



PROGRAM OVER VIEW
ModTech2014 International Conference

Congress and Education Centre of The Silesian University of Technology
 ul. Konarskiego 18 B, 44-100 Gliwice

Time		Sunday, July 13, 2014	Monday, July 14, 2014	Tuesday July 15, 2014	Wednesday July 16, 2014		
7 ⁰⁰	15'		BREAKFAST Mikulski Restaurant	BREAKFAST Mikulski Restaurant	BREAKFAST Mikulski Restaurant		
	30'						
	45'						
	60'						
8 ⁰⁰	15'						
	30'						
	45'						
	60'						
9 ⁰⁰	15'		REGISTRATION ModTech 2014 Congress and Education Centre of The Silesian University of Technology ul. Konarskiego 18 B, 44-100 Gliwice	<p>Plenary Session -Room D/CEK*- Chairman, Prof. Remus Zagan Constanta Maritime University, Romania</p> <p>Prof. Loredana Santo, "Tor Vergata" University of Rome, Italy <i>SELF-DEPLOYABLE COMPOSITE STRUCTURES</i></p> <p>Prof. Salam Bash Al-Maliky, Al-Mustansiriya University, Baghdad, Iraq <i>EFFECT OF SUCTION PIPE DIAMETER AND SUBMERGENCE RATIO ON AIR LIFT PUMPING RATE</i></p> <p>Prof. Manuel Alberto Ferreira, ISCTE-Lisbon, Portugal <i>PERFORMANCE AND DIFFERENTIAL COSTS ANALYSIS IN A TWO ECHELONS REPAIR SYSTEM WITH INFINITE SERVERS QUEUES</i></p> <p>Prof. Pavel Topala, "Alecru Russo" University of Balti, Republic of Moldova <i>NANO-OXIDE FILMS FORMED ON METAL SURFACES BY APPLYING EDI</i></p> <p>Dr. Ildiko Peter, Politehnica University of Torino, Italy <i>METALLIC ALLOYS FOR MEDICAL APPLICATIONS</i></p>	Sections: A, B -Room F/CEK*- Papers ID: A-45÷A-67 B-30÷B-44	Sections: C, D -Room I/CEK*- Papers ID: C-40÷C-59	Sections: E, F, G -Room J/CEK*- Papers ID: F-16÷F-26
	30'						
	45'						
	60'						
10 ⁰⁰	15'	<p>Opening Ceremony, Welcome Addresses of Conference Presidents -Room D/CEK*-</p> <p>Plenary Session -Room D/CEK*- Chairman, Assoc. Prof. Andrzej Wrobel Silesian University of Technology, Gliwice, Poland</p> <p>Prof. Makio Naito, Osaka University, Joining and Welding Research Institute, Osaka, Japan <i>SMART SYNTHESIS OF NANOCOMPOSITE PARTICLES BY MECHANICAL PROCESSING AND ITS APPLICATIONS</i></p> <p>Prof. Anna Timofiejczuk, Silesian University of Technology, Gliwice, Poland <i>CONTEXTUAL APPROACH TO TECHNICAL DIAGNOSTICS</i></p> <p>Senior Principal Scientist Dr. Radhey Shyam Beniwal, CSIR-NISCAIR, New Delhi, India RECENT DEVELOPMENTS IN MATERIALS SCIENCE</p>					
	30'						
	45'						
	60'						

