

# The Competition for the Best Dissertations Defended in 2024

Economics, Finance and Management
• Agnieszka Matecka • Jakub Kubiczek • Jiří Branžovský • Magdalena Dominiczewska • Mikuláš Hurta • Nikola Štaffenová • Rafał Kania

## Category 1: Economics, Finance and Management

1 <sup>st</sup>	<b>Jiří Branžovský</b>
2 <sup>nd</sup>	Jakub Kubiczek
3 <sup>rd</sup>	Magdalena Dominiczewska

**Final results**  
Best 5 dissertations defended  
in 2024

Raw materials, Energy and the Environment
• Alexander Backa • Bassel Nesser • Anita Parzentna-Gabor • Jan Výtisk • Kinga Surmiak-Stalmach • Łukasz Gajda • Kornelia Przedworska • Martina Bašistová • Mateusz Lis • Weronika Janik

## Category 2: Raw materials, Energy and the Environment

1 <sup>st</sup>	<b>Weronika Janik</b>
2 <sup>nd</sup>	Anita Parzentna-Gabor
3 <sup>rd</sup>	Jan Výtisk

Health and Applications in Healthcare
• Aleksandra Mikulíková • Dominika Petříková • Katarzyna Niesyto • Patrik Prôčka • Tobiasz Gabrys • Kamila Žondra Revendová • Adam Łysiak

## Category 3: Health and Applications in Healthcare

1 <sup>st</sup>	<b>Aleksandra Mikulíková</b>
2 <sup>nd</sup>	Katarzyna Niesyto
3 <sup>rd</sup>	Kamila Žondra Revendová

Information Technology and Electrical Engineering
• Łukasz Drózdź • Michal Mrena • Monika Nycz • Roman Pawełczyk

## Category 4: Information Technology and Electrical Engineering

1 <sup>st</sup>	<b>Monika Nycz</b>
2 <sup>nd</sup>	Łukasz Drózdź
3 <sup>rd</sup>	Michal Mrena

Competitive Engineering and Materials Research
• Debela Desisa • Grzegorz Stando • Jan Zelinka • Martina Sýkorová • Nilesh Kumar • Piotr Olesik • Veronika Obertová

## Category 5: Competitive Engineering and Materials Research

1 <sup>st</sup>	<b>Veronika Obertová</b>
2 <sup>nd</sup>	Grzegorz Stando
3 <sup>rd</sup>	Martina Sýkorová

# Final results

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

- 1<sup>st</sup> - Jiří Branžovský** - The S&P 500 behavior near the official Federal Open Market Committee meetings
- 2<sup>nd</sup> - Jakub Kubiczek** - Changes in financial behavior of Poles in the COVID-19 pandemic crisis
- 3<sup>rd</sup> - Magdalena Dominiczewska** - Dynamic capabilities of enterprises in Poland: content, process, context, effects

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

- 1<sup>st</sup> - Weronika Janik** - Research on improving the mechanical properties of bio-polymer-based materials
- 2<sup>nd</sup> - Anita Parzentna-Gabor** - Adaptation of odor removal technology in compact trickle bed bioreactors to the municipal sector, especially to wastewater treatment plants
- 3<sup>rd</sup> - Jan Výtisk** - Comparison of additive and subtractive production technologies in terms of energy flows and environmental impacts

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

- 1<sup>st</sup> - Aleksandra Mikulíková** - A manual mobility chair for children with motor disabilities with a construction optimized for additive manufacturing
- 2<sup>nd</sup> - Katarzyna Niesyto** - Designing of grafted poly(ionic liquids) as potential drug delivery systems for antibacterial therapy
- 3<sup>rd</sup> - Kamila Žondra Revendová** - Laboratory biomarkers of multiple sclerosis

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

- 1<sup>st</sup> - Monika Nycz** - Modelling the dynamics of internet transmissions using fluid-flow approximation
- 2<sup>nd</sup> - Łukasz Drózdź** - Metrological analysis of the Discrete Wavelet Transform Algorithms
- 3<sup>rd</sup> - Michal Mrena** - Reliability analysis of complex systems using decision diagrams

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

- 1<sup>st</sup> - Veronika Obertová** - Study of the electrochemical properties of surface-treated biodegradable metallic materials
- 2<sup>nd</sup> - Grzegorz Stando** - Development of high-performance composites based on non-functionalized carbon nanostructures
- 3<sup>rd</sup> - Martina Sýkorová** - Study and evaluation of properties of AlSi5Cu2Mg alloy intended for automotive industry