



# TEAM 2011 3<sup>rd</sup> International Scientific and Expert Conference & CO-MAT-TECH 2011 17<sup>th</sup> International Scientific Conference

**Conference Programme** 

19<sup>th</sup> – 21<sup>st</sup> October, 2011

Slovak University of Technology, Faculty of Materials Science and Technology Paulínska 16, 917 01 Trnava, Slovakia

## Wednesday (October 19, 2011)

Place: Slovak University of Technology, Faculty of Materials Science and Technology in Trnava

#### Address: Paulínska 16, 917 01 Trnava

‡	Time	Event
	16:00 to 18:00	Participant Registration
-		Place: Slovak University of Technology, Faculty of Materials Science and Technology in Trnava
		Address: Paulínska 16, 917 01 Trnava
		Welcome drink
	19:00 to 20:00	Place: Slovak University of Technology, Faculty of Materials Science and Technology in Trnava
4	19:00 18 20:00	Address: Paulínska 16, 917 01 Trnava
		Clothing: Informal

### Thursday (October 20, 2011)

Place: Slovak University of Technology, Faculty of Materials Science and Technology in Trnava

#### Address: Paulínska 16, 917 01 Trnava

#	Time	Event						
1	8:00 to 10:00	Participants registrationPlace: Slovak University of Technology, Faculty of Materials Science and Technology in TrnavaAddress: Paulínska 16, 917 01 TrnavaUniversity Foyer						
2	2 10:00 to 12:20	Opening Ceremony, Room: AULA         Plenary Lectures         Jaroslav Bruncko 00:20       František Horňák 00:20         Miroslav Macák 00:20       Jana Šujanová 00:20						
	3 12:30 to 13:30	(Technology) Lunch	(Education)	(Agricultural)	(Management)			

jozef.barta@gmail.com

Se	Section lectures								
#	Time	Section A Technology I Room 084 Blue colour	Section B Technology II Room 086 Orange colour	Section C Technology III Room 157 Red colour	Section D Management Room 160 Brown colour	Section E Education Room 126 Green colour	Section F Agriculture Room 105 Yellow colour		
Ch	air Person	Prof. Dr. sc. Antun Stoić	Prof. Dr. Dražan Kozak	Prof. Dr. Ivan Samardžić	Assoc. Prof. RNDr. Karol Hatiar, CSc.	PhDr. Emília Mironovová	Dr. Krunoslav Mirosavljević		
1	13:30 to 13:50	Martin Benovič and Štefan Václav. A new approach to assembly systems	Sebastian Saniuk. Modelling of the product manufacturing networks	Ingrid Kovaříková, Beáta Šimeková, Erika Hodúlová, Koloman Ulrich and Marián Palcut. Formation of surface layers of laser cladding technology with additional material in the form of wire	Sanja Knežević, Lena Sigurnjak and Berislav Bolfek. <i>The role of pre-</i> <i>accession funds in the</i> <i>process of Croatian</i> <i>accession to the European</i> <i>Union</i>	Hrvoje Sivrić, Tomislav Lopac and Mladen Vladetić. Flexibility exercises usage during lessons within Educational Kinesiology	Božica Japundžić-Palenkić, Ivan Sedlar and Matija Japundžić. Influence of agrochemical properties of the substrate on the germination of radicchio (Cichorium intybus var. Foliosum Hegi.)		
2	13:50 to 14:10	Michal Chachula and Roman Koleňák. Selection of suitable lead-free solder for higher application temperatures	Alexander Chaus, Michail Sitkevich and Ján Porubský. Application of CBN Diffusion Coatings on metal-cutting and Cold Forming Tools	Viktor Molnar, Janos Kundrak and Istvan Deszpoth. <i>Some</i> economic issues of hard machining	Lena Sigurnjak, Sanja Knezevic and Anita Kulas. The role of Business Angels in financing of small sized enterprises in Croatia	Andrea Andrašová, Jozef Zlocha and Bartolomej Hajnik. Assessing the effectiveness of investments from the perspective of two systems - economy and ecology	Božica Japundžić-Palenkić, Matija Japundžić and Monika Marković. Pseudogley characteristics, distribution and limitations in plant production on the County of Slavonski Brod- Posavina area		
3	14:10 to 14:30	Peter Zemko, Peter Šugár and Jana Šugárová. Evaluation of Material Deformations and Surface Layers Properties of Hollow Sheet Metal Parts	Ivan Michalec, Milan Marônek, Jozef Bárta and František Nový. Fatigue behaviour of steel sheets treated by nitrooxidation	Lubos Bernadic and Viktor Tittel. <i>The</i> <i>Influence of Cold Rolling</i> <i>And Artificial Aging on</i> <i>the Tensile Behaviour of</i> <i>Reinforcing Bars</i>	Anita Kulaš, Maja Vretenar and Mirko Cobović. An Analysis of the Representation of Certain Types of Traffic of the Traffic System of the Republic of Croatia	Jozef Zlocha, Andrea Andrašová and Bartolomej Hajnik. <i>Necessity of</i> <i>motivation to ensure the</i> <i>sustainable development</i> <i>of industrial companies</i>	Željka Sameljak, Teuta Benković-Lačić, Krunoslav Mirosavljević and Robert Benković. The Effect of Mineral Fertilization on Annual Vine Shoot Growth		
4	14:30 to 14:50	Maroš Martinkovič. Utilization of stereology for evaluation of strain in the structure of formed parts	Marián Blaško, Peter Bútora, Viktor Tittel, Antonín Náplava and Martin Ridzoň. <i>CAE</i> <i>injection molding and</i> <i>structural analysis in metal</i> <i>to plastic conversion of</i> <i>bolted flange joint - case</i> <i>study</i>	Matej Beznák, Vladimír Hanzen and Roland Šuba. The influence of core sand content on selected parameters of bentonite moulding sands	Jaroslava Vičíková, Viliam Cibulka and Sándor Jakab. <i>Comparative analysis of</i> <i>customer relationship</i> <i>management utilization in</i> <i>conditions of enterprises in</i> <i>Slovakia and Hungary</i>	Tomáš Naňo, Peter Sakál, Katarína Drieniková and Gabriela Hrdinová. Enterprise 2020 - challenge for schools, universities and commercial practice I.	Monika Marković, Marko Josipović, Jasna Šoštarić, Hrvoje Plavšić and Bozica Japundzic-Palenkic. <i>Correlation analysis for</i> <i>yield and some</i> <i>morphological and</i> <i>physiological indicators of</i> <i>maize leaf photosynthesis</i> <i>activity (Zea mays L.)</i>		