			<p>Prof. Leandru Bujoreanu, "Gheorghe Asachi" Technical University of Iasi, Romania <i>THERMOMECHANICAL TRAINING EFFECTS OF MULTIFUNCTIONAL MODULES, PROCESSED BY HIGH-SPEED HIGH PRESSURE TORSION, WHEN SUBJECTED TO COMPRESSION LOADING-UNLOADING CYCLES</i></p> <p>Dr. Jae-Ho Jeon, Korea Institute of Materials Science, South Korea <i>MECHANOCHEMICAL SYNTHESIS AND MECHANOCHEMICAL ACTIVATION-ASSISTED SYNTHESIS OF ALKALINE NIOBATE-BASED LEAD-FREE PIEZOCERAMIC POWDERS</i></p>	<p>Prof. H. K. Raval, S. V. National Institute of Technology, Surat, Gujarat, India <i>AN INVESTIGATION ON FORCES DURING ROLLER FORMING PROCESS</i></p> <p>Prof. Viorel Paunoiu, "Dunarea de Jos" University of Galati, Romania <i>THE RECONFIGURABLE MULTIPOINT HYDROFORMING OF COMPLEX SHEET METAL PARTS</i></p>			
	45'						
	60'			COFFEE BREAK	COFFEE BREAK		
11 ⁰⁰	15'			Tour of the laboratories of the Faculty of Mechanical Engineering	Sections: A, B -Room F/CEK*- Papers ID: A-68÷A-86 B-45÷B-56	Sections: C, D -Room I/CEK*- Papers ID: C-60÷C-73	Sections: E, F, G -Room J/CEK*- Papers ID: G-1÷G-14
	30'						
	45'						
	60'						
12 ⁰⁰	15'		COFFEE BREAK	LUNCH BREAK CEK - The Main Hall	CLOSING CEREMONY / PAPERS AWARDS		
	30'		Plenary Session -Room D/CEK*- Chairman, Prof. Dumitru Nedelcu "Gh. Asachi" Technical University of Iasi, Romania		General Meeting of ModTech Professional Association -Room I/CEK*-		
	45'						
	60'						
13 ⁰⁰	15'		Dr. Natalia Kamanina , Vavilov State Optical Institute, St. Petersburg, Russia <i>CHANGE OF THE OPTICAL AND THE MECHANICAL PROPERTIES OF THE NANOSTRUCTURED MATERIALS VIA NANOSTRUCTURIZATION</i>	TRIP Guido Mine in Zabrze Gliwice Radio Station			
	30'		Prof. Jose Manuel Torralba , University Carlos III, Madrid, Spain <i>DESIGN AND DEVELOPMENT OF MASTER ALLOYS FOR LIQUID PHASE SINTERING</i>				
	45'		Prof. Hidehiro Kamiya , TAT, Tokyo, Japan <i>NANOPARTICLES AND CARBON NANOMATERIAL COATING ON FINE PARTICLES PREPARED THROUGH COLLOIDAL AND CVD COMBINED PROCESS</i>				
	60'		Prof. Andrzej Buchacz , Silesian University of Technology, Gliwice, Poland <i>CLASSICAL AND UNCLASSICAL METHODS IN MODELING, ANALYSIS AND SYNTHESIS OF DISCRETE AND CONTINUOUS SYSTEMS AS AN INTRODUCTION TO SYNTHESIS OF TRANSVERSE VIBRATING MECHANICAL AND MECHATRONIC COMPLEX SYSTEMS</i>				
14 ⁰⁰	15'		Prof. Hong Seok Park , University of Ulsan, South Korea <i>ENERGY EFFICIENCY PROCESS FOR MANUFACTURING</i>				

ModTech International Conference
 Modern Technologies in Industrial Engineering
 July 13-16, Gliwice, Poland

