

Faculty of Mechanical Engineering TUL – Student Grant Competition – 2023

Number	Project title	Principal investigator	Period	Subsidy CZK
21444	Research and development of equipment for the production of nanofibrous materials	Ing. Ondřej Friedrich	2021–2023	347 499
21486	Experimental and Numerical Investigations of Magnetorheological Elastomeric Foam and its Industrial Applications	Jaroslav Pulec	2022–2024	291 778
21488	Research on aging and biodegradation of PLA and PHBV composites with natural fillers	Jan Novák	2022–2024	297 661
21489	Determination of corrosion mechanism and resistance of Fe3Al-based intermetallic alloys in different types of lead-free enamels	Petra Pazourková Prokopčáková	2022–2023	180 818
21490	Research and application of advanced simulation methods in the field of vehicle efficiency improvement	Tomáš Petr	2022–2023	262 982
21491	Research on the combustion of renewable fuels in dual-fuel engines for road freight transport	Dong Nguyen Phu	2022–2023	222 363
21493	Research and development in the field of machining of metal and composite materials using new knowledge for industrial practice	Tomáš Knápek	2022–2023	281 266
21494	Process research on textile and single-purpose machines III	Jiří Komárek	2022–2024	350 238
21495	Optimization of bolted connection in non-ferrous and non-metallic structures	Radka Jírová	2022–2023	212 777
21496	Surface modification of tool steels using laser technology and physical deposition of thin films	Michal Kraška	2022–2023	203 569
21497	Antimicrobial treatment of geopolymers	Vojtěch Růžek	2022–2023	242 904
21498	Advanced materials research and machine learning applications in control and modelling of mechanical systems	Jan Škoda	2022–2024	383 651
21538	Research on additive Directed Energy Deposition technology for obtaining optical sensor components from glass	Mohamed Fawzy Abdelkader	2023–2025	235 526
21539	Optimizing and improving the efficiency of heat transfer applications using computational fluid dynamics modelling	Anas F A Elbarghthi	2023–2025	199 912
20154	Research on kinetics of diffusion processes and optimization of heterogeneous diffusion junction formation	Šárka Bukovská	2023–2025	267 483
21541	Boiling heat transfer, pressure drop and low GWP refrigerant flow pattern in mini-channels	Ernest Gyan Bediako	2023–2024	259 347
21542	Research in the field of micromachining – micro milling	Artur Knap	2023–2024	298 103
21543	Investigation of rheological properties of silicate materials for robotic 3D printing	Ondřej Matúšek	2023–2025	254 906
21016	SGC Organization – FME TUL		2023	104 245

Total FME TUL

4 897 028