR PARTICIPATION

19TH WORKSHOP ON ENERGY AND ENVIRONMENT (EE 2013)

October 24-25, 2013, Gödöllő, Hungary

Successful events in the series of the Seminar/Workshop on Energy and Environment (EE) were organised yearly since 1995 under the auspices of the Department of Physics and Process Control, Institute for Environmental Engineering Systems, Szent István University Gödöllő, Hungary including active participation also from foreign institutions working in the field of the application possibilities of renewable energy resources.

The aim of the Workshop is provide a forum for the presentation of new results in research, development and applications in connection with the issues of energy and environment.

Further information, please, contact:

Prof. I. Farkas
Founding Chairman of the Workshop
Department of Physics and Process Control
Institute for Environmental Engineering Systems
Faculty of Mechanical Engineering
Szent István University

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SYNERGY
&
Technical Development



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GENERAL INFORMATION

PROGRAMMES

“Sights & Sounds of Gödöllő”

CULTURAL EVENING

10.10.2013. (Monday)

Meeting time: 17:30

Meeting point: Parking lot in front of the Faculty of Mechanical Engineering

Visit of the Royal Palace of Gödöllő

- Queen Elisabeth welcomes the participants
- Palace visit entrance
- Baroque Theatre
- Concert

Gala Dinner

15.10.2013. (Tuesday)

Meeting time: 19:30

Meeting point: SZIU Rector's Meeting Hall (ground floor)

Fee: 50 EUR



Program of the One Day Study Tour

(included in conference fee)

17.10.2013. (Thursday)

Departure: 8:00

Arrival: approx. 18:00

Meeting point: Assembly Hall, Faculty of Mechanical Engineering

Visiting in the Mátrai Erőmű, with an installed output of 950 MW is the largest coal-fired power plant in Hungary. Walking in the surface mine, among the work machines.

Excursion to Kékes which is highest mountain of Hungary 1,014 meters above sea level. And of course, wine tasting of the Mátraalja wine region.





Program of the Optional one day Cultural Tour

(fee: 100 EUR/person)

18. 10. 2013. (Friday)

Departure: 8:00

Arrival: approx. 18:00

Meeting point: Assembly Hall, Faculty of Mechanical Engineering

Optional cultural and study tour will be organized for viewing professional establishments, traditional cultural and historical sites.

Spirit of Hungary

One-day bus trip, where can be learned three Hungarian words: “Pusztá, Paprika and Pálinka”. Surprise tour with touching of the Unesco World



Heritage part.





USEFUL INFORMATION

Registration

Place: Student's Hostel Hall (see map)

Opening hours: 15:00-18.00 13.10.2013. Sunday

Place: Knowledge Transfer Centre

Opening hours: 8:00-16:00 14.10.2013. Monday

8:00-16:00 15.10.2013. Tuesday

8:00-12.00 16.10.2013. Wednesday

Communication

During the Conference organizers can be reached as follows

Phone:	+36-28/522-025
Fax:	+36-28-420-997
E-mail:	synergy@gek.szie.hu
Internet:	http://www.synergy.szie.hu

Internet

There will be free wireless internet connection in the presentation rooms, and in the communal areas.

Message Board

Near the Registration area a Message Board will be available.

Participants are requested to check the board regularly.

Transportation facilities

Gödöllő Taxi	+36-28/410-410
Volánbusz (bus)	www.volanbus.hu
MÁV (train)	www.elvira.hu
BKV HÉV (suburban train)	www.bkv.hu
Airport transfer:	tibormiskoff@gmail.com +36-20-942-4061



In case of emergency

Please contact the Registration Desk, or dial:

Ambulance	104
Police	107
Fire Department	105

Smoking

Smoking is only permitted outside (e.g. at the entrance of the Knowledge Transfer Centre).

Smoking in the building is strictly prohibited!



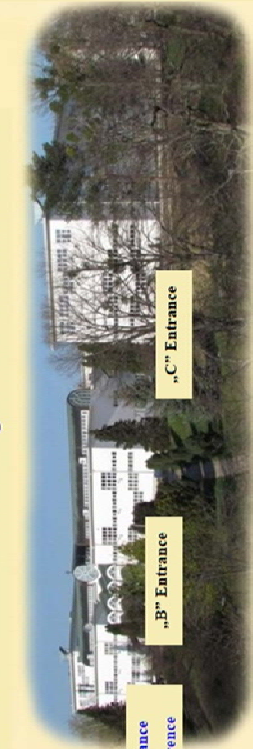
Map of the Conference



Notation:

- 2: Knowledge Transfer Centre
(Places of Conference)
- 4: Faculty of Mechanical Engineering
- 5: Main Building of SZIU
(Rector's Council Hall)
- 12: Restaurant
- 13: Railway station
- B: Student Hostels
(Welcome Party)

2. Knowledge Transfer Centre



„A” Entrance

GPS coordinates

GPS coordinates	North latitude degree	East long degree
	47° 59' 64.724613	19.361461401
	47° 35' 47.3"	19° 21' 41.2"
	North	East
	second"	second"



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