## Slovak University of Technology, Faculty of Materials Science and Technology

#### Paulínska 16, 917 01 Trnava, Slovakia

5	14:50 to 15:10	Gergely Szabo and Janos Kundrak. FEM simulation of hard cutting	Martin Kováč, Marek Zvončan, Eva Kucháriková and Ivan Buranský. Effect of cutting environment on milled parts surface	Ľuboš Kravárik and Mária Kapustová. The Optimalization of the Technological Parameters of Precision Die Forging in Closed Dies	Viktória Talnagiová and Ľubica Černá. The impact of fair value measurement on the enterprises's costs	Katarína Drieniková, Peter Sakál, Gabriela Hrdinová and Tomáš Naňo. Enterprise 2020 - challenge for schools, universities and commercial practice II.	Natasa Romanjek-Fajdetic, Bozica Japundzic-Palenkic, Branimir Vujcic and Slavica Antunovic. Mycogona perniciosa attacker Agaricus bisporus
6	15:10 to 15:30	Robert Augustin and Roman Koleňák. Wettability of high- temperature brazing alloys on SiC-based ceramics	Matej Beznák, Roland Šuba, Martin Bajčičák and Ján Vrabec. The influence of spin casting parameters on dimensional accuracy of castings cast into silicon moulds	Ivan Michalec, Milan Marônek, Katarína Bártová and Pavol Sejč. Resistance welding of steel sheets treated by nitrooxidation	Ivana Mudriková, Dagmar Cagáňová and Miloš Čambál. Performance management – presumption of industrial enterprises sustainable development	Kristina Urbanovicova. Professional and personable side of manager	Vlado Kovačević, Mirta Rastija and Dario Iljkić. Weather conditions effects on yield of main field crops in Croatia
7	15:30 to 15:50			Coffe	e Break		
Cł	air Person	Prof. Dr. Pero Raos	Prof. Ing. Alexander Čaus, DrSc.	Prof. Ing. Peter Šugár, CSc.	Assoc. Prof. Ing. Helena Vidová, PhD.	PhDr. Andrea Hagovská	
1	15:50 to 16:10	Peter Kováč and Viktor Tittel. Research of segment blank holding force influence on complex part drawing	Marek Zvončan, Martin Kováč, Eva Kucháriková and Ivan Buranský. Cutting fluid pressure influence on surface quality in rotary ultrasonic machining	Dušan Vaňa and Štefan Podhorský. Electrolytic– plasma polishing in electrolyte	Krzysztof Witkowski. Reverse logistics processes in plastics supply chains	Lilla Kremžárová. Statistical Implicative Analysis, a means for multidisciplinary investigation.	
2	16:10 to 16:30	Antun Stoić, Miroslav Duspara, Mladen Bošnjaković and Marko Peh. <i>Technology of</i> making pump body	Martin Bajčičák, Ján Vrabec and Roland Šuba. The Influence of Spin Casting Parameters on Running Property of Zinc Alloy ZnAl4Cu3	Stanislav Lakota, Monika Maračeková and Augustín Görög. Comparison of strategies for measuring flatness by means of coordinate measuring machine	Lilia Buharbaeva, Ulia Egorova, Lena Karimova and Marina Frants. Regional differentiation in organization and levels of financing, volumes and levels of people satisfaction from medical care quality in Russian Federation	Mirko Smoljic, Antun Stoic and Marko Martinovic. <i>Lifelong learning in</i> <i>Republic of Croatia</i>	
3	16:30 to 16:50	Erika Hodúlová, Beáta Šimeková, Ingrid Kovaříková and Koloman Ulrich. Growth of the IMC at the interface of SnAgCuBi (Bi = 0,5; 1,0) solder joints with substrate	Branislav Martančík, Gabriela Martančíková, Koloman Ulrich and Silvia Revesová. <i>Sensitivity</i> verification of the diagnostics NDT methods	Líska János and Kodácsy János. <i>Cutting Temperature at</i> Machining of Composites	Akos Toth. The role of the state in the economic growth of the cultural sector in the EU	Krisztián Medgyes and Zsolt Csaba Johanyák. Survey on routing algorithms	
4	16:50 to 17:10	Matúš Beňo, Martin Kováč, Marek Zvončan and Jozef Peterka. Circular interpolation deviations	Martin Provazník, Roman Koleňák and Monika Koleňáková. A comprehensive	Mato Kokanović, Ivica Lacković and Željko Ivandić. The structure of mechanical clamps for	Miroslav Balog and Vladimír Švač. Slovak Innovation Policy: Current Status and Main	Gabriela Hrdinová, Peter Sakál, Katarína Drieniková and Tomáš Naňo. Enterprise 2020 -	

