

**SaMTSM 2022**  
**Conference venue:**  
**Faculty of Electrical Engineering, Mechanical Engineering and Naval Architecture**  
**Amphitheatre B401**

**FINAL CONFERENCE SCHEDULE**

**Thursday, 22<sup>nd</sup> September 2022**

- 08.30 – 09.30 **Participant registration, at the registration desk in front of the Amphitheatre B401**  
(Karla Grgić, Ivana Dumanić)
- 09.30 – 09.40 Welcome address**  
(Zvonimir Dadić, Nikša Čatipović)

**INTRODUCTORY PRESENTATIONS**  
**SESSION I – B401**  
**Chairmen: Amanda Aljinović, Jure Krolo**

- 09.40 – 10.00 – EVN – **Šimun VRANČIĆ, Tomislav KERA**
- 10.00 – 10.20 – Technical forensic examination of accidents at work – **Silva KAJIĆ**
- 10.20 – 10.40 – Serial Number Restoration – **Marin MARINOVIĆ**

**10.40 Coffee break - Poster session (Hall in front of B401)**

1. **Sonja JOZIĆ**, Dražen BAJIĆ, Ivana DUMANIĆ, Brigita LJUBA  
Die casting parameters optimisation and simulations using NovaFlow&Solid software
2. **Jure KROLO**, Branimir LELA, Nikolay BIBA, Domagoj ŠAKOTA  
Analysis of the tube hydroforming by numerical simulation and Response Surface Methodology
3. **Darko LANDEK**, Josip CEROVEČKI  
Improvement of resistance to sliding wear by nitriding the bearing steel EN DIN 100Cr6
4. Maja VLATKOVIĆ, **Ivana ČABRIJAN**, Duško PAVLETIĆ, Sandro DOBOVIČEK  
Measuring setdown output parameter of cross-wire welded mesh with reconfigurable measuring system
5. **Andrej BAŠIĆ**, Toni PERKOVIĆ, Slobodan MARENDIĆ  
Application of 3D technologies in footwear trace evidence collection and identification
6. Miglena PANEVA, **Nikolay STOIMENOV**, Peter PANEV  
Comparison of determined theoretically and experimentally critical speed of a ball mill
7. **Lyudmila NYRKOVA**, Larysa GONCHSRENKO, Pavlo LISOVYI, Svetlana OSADCHUK, Anatoly KLYMENKO, Valery KOSTIN  
Stress-corrosion cracking of steels for main gas pipelines
8. **Zlatan IŠTVANIĆ**, Amra TALIĆ-ČIKMIŠ, Aida IMAMOVIĆ  
Application of 3D scanning for deformation measurement for incremental sheet metal forming vessel bottom

**SESSION II – B401**  
**Chairmen: Karla Grgić, Igor Čulum**

- 11:30 **Massimo ROGANTE**, Valeriy POZNIAKOV, Alexandr GAIVORONSKIY, Anatoliy ZAVDOVEEV  
The use of high strength steels in the manufacture of building welded structures
- 11:50 **Jaroslav JERZ**, Arun GOPINATHAN, Jaroslav KOVÁČIK  
The synthesis of microporous magnesium-based solids for reversible hydrogen storage
- 12:10 **Petar LJUMOVIĆ**, Marko JAKOVAC, Teo UGRINA, Zvonimir DADIĆ  
Determination of critical temperature for pitting corrosion occurrence at welded 2205 duplex-duplex steel

**ONLINE Session**

- 12:20 **Claudio SANTELLI**  
Neuroplastic structure of the connectome in relation to environmental quality
- 12:50 A. GAIVORONSKIY, **A. ZAVDOVEEV**, A. MAKSIMENKO, V. POZNIAKOV, M. ROGANTE, S. JDANOV, A DENISENKO  
Effect of pulse arc welding parameters with low-alloy welding materials on weld formation and its geometric parameters
- 13:20 S. MOTRUNICH, I. KLOCHKOV, V. KNYSH, K. GUSCHIN, M. ROGANTE, **A. ZAVDOVEEV**  
Fatigue behavior of flash butt welds of high-strength aluminum alloy with high zinc content

**14:00 Lunch – Campus restaurant (Cvite Fiskovića 3, Split)**

**15:30 Excursion: TROGIR – with dinner**

**22:30 Return to Split**

Friday, 23<sup>rd</sup> September 2022

### INTRODUCTORY PRESENTATIONS

#### SESSION III – B401

Chairmen: Marina Crnjac Žižić, Ivana Dumanić

- 09:00 **Igor ĆULUM**, Ivana DUMANIĆ, Sonja JOZIĆ, Dražen BAJIĆ, Branimir LELA  
Influence of cutting parameters on cutting forces and surface roughness in milling of aluminum foam
- 09:20 **Karla GRGIĆ**, Branimir LELA, Sonja JOZIĆ, Jure KROLO  
Aluminium foams made of various aluminium alloys scrap and various foaming agents
- 09:40 **Nedim HUREM**, Amra TALIĆ-ČIKMIŠ, Aida IMAMOVIĆ  
Experimental Analysis of Distribution of Bending Stresses in Layers of Wood with Numerical Verification
- 10:00 **Ivana ČABRIJAN**, Maja VLATKOVIĆ, Elvis KRULČIĆ, Duško PAVLETIĆ  
Modelling of process parameters in cross-wire welding of S235 steel "wires using Design of Experiments
- 10:20 **Darko LANDEK**, Jurica JAČAN, Suzana JAKOVLJEVIĆ  
Comparison of macro and micro abrasive wear of hard PACVD coatings on tool steel EN DIN X37CrMoV5-1

**10:40 Coffee break**

#### SESSION IV – B401

Chairmen: Ivana Dumanić, Amanda Aljinović

- 11:20 **Franjo KOZINA**, Zdenka ZOVKO BRODARAC, Mario STJEPANOVIĆ  
The solidification sequence and microstructure development of secondary EN AC 46100 alloy
- 11:40 **Zlatko JANKOSKI**, Igor GABRIĆ  
An Experimental Device for Measuring Thermal Conductivity of Metals
- 12:00 Igor ŠULJIĆ, Igor GABRIĆ, **Ivan VRLJIČAK**, Marin BUTIR  
Experimental Investigation on the Mechanical Properties of 3D Printed Structural Polymer Materials
- 12:20 **Slaven ŠITIĆ**, Mate BALIĆ  
Manufacturing of replacement exhaust manifold for marine engine
- 12:40 **Marina CRNJAC ŽIŽIĆ**, Nikola GJELDUM, Karlo PETROVIĆ, Marko MLADINEO, Amanda ALJINOVIĆ  
Multi-criteria decision-making for mobile cobot stand
- 13:00 **Vladimir VETMA**, Nenad VULIĆ, Nikola RAČIĆ  
Methodology for testing shaft sliding bearings of the ship propulsion system

**13:20 Closing speech**  
(Zvonimir Dadić, Nikša Čatipović)

**13.30 Lunch – Campus restaurant (Cvite Fiskovića 3, Split)**