

ADVANCED MATERIALS FOR BIOMEDICAL APPLICATION



Catholic University of Croatia

31 July 2026, Zagreb

Building B, Alojzije Stepinac Hall

PROGRAM

10:30 – 11:00 Registration

11:00 – 11:10 Opening and welcome speech by the organizer

11:10 – 11:40 **Tamara Holjevac Grgurić** (Catholic University of Croatia, Technical faculty)

Development of innovative titanium-based alloy for endoprosthesis

11:40 – 12:00 **Sanja Martinez** (University of Zagreb, Faculty of Chemical Engineering and Technology)

Automated EIS platform for assessing the passivity of implant materials developed in the AntibacHip project

12:00 – 12:20 **Primož Mrvar** (University of Ljubljana, Faculty of Natural Sciences and Engineering)

Gravity, centrifugal and HPDC casting of composed as-cast foam from biodegradable ZnMg_{1,5} alloy

12:20 – 12:30 Coffee break

12:30 – 14:30 Poster presentations

- **Lucija Lasić, Primož Mrvar, Mitja Petrić, Stevica Hodić, Vilko Mandić, Maja Jazvinščak-Jembrek, Tamara Holjevac Grgurić:** *The Effect of Copper on the Microstructure and Functional Properties of Cast Ti-6Al-4V Alloy*

- **Karla Knežević, Irena Paulin, Primož Mrvar, Sanja Martinez, Vilko Mandić, Maja Jazvinščak-Jembrek, Tamara Holjevac Grgurić:** *3D-printing of Ti-6Al-4V Alloy by Laser Powder Bed Fusion Technology*
- **Emi Govorčin Bajsić, Mario Meheš:** *Development and Characterization of Linear Low-Density Polyethylene/Rice Husk Biocomposites*
- **Ljerka Slokar Benić, Stjepan Kožuh, Ivan Iveć, Tin Brlić, Magdalena Jajčinović, Andrea Carek, Hrvoje Skenderović, Tamara Holjevac Grgurić:** *Synthesis, Laser Surface Modification, and Characterization of Surface Properties of Cast Titanium Alloy*
- **Davor Gašparić, Arijeta Bafti Dunatov, Patricija Klanac, Ivana Panžić, and Vilko Mandić:** *Synthesis of Metallic Nanosystems for Advanced Applications*
- **Mario Meheš, Emi Govorčin Bajsić:** *Properties of the Polyetherimide/bentonite Composite*

14:30 – 14:40 Closing of the conference

14:40 Conference Reception



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