			CRANK SHAFT						
	30'		LUNCH BREAK CEK - The Main Hall						
	45'								
	60'								
15 ⁰⁰	15'	REGISTRATION ModTech2014 Mikulski Hotel	Sections: A, B <i>-Room F/CEK*- Room</i> Papers ID: A-1÷A-22 B-1÷B-14	Sections: C, D <i>-Room I/CEK*- Room</i> Papers ID: C-1÷C-19 D-1÷D-5	Sections: E, F, G <i>-Room J/CEK*- Room</i> Papers ID: E-1÷E-7 F-1÷F-7				
	30'								
	45'								
	60'								
16 ⁰⁰	15'								
	30'								
	45'								
	60'								
17 ⁰⁰	15'			COFFEE BREAK					
	30'			Sections: A, B <i>-Room F/CEK*-</i> Papers ID: A-23÷A-44 B-15÷B-29	Sections: C, D <i>-Room I/CEK*-</i> Papers ID: C-20÷C-39 D-6÷D-10	Sections: E, F, G <i>-Room J/CEK*-</i> Papers ID: E-8÷E-14 F-7÷F-15			
	45'								
	60'								
18 ⁰⁰	15'								
	30'								
	45'								
	60'								
19 ⁰⁰	15'								
	30'								
	45'								
	60'								
20 ⁰⁰	15'	WELCOME RECEPTION Mikulski Hotel							
	30'								
	45'		DINNER Mikulski Hotel			GALA DINNER Mikulski Hotel			
	60'								
21 ⁰⁰	15'								
	30'								
	45'								
	60'								
22 ⁰⁰	15'								
	30'								
	45'								
	60'								

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Program Sections

D/CEK Room: Plenary Session / Invited Speakers

Monday, July 14, 2014

10⁰⁰-12⁰⁰

Chairman, Lecturer **Andrzej Wrobel**
Silesian University of Technology, Gliwice, Poland



Prof. Makio Naito
Osaka University, Joining and Welding Research Institute, Osaka, Japan
SMART SYNTHESIS OF NANOCOMPOSITE PARTICLES
BY MECHANICAL PROCESSING AND ITS APPLICATIONS



Prof. Anna Timofiejczuk
Silesian University of Technology, Gliwice, Poland
CONTEXTUAL APPROACH TO TECHNICAL DIAGNOSTICS



Dr. Radhey Shyam Beniwal
CSIR-NISCAIR, New Delhi, India
RECENT DEVELOPMENTS IN MATERIALS SCIENCE



Prof. Leandru Bujoreanu
"Gheorghe Asachi" Technical University of Iasi, Romania
THERMOMECHANICAL TRAINING EFFECTS OF MULTIFUNCTIONAL
MODULES, PROCESSED BY HIGH-SPEED HIGH PRESSURE TORSION,
WHEN SUBJECTED TO COMPRESSION LOADING-UNLOADING CYCLES



Dr. Jae-Ho Jeon
Institute of Materials Science, South Korea
MECHANOCHEMICAL SYNTHESIS AND MECHANOCHEMICAL
ACTIVATION-ASSISTED SYNTHESIS OF ALKALINE NIOBATE-BASED
LEAD-FREE PIEZOCERAMIC POWDERS

12⁰⁰-12¹⁵

Coffee Break

12¹⁵-14⁰⁰

Chairman, **Prof. Dumitru Nedelcu**
“Gheorghe Asachi” Technical University of Iasi, Romania



Prof. Natalia Kamanina
Vavilov State Optical Institute, St. Petersburg, Russia
CHANGE OF THE OPTICAL AND THE MECHANICAL PROPERTIES OF
THE NANOSTRUCTURED MATERIALS VIA NANOSTRUCTURIZATION



Prof. Jose Manuel Torralba
University Carlos III, Madrid, Spain
DESIGN AND DEVELOPMENT OF MASTER ALLOYS FOR LIQUID
PHASE SINTERING



Prof. Hidehiro Kamiya
TAT, Tokyo, Japan
NANOPARTICLES AND CARBON NANOMATERIAL COATING ON FINE
PARTICLES PREPARED THROUGH COLLOIDAL AND CVD COMBINED
PROCESS



Prof. Andrzej Buchacz
Silesian University of Technology, Gliwice, Poland
CLASSICAL AND UNCLASSICAL METHODS IN MODELING, ANALYSIS
AND SYNTHESIS OF DISCRETE AND CONTINUOUS SYSTEMS AS AN
INTRODUCTION TO SYNTHESIS OF TRANSVERSE VIBRATING
MECHANICAL AND MECHATRONIC COMPLEX SYSTEMS