jozef.barta@gmail.com

Slovak University of Technology, Faculty of Materials Science and Technology

		measurement on five axis machine tools with different structure	investigation of copper pipes joints made of resistance soldering	handling cylindrical objects	Challenges	challenge for schools, universities and commercial practice III.	
5	17:10 to 17:30	Vladimír Šimna and Peter Pokorný. A proposal for a system for determining the characteristics of the modeled surfaces	Monika Maračeková, Augustín Görög, Marek Zvončan and Stanislav Lakota. Effect of Clamping Force on Parts Inaccuracy in Turning	Mário Gajdoš and Tadeusz Zaborowski. Study on helical drill wear when drilling low carbon stainless steel and accompanying phenomena in the cutting zone	Štefan Chudoba. <i>Results of</i> E-mobility analysis in South-East Europe	Peter Sakál, Katarína Drieniková, Gabriela Hrdinová and Tomáš Naňo. Enterprise 2020 - challenge for schools, universities and commercial practice IV.	
6	19:00	Social Event         Place: Olympia Restaurant         Address: J. Bottu 11, 917 00 Trnava         Dress Coat: formal					

Friday (October 21, 2011)

Place: Slovak University of Technology, Faculty of Materials Science and Technology in Trnava

Address: Paulínska 16, 917 01 Trnava

#	Time	Section A Technology I Room 084 Blue colour	Section B Technology II Room 086 Orange colour	Section C Technology III Room 157 Red colour	Section D Management Room 160 Brown colour	Section E Management Room 126 Green colour
Cł	air Person	Prof. Ing. Milan Marônek, CSc.	Prof. Ing. Jozef Janovec, DrSc.	Prof. Ing. Koloman Ulrich, PhD.	Assoc. Prof. Mgr. Dagmar Cagáňová, PhD.	Dr. Ákos Tóth
1	08:00 to 08:20	Dražan Kozak, Darko Damjanović, Josip Sertić and Tomislav Baškarić. Analysis of weld defect caused by lack of penetration in circumeferential weld	Jaroslav Sojka and Matej Beznák. Analysis of properties of an unconventional slip material made by an isostatic pressing of powder high-speed steel out of molybdenum sulphide.	Tatiana Vrtochová, Ladislav Schwarz, Koloman Ulrich and František Kolenič. Analysis of the Influence of Nitrogen in the Shielding Gas in Laser Welding of SAF 2205 Duplex Stainless Steel	Jana Sujanova, Milos Cambal, Dagmar Caganova, Jana Stefankova and Ivana Mudrikova. <i>Gender</i> <i>Diversity in Research</i> <i>System in the Slovak</i> <i>Republic</i>	Baryiy Ilyasov, Irina Degtyareva, Elena Makarova and Anastasiya Pavlova. Control of the Financial Flows Formation in the Non-Balanced Conditions of Goods and Labor Markets

