

The Competition for the Best Dissertation Defended in 2021-2022

Final results

Best 5 dissertations defended
in 2021-2022

Economics, Finance and Management

- Agnieszka Jania
- Agnieszka Put
- Anlan Wang
- Dagmara Wójcik
- Jakub Stefek
- Katarzyna Turoń
- Krzysztof Podgórski
- Małgorzata Krzciuk
- Marie Ligocká
- Radka Kubalová
- Wojciech Kamiński

Category 1: Economics, Finance and Management

1 st	Anlan Wang
2 nd	Krzysztof Podgórski
3 rd	Radka Kubalová

Raw materials, Energy and the Environment

- Damian Kurzydym
- Jakub Bodys
- Lukasz Pieszczyk
- Michał Stebel
- Radek Papesch

Category 2: Raw materials, Energy and the Environment

1 st	Damian Kurzydym
2 nd	Jakub Bodys
3 rd	Michał Stebel & Radek Papesch

Health and Applications in Healthcare

- Anna Woźniak
- Marta Sobkowiak
- Michał Labuda
- Przemysław Kurtyka
- Wioletta Swieboda

Category 3: Health and Applications in Healthcare

1 st	Michał Labuda
2 nd	Przemysław Kurtyka
3 rd	Marta Sobkowiak

Information Technology and Electrical Engineering

- Danuta Descour
- Dawid Szarański
- Mariia Rizun
- Michał Halaška
- Peter Kasák
- Piotr Ciepliński
- Róberta Vršková
- Věroslav Holuša
- Vojtěch Molek

Category 4: Information Technology and Electrical Engineering

1 st	Vojtěch Molek
2 nd	Věroslav Holuša
3 rd	Róberta Vršková

Competitive Engineering and Materials Research

- Aleksandra Lont
- Aleksandra Nyga
- Denisa Medvecká
- Ivan Antoniuk
- Karolina Kowalczyk
- Stefan Grushko
- Weronika Smok

Category 5: Competitive Engineering and Materials Research

1 st	Weronika Smok
2 nd	Denisa Medvecká
3 rd	Ivan Antoniuk

Final results

- **Category: Economics, Finance and Management**

- 1st - Anlan Wang** - Verification on the Performance of Classical and Modern Portfolio Optimization Models
2nd - Krzysztof Podgórski - Neural networks and the accuracy of forecasting exchange rates on the currency market
3rd - Radka Kubalová - Application of behavioral economics in marketing

- **Category: Raw Materials, Energy and the Environment**

- 1st - Damian Kurzydym** - Experimental and numerical research of the selective catalytic reduction system for diesel engine cars
2nd - Jakub Bodys - Non-equilibrium two-phase model of transcritical CO₂ flow for ejector design in state-of-the-art refrigeration systems
3rd - Michał Stebel - Numerical analysis of conjugate heat and mass transfer phenomena in food freezing using hydrofluidisation impingement method
Radek Papesch - Treatment and use of artificial aggregates in the production of concrete composites

- **Category: Health and Applications in Healthcare**

- 1st - Michal Labuda** - Fusion of multichannel electromyography and photoplethysmography imaging to analyze the electrical activity of muscles and the perfusion of subcutaneous tissue
2nd - Przemysław Kurtyka - Effect of surface modification of the Ti6Al7Nb alloy implant on the adhesion and growth of myocardial cells
3rd - Marta Sobkowiak - Modeling and simulation of blood flow in the middle cerebral artery

- **Category: Information Technology and Electrical Engineering**

- 1st - Vojtěch Molek** - Fusion of Methodologies: F-transform with CNN
2nd - Věroslav Holuša - Virtual reality applications in enterprise security resource industries
3rd - Róberta Vršková - Research on methods of behavioural classification of human behaviour

- **Category: Competitive Engineering and Materials Research**

- 1st - Weronika Smok** - Analysis of the structure and optical properties of one-dimensional SnO₂ and In₂O₃ ceramic nanomaterials produced by the hybrid sol-gel technique and solution electrospinning
2nd - Denisa Medvecká - The study of microstructural changes in the heat-affected zone of welded joints of advanced high-strength steel S960MC
3rd - Ivan Antoniuk - Short-term planning of intelligent manufacturing systems with the support of computer simulation