

## FACULTY OF CIVIL ENGINEERING AND ENVIRONMENTAL SCIENCES

### INSTITUTE OF CIVIL ENGINEERING

No.	Project title	Principal Investigator	Type of competition	Project's duration	Granted funds
4.	Road pavement texture and friction coefficient	<u>Paweł Gierasimiuk, PhD, Eng.</u> Department of Geotechnics, Roads and Geodesy	MINIATURA 7	28.11.2023-27.11.2024	48 546
3.	The influence of carbon fibers recovered from advanced products of the automotive industry and the renewable energy sector on the properties of cement concretes	<u>Julita Krassowska, PhD, Eng.</u> Department of Building Structures and Structural Mechanics	MINIATURA 7	30.05.2023-29.05.2024	38 231
2.	Changes in the physical-mechanical and structural properties of geopolymer composites based on recycled aggregate and biochar as a result of CO2 sequestration	<u>Katarzyna Kalinowska-Wichrowska, PhD, Eng.</u> Department of Construction and Landscaping	MINIATURA 7	30.05.2023-29.05.2024	49 344
1.	Biocementation as an innovative method of improvement of mineral and anthropogenic soil	<u>Mariola Wasil, PhD, Eng.</u> Department of Geotechnics and Structural Mechanics	MINIATURA 5	15.12.2021-14.12.2022	21 120

### INSTITUTE OF ENVIRONMENTAL AND POWER ENGINEERING

No.	Project title	Principal Investigator	Type of competition	Project's duration	Granted funds
16.	Changes in the rhizosphere microbiome during the removal of neonicotinoids by phytoremediation technique supported by compost application	<u>Urszula Wydro, PhD</u> Department of Chemistry, Biology and Biotechnology	MINIATURA 8	06.09.2024-05.09.2025	49 121
15.	Nano-modification and pyrolysis of apple pomace to produce efficient biosorbents for heavy metal ions removal from aqueous solutions	<u>Kamila Koronkiewicz, MSc.</u> Department of Chemistry, Biology and Biotechnology	PRELUDIUM 22	03.01.2024-02.01.2027	209 320
14.	Influence of compaction conditions on the quality of pellets made of different types of biochar	<u>Magdalena Joka Yildiz, PhD, Eng.</u> Department of Agri-Food Engineering and Environmental Management	MINIATURA 7	30.05.2023-29.05.2024	39 358
13.	Research on the comprehensive use of phenolic-rich agri-food waste in order to obtain nano-formulations with high bioactivity and bioavailability  Project implemented in a consortium: Leader – Białystok University of Technology; Partner – Prof. Waclaw Dabrowski Institute of Agricultural and Food Biotechnology – State Research Institute	<u>Assoc. Prof. Monika Kalinowska, DSc, PhD</u> Department of Chemistry, Biology and Biotechnology	OPUS 22	24.06.2022-23.06.2027	1 877 336; incl BUT: 1 721 542
12.	Selected fungicides as potential EDC estrogenic micropollutants in the environment	<u>Agata Jabłońska-Trypuć, DSc, PhD</u> Department of Chemistry, Biology and Biotechnology	MINIATURA 5	03.11.2021-02.11.2022	42 486
11.	Research into the causes of an increase in the antioxidant properties of natural compounds found in food under the influence of complexation with microelements. Searching for effective antioxidants in food technology  Project implemented in a consortium: Leader – Białystok University of Technology; Partner – Prof. Waclaw Dabrowski Institute of Agricultural and Food Biotechnology – State Research Institute	<u>Prof. Włodzimierz Lewandowski, DSc, PhD</u> Department of Chemistry, Biology and Biotechnology	OPUS 20	18.06.2021 – 17.05.2026	1 599 900 incl BUT: 811 000
10.	The effect of low-temperature conditioning of granular oxygen sludge with the use of solidified carbon dioxide on methane fermentation	<u>Joanna Kazimierowicz, PhD, Eng.</u> Department of Water Supply and Sewage Systems	MINIATURA 4	16.10.2020-15.10.2021	42 834

