

Faculty of Mechanical Engineering TUL – Student Grant Competition – 2022

Number	Project title	Principal investigator	Period	Subsidy CZK
21393	Effect of residual stresses arising during technological processing on the fatigue life of manufactured parts	Ing Šárka Bukovská	2020–2022	298 000
21396	Researching new approaches for process improvement	Ing. Vladimír Sojka	2020–2022	240 000
21443	Processing of H13 tool steel by SLM technology and research on lightweight structures	Ing. Filip Véle	2021–2022	293 000
21444	Research and development of equipment for the production of nanofibrous materials	Ing. Josef Skřivánek, Ph.D.	2021–2023	255 000
21485	Experimental and numerical investigation of magnetorheological elastomeric foams and their industrial applications	Mohammad Yousef Amer Hdaib	2022–2024	277 000
21486	Experimental and Numerical Investigations of Magnetorheological Elastomeric Foam and its Industrial Applications	Jaroslav Pulec	2022–2024	290 000
21487	Heat transfer in phase change and multiphase flow in small cross-section tubes	Ernest Gyan Bediako	2022–2023	266 000
21488	Research on aging and biodegradation of PLA and PHBV composites with natural fillers	Jan Novák	2022–2024	249 000
21489	Determination of corrosion mechanism and resistance of Fe3Al-based intermetallic alloys in different types of lead-free enamels	Petra Pazourková Prokopčáková	2022–2023	223 000
21490	Research and application of advanced simulation methods in the field of vehicle efficiency improvement	Tomáš Petr	2022–2023	295 000
21491	Research on the combustion of renewable fuels in dual-fuel engines for road freight transport	Dong Nguyen Phu	2022–2023	239 000
21492	Energy Harvesting for Sustainable Applications	Shehab Salem	2022–2023	319 000
21493	Research and development in the field of machining of metal and composite materials using new knowledge for industrial practice	Tomáš Knápek	2022–2023	271 000
21494	Process research on textile and single-purpose machines III	Jiří Komárek	2022–2024	269 000
21495	Optimization of bolted connection in non-ferrous and non-metallic structures	Radka Jírová	2022–2023	172 000
21496	Surface modification of tool steels using laser technology and physical deposition of thin films	Michal Krafka	2022–2023	221 000
21497	Antimicrobial treatment of geopolymers	Vojtěch Růžek	2022–2023	210 000

21498	Advanced materials research and machine learning applications in control and modelling of mechanical systems	Jan Škoda	2022–2024	482 000
21016	SGC Organization – FME TUL	DFME	2022	138 000
Total FME TUL				5 007 000