Grants for starting a scientific activity in a new research topic, under the Excellence initiative - Research University* programme

in accordance with Ordinance No 33/2020 of 4 March 2020.

In 2021, the Commission for Awards and Pro-Quality Programmes assessed 40 applications for a grant to fund the start of a scientific activity in a new research topic under the Excellence Initiative — Research University programme

39 applications received at least 50% of the maximum number of points specified in § 3, paragraph 2 of the Rector's Ordinance No. 33/2020 of the Rector of the Silesian University of Technology of 4 March 2020 on the pro-quality competition for support for initiating scientific activity in a new research topic within the Excellence Initiative - Research University programme. The Rector awarded 34 grants to support the initiation of scientific activity in a new research topic, adopting an additional criterion in the first edition that a maximum of 10 grants should be co-financed within one POB.

Ranking list:

The first edition

No.	Academic title/degree, first name and surname	Research topic	% of points available
1.	mgr inż. Krzysztof Rusin (doctoral student)	*Adiabatic energy storage systems for compressed gases*	99,58%**
2.	mgr inż. Marta Zaborowska (doctoral student)	*One-dimensional niobium oxide (Nb205) nanostructures for photocatalytic water purification*	96,68%
3.	mgr inż. Szymon Sobek (doctoral student)	*Hydrothermal conversion of plastic waste*	96,11%**
4.	mgr inż. Daria Katla (doctoral student)	*Study on the influence of different types of catalysts on the methanation process*	94,37%**

No.	Academic title/degree, first name and surname	Research topic	% of points available
5.	mgr inż. Dominika Czerwińska-Główka (doctoral student)	*Application of aliphatic polyesters based on isosorbide for the preparation of nanofibres by electrospinning and assessment of their suitability as scaffolds and implants*	92,63%**
6.	mgr inż. Piotr Wiśniewski (doctoral student)	*Analysis of the phenomenon of penetration of micro and nano particles through porous partitions*	89,74%**
7.	mgr inż. Daria Kogut (doctoral student)	*Searching for a molecular mechanism for the switching of p53 protein isoform expression in cancer cells*	86,26%**
8.	mgr Anna Horzela (doctoral student)	*Organisational conditions for creating and developing energy clusters in Poland*	84,53%**
9.	mgr inż. Gabriela Fojt-Dymara (doctoral student)	*Influence of plastic deformation parameters on fracture toughness of high manganese TWIP steels*	83,95%**
10.	dr inż. Krzysztof Bernacki / RAU	*Development of remote-controlled astronomical observations at the Faculty of Automatic Control, Electronics and Computer Science*	83,68%
11.	dr inż. Alina Brzęczek-Szafran / RCH	*New deep eutectic mixtures for pure chemical processes*	83,68%

No.	Academic title/degree, first name and surname	Research topic	% of points available
12.	mgr inż. Piotr Oleksik (doctoral student)	*Determination of the effect of nucleants on the crystallization of the BFO phase in B2O3-Bi2O3-Fe2O3 based glass-ceramics*	83,37%**
13.	MSc Welisson de Pontes Silva (doctoral student)	*Synthesis and investigation of new D-A type molecules based on acenaphtopyridopvrazine as acceptor core to OLEDs applications*	83,37%**
14.	dr inż. Piotr Latos / RCH	*Sustainable biomass conversion method for innovative materials towards acidic ionic liquids*	83,16%
15.	dr inż. Tomasz Maciąg / RM	*Application of 3D printing by DLP method for manufacturing ceramic preforms*	82,11%
16.	mgr inż. Jakub Smoleń (doctoral student)	*Development of a model for the sedimentation threshold of filler particles in composites*	81,05%**
17.	mgr inż. Kamila Hyra (doctoral student)	*Influence of intensive plastic deformation process conditions on structure and properties of selected aluminium alloys*	81,05%**
18.	dr inż. Waldemar Mucha / RMT	*Application of digital image correlation and artificial intelligence methods in condition and load monitoring processes of mechanical systems*	79,47%

No.	Academic title/degree, first name and surname	Research topic	% of points available
19.	MSc Paola Zimmermann Crocomo (doctoral student)	*Photophysical study of coniugated Donor-Acceptor molecules for optoelectronical applications*	79,32%**
20.	dr inż. Anna Marszałek / RIE	*Hybrid geopolymers based on matakaolin and carbon nanotubes as adsorbents of heavy metals and PAHs from rainwater*	72,11%
21.	mgr inż. Magdalena Ćwiertniewicz-Wojciechowska (doctoral student)	*Isolation and characterization of autochthonous microscopic fungi from sewage sludge for cellulose degradation*	70,05%**

THE SECOND EDITION

No.	Academic title/degree first name and surname	Research topic	% of points available
1.	mgr inż. Anna Wojtacha (doctoral student)	*Influence of hot forming conditions on changes in yield stress, strain hardening and softening rate in newly developed multiphase steels*	97,31%**
2.	MSc Nicolas Oliveira Decarli (doctoral student)	*Synthesis, electrochemical and photophysical analysis of new azadiphosphole derivatives based on D-A-D system for OLED devices application*	96,46%**
3.	MSc Rency Geevarghese (doctoral student)	*Controlling of wettability and cell adherance of 3D printed PCL scaffold via the designed architecture and porosity*	94,77%**

No.	Academic title/degree first name and surname	Research topic	% of points available
4.	mgr inż. Artur Król (doctoral student)	*Implementation of control and measuring equipment with wireless communication for quality control of components and prototypes in the R&D department of an automotive company*	94,77%**
5.	mgr inż. Błażej Kurpiel (doctoral student)	*Implementation of a system to manage data from control and measurement devices in the R&D department of the motorization industry*	94,77%**
6.	mgr inż. Dawid Nastula (doctoral student)	*Electrochemical, spectroscopic and spectroelectrochemical investigation of 3,6-disubstituted s-tetrazines for applications in organic electronics*	90,54%**
7.	MSc Nasir Shakeel (doktorant)	*Chemometric tools for the assessment of plant exposure to pesticides*	90,54%**
8.	MSc Pavan Kumar Reddy Gudeti (doktorant)	*Development and evaluation of macro- and micro- channels for neovessel formation in a cell-laden hydrogel network using bioreactor chip*	88,00%**
9.	dr inż. Małgorzata Włodarczyk-Biegun / RJO11-CB	*Development of chitosan / Nano hydroxy apatite / PLGA based bioink for local alendronate drug delivery in osteoporosis treatment*	87,69%
10.	dr inż. Marcin Kłos / RT	*Spatial analyses in public transport*	87,69%

No.	Academic title/degree first name and surname	Research topic	% of points available
11.	mgr inż. Julia Lisoń (doctoral student)	*Influence of nanometric oxide coatings on physicochemical properties of Ti13Nb13Zr alloy*	87,15%**
12.	PhD Leandro Espindola	*Synthesis, electrochemical and photophysical analysis of unprecedented compounds with TADF properties for OLED devices application*	83,85%
13.	mgr inż. Artur Budzyński (doctoral student)	*Using machine learning to solve transport problems*	83,77%**

* Listed in order of grant award

** The assessment shall take into account the increase in the number of points referred to in paragraph 3(1) of Ordinance No. 33/2020.