# The Competition for the Best Dissertation Defended in 2017



## Category 2: Raw materials, energy and the environment

#### Raw materials, energy and the environment

- Anna Klegova
- Katarzyna Suchodolska
- Piotr Ciuman
- Zuzana Mrázková

1 <sup>st</sup>	Zuzana Mrázková
2 <sup>nd</sup>	Katarzyna Suchodolska
3 <sup>rd</sup>	Anna Klegova

## Category 3: Health and applications in healthcare

### Health and Applications in Healthcare

- František Tomeček
- Mateusz Stolarz
- Natalya Kraeva
- Tomasz Moroń

#### Information Technology and Electrical Engineering

Krystian Radlak

- Agnieszka Jakubowska-Ciszek
- Jan Zapletal
- Miralem Mehić Paweł Popielski
- Wojciech Lubicki

#### **Competitive Engineering and Materials Research**

- Karolina Dudek
- Michal Krbaťa
- Witold Ogierman

<b>1</b> <sup>st</sup>	František Tomeček
2 <sup>nd</sup>	Mateusz Stolarz Natalya Kraeva
3 <sup>rd</sup>	Tomasz Moroń

## Category 4: Information Technology and Electrical Engineering

1 <sup>st</sup>	Jan Zapletal
2 <sup>nd</sup>	Miralem Mehić
3 <sup>rd</sup>	Paweł Popielski

## **Category 5: Competitive Engineering and Materials Research**

	<b>1</b> <sup>st</sup>	Karolina Dudek
_	2 <sup>nd</sup>	Witold Ogierman
	3 <sup>rd</sup>	Michal Krbaťa

# **Final results** Best 5 dissertations defended

in 2017

# **Final results**

## • Category: Economics and finance

### **1st - Dominik Kudyba** – Electricity demand modelling in market liberalization conditions

**2nd - Martin Hodula** - Monetary and fiscal policy implications for financial stability **3rd - Jerzy Bar** – The management model of a family business taking its life cycle into account

### • Category: Raw materials, energy and the environment

### 1st - Zuzana Mrázková - Modeling and characterization of materials and nanostructures for photovoltaic applications

2nd - Katarzyna Suchodolska - The assessment of potential and models of geological storage processes of acid gases (CO<sub>2</sub>, H<sub>2</sub>S) in aquifers of Upper Silesian Coal Basin 3rd - Anna Klegova - Supported shaped catalysts based on cobalt mixed oxides for N<sub>2</sub>O decomposition

## • Category: Health and applications in healthcare

### 1st - František Tomeček - Arrangement for hypothermia application

2nd - Mateusz Stolarz - Quantitative and qualitative assessment of the microstructure of femoral and tibial epiphysis elements used for anterior cruciate ligament reconstruction

- Natalya Kraeva - Analysis of genetic differences between monoxenous and dixenous Leishmaniinae for identification of novel virulence factors

3rd - Tomasz Moroń - The application of dynamic nonlinear alignment in processing biomedical signals

## • Category: Information Technology and Electrical Engineering

1st - Jan Zapletal – The Boundary Element Method for Shape Optimization in 3D
2nd - Miralem Mehić - Using Quantum Key Distribution for Securing Real-Time Applications
3rd - Paweł Popielski - Finding Correspondence of Characteristic Points in Stereovision Images

## • Category: Competitive Engineering and Materials Research

### 1st - Karolina Dudek - Structure and characteristics of multifunctional layers on the NiTi shape memory alloy

2nd - Witold Ogierman - Homogenization of heterogenous materials with consideration of anisotropy and nonlinear constitutive behaviour 3rd - Michal Krbaťa - The impact of plasma nitridation on selected surface properties