

## ARIS research projects in progress

ARIS	Project number	Title	Responsible person / Project coordinator on the Faculty of Mechanical Engineering	Duration
	<b>N2-0328</b>	Effect of temperature conditions on the microstructure and mechanical properties additively manufactured materials	Prof. Dr. Damjan Klobučar/ Prof. Dr. Franc Zupanič  franc.zupanic@um.si	1.1.2024 – 31.12.2027
	<b>N2-0326</b>	Experimental and numerical analysis of static and fatigue double-side bending of rubber matrix composites	Prof. Dr. Jernej Klemenc/ Prof. Dr. Srečko Glodež  srecko.glodez@um.si	1.1.2024 – 31.12.2026
	<b>J2-50086</b>	Nanofibrillar cellulose membranes in microbial fuel cells: material development for sustainable, high value-added applications	Senior Research Fellow Selestina Gorgieva  selestina.gorgieva@um.si	1.12.2023 – 30.11.2026
	<b>J2-50087</b>	Fabrication of high capacitance electrospun fibrous net for flexible supercapacitor	Assist. Prof. Dr. Alenka Ojstršek alenka.ojstrsek@um.si	1.10.2023 – 30.9.2026
	<b>L2-50059</b>	Nanostructured coatings of high-entropy alloys for use in toolmaking	Dr. Aljaž Drnovšek / Prof. Dr. Franc Zupanič  franc.zupanic@um.si	1.10.2023 – 30.9.2026
	<b>Z2-50082</b>	Developing advanced metamaterials with improved vibration fatigue resistance	Dr. Branko Nečemer  branko.necemer@um.si	1.10.2023 – 30.9.2025
	<b>L7-4494</b>	New complex, bone layer incorporating human in vitro skin model for testing of non-invasive glucose sensors	Assist. Prof. Dr. Tina Maver / Prof. Dr. Matej Vesenjāk  matej.vesenjāk@um.si	1.10.2022 - 30.9.2025
	<b>J1-4416</b>	The development of a highly sensitive electrochemical method for trace determination of antibiotic compounds based on magnetic polymeric nanocomposites in environmental systems	Dr. Olivija Plohl olivija.plohl@um.si	1.10.2022 - 30.9.2025
	<b>J7-4492</b>	Advanced technological processes for recycling of waste keratin biomass and development of novel keratin based functional bio-product	Prof. Dr. Mojca Škerget / Prof. Dr. Lidija Fras Zemljič  lidija.fras@um.si	1.10.2022 - 30.9.2025

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	<b>J2-3149</b>	Design and Management of Sustainable Plastic Value Chains to Support a Circular Economy Transition	Assoc. Prof. Dr. Lidija Čuček / Assoc. Prof. Dr. Julija Volmajer Valh  julija.volmajer@um.si	1.11.2021 - 31.10.2024
	<b>L2-3163</b>	Development of safe multifunctional surfaces for catheters to combat biofilms (DemoCat)	Assoc. Prof. Dr. Alenka Vesel / Prof. Dr. Lidija Fras Zemljič  lidija.fras@um.si	1.10.2021 - 30.9.2024
	<b>L2-3174</b>	Low emission household tumble drying with evaluation of damage to textile materials	Prof. Dr. Marko Hočevar / Assoc. Prof. Dr. Branko Neral  branko.neral@um.si	1.10.2021 - 30.9.2024
	<b>J2-3053</b>	Development of high-performance piezoelectric coatings for self-powering of nonwovens used in e- mobility	Assoc. Prof. Dr. Vanja Kokol  vanja.kokol@um.si	1.10.2021 - 30.9.2024
	<b>J2-3037</b>	Bionanotechnology as a tool for stabilization and applications of bioactive substances from natural sources	Prof. Dr. Maja Leitgeb / Assoc. Prof. Dr. Vanja Kokol  vanja.kokol@um.si	1.10.2021 - 30.9.2024
	<b>L2-3167</b>	Cognitive geometrical control of machined forged parts based on big data from the manufacturing process	Assoc. Prof. Dr. Mirko Ficko  mirko.ficko@um.si	1.10.2021 - 30.9.2024
	<b>J7-2593</b>	Development of bio-active nanostructured fibrous membranes for an extension of fresh fruits postharvest shelf life	Assist. Prof. Dr. Manja Kurečič  manja.kurecic@um.si	1.9.2020 - 31.8.2023