

MFC 2025

CONFERENCE PROGRAMME

September 22, 2025



9th MY FIRST CONFERENCE

09:00 – 09:30	REGISTRATION	Faculty Hall
09:30 – 09:45	CONFERENCE OPENING AND WELCOME SPEECHES	G-003
09:45 – 10:15	KEYNOTE LECTURE dr.sc. Laura Grbac: Materials with Microstructures Under Investigation: Numerical Modelling, Experiments, and Beyond	G-003
10:15 – 10:45	COFFEE BREAK	Faculty Hall
10:45 – 12:00	SECTION 1.1G-003 CHAIRMAN: Mateo Mikulić & Karlo Severinski Mrle, Z., Čarija, Z. CFD Analysis of a double regulated water turbine Ivić, M., Alvir, M., Kranjčević, L. Numerical simulation and analysis of hydrogen combustion Miščević, G. Hydrogen Logistics in Maritime Transport: Challenges and Opportunities in Fuel Supply Mališa, M., Ivić, S. Optimization of the household heating system Gruden, U., Trp, A. Numerical Investigation of the Thermohydraulic Performance of Chevron-Type Plate Heat Exchanger	SECTION 1.2G-004 CHAIRMAN: Davor Marušić & Marta Marija Gržić Vičević, D., Tschauer, S., Hrzić, F., Štajduhar, I. Development of a deep Learning model for cast removal on pediatric medical X-ray images Klobučar, M., Šurdonja, S., Deluka-Tibljajš, A. Microsimulation-Based Surrogate Safety Analysis of Single-Lane Urban Roundabouts Mihaljec, B., Vukelić, G. Mechanical behaviour of the additively manufactured stainless steel AISI 316L in the marine environment Kopić, M., Vizentin, G., Vukelić, G. Environmental Ageing of Structural Materials in Marine Engineering Liker, L., Ogrizović, D. Students’ perceived immersion in translating FlexSim models to virtual reality
12:00 – 13:00	WORKSHOP Duje Kalajžić: 3D Scanning - Technology, Workflow, and Demonstration	G-003 / Faculty Hall
13:00 – 14:00	LUNCH	Student Restaurant (Kampus)
14:00 – 15:30	SECTION 2.1G-003 CHAIRMAN: Kristina Galjanić & Gea Miščević Gržić, M. M., Ožanić, N., Krvavica, N. Pluvial flood hazard and exposure assessment: Novi Vinodolski region Petković, I., Ožanić, N., Krvavica, N. High-resolution pluvial flood hazard mapping in Rječina river basin Dumenčić, S., Lerga, J., Kranjčević, L. Water surface detection using multi-source Sentinel imagery Severinski, K., Lopac, N., Lerga, J. Advancing Sea State Estimation: Current Techniques and Emerging Methodologies Marušić, D., Jagodnik, V., Schneider-Muntau, B. Silty sand’s monotonic behaviour in simple shear	SECTION 2.2G-004 CHAIRMAN: Ugo Gruden & Luka Liker Žužić, L., Lerga, J. A versatile image annotation and masking tool Mikulić, M., Štajduhar, I. Towards Full Laboratory Automation: Identification of Bacteria Using Machine Learning and Hyperspectral Imaging Jelušić, D., Kalafatović, D., Mauša, G. Explainable graph-based peptide classification Kapić, Z. A novel approach for machine Learning with hyperbolic embeddings and dynamical systems Lukina, N., Tuta, J. Causes and risks of accidents in the transport of combat equipment: statistical analysis, field challenges and digital transformation of military training Jurković, D., Škec, L., Alfano, G. Experimental and Numerical Rate-Dependent Analysis of the End-Notched Flexure Test
15:30 – 15:45	CONFERENCE CLOSING	G-003
16:00	BEER TIME	Tvornica piva Rijeka - Pogon Trsat