Prof. Hong Seok Park
University of Ulsan, South Korea
ENERGY EFFICIENCY PROCESS FOR MANUFACTURING CRANK
SHAFT

Tuesday, July 15, 2014

8³⁰-10³⁰

Chairman, **Prof. Remus Zagan**
Constanta Maritime University, Romania



Prof. Loredana Santo
Tor Vergata University of Rome, Italy
SELF-DEPLOYABLE COMPOSITE STRUCTURES



Prof. Salam Bash Al-Maliky
Al-Mustansirya University, Baghdad, Iraq
EFFECT OF SUCTION PIPE DIAMETER AND SUBMERGENCE RATIO ON
AIR LIFT PUMPING RATE



Prof. Manuel Alberto M. Ferreira
ISCTE-IUL, Lisboa, Portugal
PERFORMANCE AND DIFFERENTIAL COSTS ANALYSIS IN A TWO
ECHELONS REPAIR SYSTEM WITH INFINITE SERVERS QUEUES



Prof. Pavel Topala
“Alecru Russo” University of Balti, Republic of Moldova
NANO-OXIDE FILMS FORMED ON METAL SURFACES BY APPLYING
EDI



Dr. Ildiko Peter
Politehnica University of Torino, Italy
METALLIC ALLOYS FOR MEDICAL APPLICATIONS



Prof. H. K. Raval
S. V. National Institute of Technology, Surat, Gujarat, India
AN INVESTIGATION ON FORCES DURING ROLLER FORMING
PROCESS



Prof. Viorel Paunoiu
Dunarea de Jos University of Galati, Romania
THE RECONFIGURABLE MULTIPOINT HYDROFORMING
OF COMPLEX SHEET METAL PARTS

F/CEK Room: Section A & Section B

A. Engineering of Manufacturing Processes: Novel Manufacturing Methods; Advances in Nontraditional Manufacturing Processes; Virtual Manufacturing; Advanced Methods and Tools for Computer Integrated Manufacturing; New Industrial Applications; Smart Manufacturing; Energy Efficiency in Manufacturing

President:

Prof. Alexei Toca, Technical University of Moldova, Chisinau, Republic of Moldova

Vice President:

Prof. Jerzy Świder, Silesian University of Technology, Gliwice, Poland

Member:

Dr. Miloš Vasić, Institute for Testing of Materials, Belgrade, Serbia

Secretary:

Assoc. Prof. Virgil Teodor, “Dunarea de Jos” University of Galati, Romania

B. Advances in Composite Materials and Technologies: Advanced Metals, Ceramics and Polymers; Bio-Materials; Recycling of Materials

President:

Prof. Maria Eugenia Rabanal Jimenez, University Carlos III, Madrid, Spain

Vice President:

Dr. Harshit K. Dave, S. V. National Institute of Technology, Surat, Gujarat, India

Member:

Andrzej Katunin Ph.D., Silesian University of Technology, Gliwice, Poland

Secretary:

Iwona Paprocka Ph.D., Silesian University of Technology, Gliwice, Poland

Monday, July 14, 2014	Tuesday, July 15, 2014	Wednesday, July 16, 2014
15 ³⁰ -17 ³⁰ Papers ID: A-1÷A-22; B-1÷A-14	-	8 ³⁰ -10 ³⁰ Papers ID: A-45÷A-67; B-30÷B-44
17 ³⁰ -17 ⁴⁵ Coffee Break	-	10 ³⁰ -10 ⁴⁵ Coffee Break
17 ⁴⁵ -19 ³⁰ Papers ID: A-23÷A-44; B-15÷B-29	-	10 ⁴⁵ -12 ⁰⁰ Papers ID: A-68÷A-86; B-45÷B-56

Please follow the steps:

- check the author index (Book of Abstracts) for the page number;
- go to your abstract and note the ID;
- check the day and room of your presentation.