## Slovak University of Technology, Faculty of Materials Science and Technology

## Paulínska 16, 917 01 Trnava, Slovakia

2	08:20 to 08:40	Ivan Samardžić, Ivica Kladaric, Stefanija Klaric, Halima Hadžiahmetović and Slavica Kladarić. <i>Heat</i> <i>Treatment Influence on</i> <i>Stud Arc Welding Process</i> <i>Characteristics</i>	Filip Jambrek, Ana Pilipović and Mladen Šercer. Application of polymer materials for reducer	Martin Gatial, Milan Turňa and Jozef Ondruška. <i>Explosion</i> Welding of Large Area Ti - Al Targets	Lucia Banasova, Dagmar Caganova and Milos Cambal. The Concept of Key Managerial Competencies Identification	Elena Budnik and Yulia Ismagilova. Tools of support and decision- making on development of industrial sector of economy	
3	08:40 to 09:00	Gabriela Martančíková, Milan Marônek and Branislav Martančík. Welding Simulator – A Tool for Novice Welder	Josip Stojsic, Pero Raos and Marija Somolanji. <i>Compounding of PA12/Clay</i> <i>Nanocomposites</i>	Martin Gatial, Milan Turňa and Jozef Ondruška. Quality Assessment of Titanium- Copper Joints Prepared by Explosion Welding	Larisa Ismagilova and Ekaterina Orlova. Irrational Factors of Investor Behaviour:	Peter Stankovsky and Viliam Cibulka. <i>Integrated</i> <i>Logistics in Automotive</i> <i>Industry</i>	
4	09:00 to 09:20	Matej Beznák and Alexander Chaus. Application of Diffusion Boronized Layer on Forging Die	Daniela Kalincová, Miroslava Ťavodová, Mária Kapustová and Martin Novák. Production of Relief on the Instrument for Coinage – Influence of Pressing on the State of Material Coining Die	Líska Katalin. CAM strategies at machining	Inna Gubanova. Inventory management as a method of retailer's efficiency improvement	Erik Janák. Optimization of Business Logistics Processes Through RFID	
5	09:20 to 09:40	Silvia Revesová, Pavel Blaškovitš and Branislav Martančík. Breach of surface layers in the abrasive wear surfacings		Martin Bajčičák, Ján Vrabec and Martin Tóth. Characterization of selected silicon rubbers during vulcanization and loading	Marina Frants, Lilia Buharbaeva and Rafael Safyanov. Modeling of mutual insurance system development in Republic of Bashkortostan	Martina Hasayová. Management changes in the life of the project	
6	10:00 to 10:20			Coffe	e Break		
7	11:30 to 12:20	Closing Ceremony (C	onference statistics, Be	est PhD. work annou	ncement, etc.)		
8	12:30 to 13:30	Lunch					
Ро	Poster Section						
		Prachya Peasura. Full Factorial Design in Gas Metal Arc Welding on Aluminium Alloy 7075	Prachya Peasura and Suthiphong Sopha. The study of cleaning surface for resistance spot welding in aluminium alloy grade 5052				

#### Colour Legend:

Purple colour	<ul> <li>Information related to all attendees</li> </ul>
Blue colour	<ul> <li>Information related to the "Section A"(Technology I)</li> </ul>
Orange Colour	<ul> <li>Information related to the "Section B"(Technology II)</li> </ul>
Red colour	<ul> <li>Information related to the "Section C"(Technology III)</li> </ul>
Brown colour	<ul> <li>Information related to the "Section D"(Management)</li> </ul>
Green colour	<ul> <li>Information related to the "Section E"(Education)</li> </ul>
Yellow colour	<ul> <li>Information related to the "Section F"(Agriculture)</li> </ul>

#### Excursions (based on the interest):

Excursion	Date	Time of departure	Departure place
Nuclear Power Plant (primary and secondary circuit)	20 <sup>th</sup> October 2011	8:30	Conference place, in front of the building (BUS)
Makino s.r.o, Bratislava	20 <sup>th</sup> October 2011	13:00	Conference place, in front of the building (BUS)
Bratislava – The City	20 <sup>th</sup> October 2011	13:00	Conference place, in front of the building (BUS)
Trnava – The City	21 <sup>st</sup> October 2011	9:00	Conference place, in front of the building