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9.	Influence of the type of activated sludge and technological parameters of sequential batch reactors on the efficiency and mechanism of removal of micro pollutants from the benzotriazole group	<u>Joanna Struk-Sokolowska, PhD, Eng.</u> Department of Environmental Engineering Technology	MINIATURA 4	01.10.2020-30.09.2021	49 740
8.	Postproduction plant wastes as materials for the production of biofuel	<u>Aneta Sienkiewicz, PhD, Eng.</u> Department of Agri-Food Engineering and Environmental Management	MINIATURA 3	19.12.2019-19.08.2021	49 940
7.	Analysis of the influence of hydrodynamic shear forces on the mechanism of nitrogen transformation during natural granulation of flocculated activated sludge	<u>Piotr Ofman, PhD, Eng.</u> Department of Environmental Engineering Technology	MINIATURA 3	19.12.2019-18.12.2020	34 386
6.	New derivatives of plant carboxylic acid as active components of biopreparations safe for human and natural environment  Project implemented in a consortium: Leader – Białystok University of Technology; Partner – Prof. Wacław Dąbrowski Institute of Agricultural and Food Biotechnology – State Research Institute	<u>Prof. Włodzimierz Lewandowski, DSc, PhD</u> Department of Chemistry, Biology and Biotechnology	OPUS 16	28.06.2019-27.06.2024	957 800 incl BUT: 637 000
5.	Study of the relationship between molecular structure and biological activity of compounds of natural origin with the potential preservative activity and their complexes with metals  Project implemented in a consortium: Leader – Białystok University of Technology; Partner – University of Białystok	<u>Prof. Włodzimierz Lewandowski, DSc, PhD</u> Department of Chemistry, Biology and Biotechnology	OPUS 15	21.02.2019-20.02.2024	922 500 incl BUT: 570 640
4.	Dynamics of fertilizing components in soil fertilized with post-fermentation sludge (digestate) from agricultural biogas plant	<u>Agnieszka Wysocka-Czubaszek, PhD, Eng.</u> Department of Agri-Food Engineering and Environmental Management	MINIATURA 1	09.11.2017-08.11.2018	18 700
3.	Study of the influence of selected metals to change the antioxidant of natural compounds occurring in food and food of natural origin	<u>Prof. Włodzimierz Lewandowski, DSc, PhD</u> Department of Chemistry, Biology and Biotechnology	OPUS 9	25.02.2016-24.02.2020	542 920
2.	Study on improving the selectivity and activity of selected drugs and natural compounds with anticancer properties due to metal complexation	<u>Prof. Włodzimierz Lewandowski, DSc, PhD</u> Department of Chemistry, Biology and Biotechnology	OPUS 7	04.02.2015-03.12.2018	892 480
1.	Analysis of the dependence between the antimicrobial and prooxidative activity of apple extracts and selected plant phenolic compounds and their derivatives	<u>Monika Kalinowska, PhD</u> Department of Chemistry, Biology and Biotechnology	SONATA 6	22.07.2014-21.07.2018	399 700

## INSTITUTE OF FOREST SCIENCES

No.	Project title	Principal Investigator	Type of competition	Project's duration	Granted funds
2.	Emission of photochemically active organic compounds into the atmosphere by decaying deciduous litter and plants of the living soil cover of forests, as well as grassy felt of the light of global climate changes	<u>Prof. Walerij Isidorow, DSc, PhD</u> Department of Forest Environment	OPUS 18	01.09.2020-31.12.2023	1 692 074
1.	Investigation of the chemical composition and mechanisms of antitumor activity of extracts and chemical substances isolated from white birch buds	<u>Prof. Walerij Isidorow, DSc, PhD</u> Department of Forest Environment	OPUS 12	03.08.2017-02.01.2020	678 042