MTSM 2016

Conference venue: Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture – Amphitheatar B401

Conference schedule Thursday, 22nd September 2016

- 08.30 09.30 Participant regristration
- 09.30 09.45 **Opening ceremony**

Session I

- 09.45 PRESENTATION OF RESEARCH PROJECT: **Optimisation and modelling of thermal processes of materials – HRZZ 5371,** Project Leader: **PhD Božo Smoljan, Full Professor**
- 10.00 **Massimo Rogante, Anatoliy Zavdoveev, Jan Pilch**: Residual stress determination by neutron diffraction in low-carbon steel wires with accumulated shear deformation
- 10.15 Katica Šimunović, Ilija Svalina, Tomislav Šarić, Sara Havrlišan, Roberto Lujić, Goran Šimunović: Analysis of variance for aluminium alloy surface roughnesss data
- 10.30 **Kateryna Kamyshnykova, Juraj Lapin:** Induction melting and centrifugal casting of intermetallic TiAl alloy
- 10.45 **Amalija Horvatić Novak, Biserka Runje** Dimensional measurements with usage of computed tomography method
- 11.00 Branimir Tadić, Mladen Perinić, Zoran Jurković: Computer analysis of injection molding process

11.15 Coffee break

- 12:00 Juraj Lapin: Precision cast turbocharger wheels from TiAl-based alloy
- 12.15 **Michaela Štamborská, Juraj Lapin, Oto Bajana**: Effect of annealing in argon and hydrogen on tensile deformation behavior of ferritic-pearlitic steel
- 12.30 Andrej Borić, Goran Cukor, Duško Pavletić: The Model of Stress Distribution in the Cutting Tool During Turning Process Application SolidWorks
- 12.45 **Jaroslav Jerz, František Simančík, Jozef Šebek, Jaroslav Kováčik, Ján Španielka**: Application of aluminium foam for heat exchangers on building facades and interior ceilings
- 13:00 **Ivana Ivanić, Stjepan Kožuh, Stanislav Kurajica, Borut Kosec, Ivan Anžel, Mirko Gojić**: XRD analysis of CuAlNi shape memory alloy before and after heat treatment
- 13:30 Lunch
- 15:15 Excursion Hinterland Dalmatia with dinner
- 22:15 Return to Split

Friday, 23th September 2016

Session II

09.00 BRODOSPLIT PRESENTATION: Ivana Zore, Mladen Bratošević

- 09.15 **Božo Smoljan, Dario Iljkić, Lovro Štic, Loreta Pomenić, Sunčana Smokvina Hanza**: Numerical modelling of case hardening of steel
- 09.30 Ivan Peko, Ivan Špar, Andrej Bašić: Rapid Prototyping of Mechanical Measurement Level Device
- 09.45 **Ante Čorić, Slaven Šitić, Ivan Madunić**: Manufacturing and testing of underwater remotely operated vehicle propulsion unit
- 10.00 **Jure Krolo, Branimir Lela, Rafaela Vuleta**: Preliminary study of severe plastic deformation tool for production of solid state recycled materials
- 10.15 **Antonio Mijić**: Production line for coating fuel cell membranes
- 10.30 Coffee break
- 11.15 **Nikola Banduka, Ivica Veža, Nikola Gjeldum**: Supply chain model based on management principles of key elements and Lean principles
- 11.30 **Nikša Čatipović, Dražen Živković, Zvonimir Dadić**: Effects of copper and heat treatment parameters on mechanical properties of austempered ductile iron
- 11.45 **Zvonimir Dadić, Dražen Živković, Nikša Čatipović**: Surface wear of steel X38CrMoV5-1 in conditions of die casting
- 12.00 Luka Celent, Dražen Bajić, Sonja Jozić: Reverse engineering process application in single item production
- 12.15 **Marko Mladineo, Djerdj Horvat, Ivica Veza:** Case Study of Croatian manufacturing industry: Industry 4.0 Providers or Users?
- 12.30 Closing speech
- 13.00 Lunch