I/CEK Room: Section C & Section D

C. Characterization, Modeling and Simulation of Mechanical Processes: Mechanical, Structural, Physical and Geometrical Characterization; Probabilistic Modeling and Analysis

President:

Prof. Mohamed Abdulraoof Abdulrazzao Al-Sabbagh, Al-Mustansirya University, Baghdad, Iraq

Vice President:

Prof. Sergiu Mazuru, Technical University of Moldova, Chisinau, Republic of Moldova

Member:

Assoc. Prof. Jan Zwolak, Silesian University of Technology, Gliwice, Poland

Secretary:

Agnieszka Sękala Ph.D., Silesian University of Technology, Gliwice, Poland

D. Robotics and Computer Integrated Manufacturing: Industrial Robots, CIM Systems, Biological Inspired Robotics, Social Robotics, Entertainment Robotics

President:

Andrzej Wróbel Ph.D. Eng., Silesian University of Technology, Gliwice, Poland

Vice President:

Prof. Hilal Turkoglu Sasmazel, Atilim University, Ankara, Turkey

Member:

Professor Tomasz Węgrzyn, Silesian University of Technology, Gliwice, Poland

Secretary:

Assoc. Prof. Radu Comaneci, “Gheorghe Asachi” Technical University of Iasi, Romania

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17 ⁴⁵ -19 ³⁰ Papers ID: C-20÷C-39 D-6÷D-10	-	10 ⁴⁵ -12 ⁰⁰ Papers ID: C-60÷C-73

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J/CEK Room: Section E & Section F & Section G

E. Technology Transfer: Knowledge Management Case Studies; Knowledge Communication; Knowledge Portals, Innovation and Engineering Education; Business Intelligence; Business Process Modeling and Analysis, Process Planning and Flexible Workflow; Security in Business Process

President:

Prof. Damian Hadrys, Higher School of Labour Safety Management in Katowice, Poland

Vice President:

Assoc.Prof. Gheorghe Plesu, “Gheorghe Asachi” Technical University of Iasi, Romania

Member:

Prof. Bożena Skołud, Silesian University of Technology, Gliwice, Poland

Secretary:

Katarzyna Białas Ph.D., Silesian University of Technology, Gliwice, Poland

F. Micro- and Nano- Technologies: New Developments in Micro/Nano Scale Processes; Fabrication of Nanostructure and Materials: Nanofilms, Nano-bubbles, Nano-droplets, Nanofluids

President:

Prof. Qasim Saleh Mahdi, Al-Mustansirya University, Baghdad, Iraq

Vice President:

Prof. Alexander Mikhaylov, Donetsk National Technical University, Ukraine

Member:

Piotr Sakiewicz Ph.D., Silesian University of Technology, Gliwice, Poland

Secretary:

Lecturer Ciprian Ciofu, “Gheorghe Asachi” Technical University of Iasi, Romania

G. Maritime Engineering and Navigation: Maritime Engineering and Technologies, Maritime Transport and Economics, Maritime Education

President:

Prof. Andrzej Buchacz, Silesian University of Technology, Gliwice, Poland

Vice President:

Assoc. Prof. Tiberiu Axinte, Constanta Maritime University, Constanta, Romania

Member:

Assoc. Prof. Andrzej Grzadziela, Polish Naval Academy, Gdynia, Poland

Secretary:

Assoc. Prof. Vitalie Beşliu, “Alec Russo” University of Bălţi, Republic of Moldova

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17³⁰-17⁴⁵ Coffee Break	-	10³⁰-10⁴⁵ Coffee Break
17⁴⁵-19³⁰ Papers ID: E-8÷E-14; F-8÷F-15;	-	10⁴⁵-12⁰⁰ Papers ID: G-1÷G-14

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