

## FINAL CONFERENCE PROGRAM - MTSM 2021

Conference venue:

Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture  
Amphitheatre B401

Thursday, 23<sup>rd</sup> September 2021

08.30 – 09.30 **Participant registration, at the registration desk in front of the Amphitheatre B401**

**09.30 – 09.45 Welcome address**

### INTRODUCTORY PRESENTATIONS

#### SESSION I – B401

**Chairmen: Zvonimir Dadić, Amanda Aljinović**

09.50 – 10.10 – Company: Include – **Filip Grubišić-Čabo**

10.10 – 10.30 – Students association: FESB racing team – UPS – **Luka Dodig, Janko Ljubešić**

**10.30 Coffee break**

#### SESSION II – B401

**Chairmen: Marina Crnjac, Nikša Čatipović**

11:10 **Massimo ROGANTE**, Franco G. CESARI, Massimo GIORGI:

Decommissioning of Nuclear Facilities: general considerations and suggestions not regarding activated parts

11:30 **Nikolay STOIMENOV**, Stanislav GYOSHEV, Miglena PANEVA:

Determination of the friction coefficient of 3D printed materials - Part I - Rolling friction

11:50 **Jaroslav JERZ**, Arun GOPINATHAN, Anton PUŠKÁR, Daniel SZABÓ, Jaroslav KOVÁČIK:

Structural design of thermo-active aluminium foam roofing

12:10 **Petar LJUMOVIC**, Inoslav SVALINA, Igor GABRIC, Anela BARBARIC:

Aluminium and aluminium alloys surface protection by the use of anodization technology

12:30 Olena KUZMENKO, Victor KUZMENKO, **Anton OKUN**:

Factors determining the durability of cold extrusion dies

12:50 **Stanislav GYOSHEV**, Nikolay STOIMENOV, Miglena PANEVA:

Determination of the friction coefficient of 3d printed materials - part ii - sliding friction

#### ONLINE Session

13:10 Massimo ROGANTE, Osman GENCEL, **Erol KAM**, Tuncay TUNA:

Investigation of the shielding ability of concrete samples reinforced with B4C and iron fillings against neutron radiation

13.30 **Anatoliy ZAVDOVEEV**, Massimo ROGANTE, Valeriy POZNYAKOV, Mark HEATON, Thierry BAUDIN, Alexandr GAYVORONSKI, Yuriy DEMCHENKO, Serj ZHDANOV:

Influence of pulse current arc welding modes on changing the parameters of the weld and HAZ of welded joints made by low alloyed materials

13:50 **Claudio SANTELLI**:

Cell cytoskeleton structure and conduction of environmental biophysical signals through microtubules and microfilaments

**14:10 Lunch – Faculty restaurant**

**15:15 Excursion: RIVER CANYON & OMIS – with dinner**

**22:30 Return to Split**

Friday, 24<sup>th</sup> September 2021

**INTRODUCTORY PRESENTATIONS**

**SESSION III – B401**

**Chairmen: Ivana Dumanić, Jure Krolo**

09:00 – 09:20 – VR Metal – **Denis Jozić**

09:20 – 09:40 – Flow Design Team

**SESSION IV – B401**

**Chairmen: Ivana Dumanić, Jure Krolo**

09:40 **Arun GOPINATHAN**, Jaroslav JERZ, Jaroslav KOVÁČIK:

Effect of pore morphology on the heat transfer rate of powder metallurgically prepared aluminium foams

10:00 **Nikša ČATIPOVIĆ**, **Hasan AVDUŠINOVIĆ**, Karla GRGIĆ, Petar LJUMOVIĆ, Josipa ŽIVALJIĆ, Zvonimir DADIĆ:  
The influence of subsequent high temperature tempering on tensile strength and elongation of austempered ductile iron

10:20 **Franjo KOZINA**, Zdenka ZOVKO BRODARAC, Barbara TUBIĆ BULAT, Franjo DOMINKOVIĆ:  
The impact of melt retention time on the strontium modification efficiency

10:40 **Marko MLADINEO**, Marijan ČUBIĆ, Nikola GJELDUM, Marina CRNJAC ŽIŽIĆ:  
Human-centric approach of the lean management as an enabler of industry 5.0 in smes

11:00 **Kenan VARDA**, Ernad BEŠLAGIĆ, Josip KAČMARČIK, Nermina ZAIMOVIĆ-UZUNOVIĆ:  
Fatigue numerical analysis comparison on bicycle pedal example using different software

11:20 **Miglana PANEVA**, Peter PANEV, Nikolay STOIMENOV:  
Roughness of low carbon steel after cold rolling of reversing mill 700

**11.40 Coffee break**

**Session V – Poster session**

**Hall in front of B401**

**12:30 – 13:50**

1. **Ivana ROPUŠ**, Hrvoje CAJNER, **Lidija ČURKOVIĆ**:  
Optimization of density of microwave sintered alumina ceramics due to the corrosion in nitric acid
2. **Maryna KOSTYKOVA**, Larysa KOZACHOK, Andrii LEVTEROV, Anna PLEKHOVA, Viktoriia SHEVCHENKO, **Anton OKUN**:  
A heuristic method for an approximate solution of the knapsack problem
3. **Borut KOSEC**, Blaž KARPE, **Mirko GOJIĆ**, Matija ZORC, Ladislav VRŠALOVIĆ, Stjepan KOŽUH, Aleš NAGODE, Milan BIZJAK:  
Thermal properties of copper base shape memory alloy
4. **Nikša ČATIPOVIĆ**, Dražen ŽIVKOVIĆ, Karla GRGIĆ, Petar LJUMOVIĆ, Josip PERINIĆ, Zvonimir DADIĆ:  
The influence of furnace atmosphere during austenitization on microstructure and hardness of austempered ductile iron
5. **Nikša ČATIPOVIĆ**, Nikola GJELDUM, Andrej BAŠIĆ, Ante TURKOVIĆ, Zvonimir DADIĆ:  
Using reverse engineering for optimization and modeling of motorcycle brake caliper brackets
6. **Ladislav VRŠALOVIĆ**, Senka GUDIĆ, Radosna JERČIĆ, Ivana IVANIĆ, Stjepan KOŽUH, Mirko GOJIĆ:  
The Influence Of Chloride Concentration End Electrolyte Temperature On CuAlMnZn Alloy Corrosion In NaCl Solution

7. **Andrej BAŠIĆ**, Ivan PEKO, Jure KROLO, Petra BAGAVAC:  
Fuzzy logic modeling of ultimate tensile strength and cost in fused deposition modeling process of additive manufacturing
8. **Darko LANDEK**, Gorana BARŠIĆ:  
Wear of spiral drills coated by hard PACVD coatings
9. **Darko LANDEK**, Lidija ĆURKOVIĆ, Mihone KEROLLI MUSTAFA, Ivana GABELICA:  
Optimization of viscosity of highly concentrated alumina suspensions for slip casting by surface response methodology
10. **Branimir LELA**, Jure KROLO, Karla GRGIĆ, Sonja JOZIĆ, Ivana DUMANIĆ:  
Production of closed cell foams from the aluminium chip waste
11. Ivana DUMANIĆ, **Sonja JOZIĆ**, Dražen BAJIĆ, Deni DUMANIĆ:  
Design and improvement of high pressure die casting process based on novaflow & solid software
12. **Aida IMAMOVIĆ**, Amra TALIĆ-ČIKMIŠ, Mirsada ORUČ, Admir MUMINOVIĆ, Fuad HADZIKADUNIĆ:  
Slag as an important waste for recycling

**13.50 Closing speech**

**14.00 Lunch – Faculty restaurant**