Wrocław University of Science and Technology
Doctoral School

ACADEMIC TEACHER PROFESSIONAL EXPERIENCE

DOCTORAL SCHOOL OF WROCŁAW UNIVERSITY OF SCIENCE AND TECHNOLOGY

1. Basic information

Name, surname:	Aleksandra Korbut
Grade / Title:	PhD
Scientific discipline	**inżynieria chemiczna / chemical engineering**
Faculty:	W3 Wydział Chemiczny / Faculty of Chemistry
Email address:	Aleksandra.korbut@pwr.edu.pl
Link to home page and/or research profiles (Google Scholar, ResearchGate, etc.)	https://www.researchgate.net/profile/Aleksandra-Korbut

2. Publication record

Up to 10 most important papers published over the period of previous 10 years.

No.	Description (authors, publication title, journal / conference, DOI)	Publication year
1.	Régis Barillé, Aleksandra Korbut, Sonia Zielińska, Ewelina Ortyl, Darío G. Pérez, Laser beam shaping using a photoinduced azopolymer droplet-based mask. Applied Optics. 2024, vol. 63, nr 4, s. 990-998, https://doi.org/10.1364/AO.510715	2024
2.	Adam Szukalski, Aleksandra Korbut, Sonia Zielińska, Bouchta Sahraoui, Photochromic polymers: structural engineering driving individual NLO response. Optical Materials (Amsterdam). 2024, vol. 147, art. 114766, s. 1-13, https://doi.org/10.1016/j.optmat.2023.114766	2024
3.	Aleksandra Korbut, Ewelina Ortyl, Sonia Zielińska, Régis Barillé, Large photo-actuated surface change of an electrospun nanofbrous membrane. Polymer Bulletin. 2023, vol. 80, nr 11, s. 12003-12019, https://doi.org/10.1007/s00289-022-04628-x	2023
4.	Aleksandra Korbut, Marcin Włodarczyk, Karolina Rudnicka, Aleksandra Szwed, Przemysław Płociński, Monika Biernat, Paulina Tymowicz-Grzyb, Martyna Michalska, Natalia Karska, Sylwia Rodziewicz-Motowidło, Konrad Szustakiewicz, Three component composite scaffolds based on PCL, hydroxyapatite, and L-lysine obtained in TIPS-SL: bioactive material for bone tissue engineering. International Journal of Molecular Sciences. 2021, vol. 22, nr 24, art. 13589, s. 1-16, https://doi.org/10.3390/ijms222413589	2021
5.	Adam Szukalski, Aleksandra Korbut, Karolina Zieniewicz, Sonia Zielińska, Compatible photochromic systems for opto-electronic applications. Journal of Physical Chemistry B. 2021, vol. 125, nr 49, s. 13565-13574, https://doi.org/10.1021/acs.jpcb.1c08728	2021
6.	Adam Szukalski, Aleksandra Korbut, Ewelina Ortyl, Structural and light driven molecular engineering in photochromic polymers. Polymer. 2020, vol. 192, art. 122311, s. 1-13, https://doi.org/10.1016/j.polymer.2020.122311	2020
7.	Aleksandra Korbut, Sonia Zielińska, Régis Barillé, Jacek Pigłowski, Ewelina Ortyl, The novel photoresponsive oligomers containing azo derivatives of sulfamerazine for spontaneous surface relief grating inscription. European	2017

	Polymer Journal. 2017, vol. 90, s. 392-406, https://doi.org/10.1016/j.eurpolymj.2017.03.024	
8.	Aleksandra Bućko, Sonia Zielińska, Ewelina Ortyl, Maria Larkowska, Régis Barillé, Synthesis of organic-inorganic hybrid azobenzene materials for the preparation of nanofibers by electrospinning. Optical Materials (Amsterdam). 2014, vol. 38, s. 179-187, https://doi.org/10.1016/j.optmat.2014.10.021	2014

3. Projects and grants

List of the most important 5 projects/grants with basic description including: title, source(s) of funding, name of the call, role in the project (e.g., principal investigator).

1.	Role in the project (e.g., principal investigator, work package leader, etc.)	investigator
	Project title	Multifunctional composites biologically active for applications in regenerative medicine of bone system
	Sources of funding	Foundation for Polish Science
	Name of the call	Wrocław University of Science and Technology Poland
	Implementation period	01.10. 2019 – 30.06.2023
2.	Role in the project (e.g., principal investigator, work package leader, etc.)	investigator
	Project title	Surface relief grating on liquids
	Sources of funding	Polish National Agency for Academic Exchange
	Name of the call	Wrocław University of Science and Technology Poland
	Implementation period	2023-2024
3.	Role in the project (e.g., principal investigator, work package leader, etc.)	investigator
	Project title	Photochromic azopolymers in nanometers structures
	Sources of funding	National Science Centre
	Name of the call	Wrocław University of Science and Technology Poland
	Implementation period	01.10.2013-31.12.2015
4.	Role in the project (e.g., principal investigator, work package leader, etc.)	investigator
	Project title	Nanotechnology in modern materials. Nanocomposites and SMART materials -NanoMat
	Sources of funding	Research project of Wroclav Research Center EIT+
	Name of the call	Wrocław University of Science and Technology Poland
	Implementation period	01.10.2013 – 30.06.2014
5.	Role in the project (e.g., principal investigator, work package leader, etc.)	investigator
	Project title	Microfluidic system for obtaining and research dynamic nanostructures azopolymers
	Sources of funding	Polish National Agency for Academic Exchange
	Name of the call	Wrocław University of Science and Technology Poland

	Implementation period	

4. International experience

Brief description of international cooperation and experience (e.g., research stays, cooperation with foreign entities, coordination or participation in international projects or programmes, keynote speeches and presentations delivered at renowned international conferences, visiting professor stays, invited lectures).

No.	Description	Year(s)
1.	International cooperation with prof. Regis Barille (University of Angers, France)	2013-still
2.	Two-month foreign research internship "Bionanomaterials - BioNaM",University of Angers, France.	2015
3.	Participation in the international conferences: “Bio-based polymers at the forefront of innovation in materials science” Bertinoro, Italy, 2023 ; “2nd International Symposium on Nanoparticles/Nanomaterials and Applications”, Portugalia, Lizbona, 2016	2016, 2023

5. Experience in teaching doctoral students

Brief description of experience in teaching doctoral students (e.g., courses in doctoral schools and PhD studies, summer/winter schools for doctoral students, tutorials, trainings, etc.).

No.	Description	Year(s)
1.	Courses in doctoral schools and PhD studies - Modern macromolecular engineering materials	2024

6. List of supervised doctoral students

List of all supervised doctoral students that defended the PhD including: name of the student, dissertation title, year of awarding PhD.

No.	Name, surname	Dissertation title	Year of awarding PhD
1.			
2.			
3.			

7. Prizes and awards

The most important national and international prizes and awards related to research, development and teaching activities.

No.	Description	Year
1.	Platinum medals, International Invention and Innovation Contest Prix Eiffel, International Patent Application (PCT): “Porous and solid elastomeric bioactive polymer-ceramic composites for bone defect filling and bone tissue regeneration”	2023
2.	Primus - Award of the Rector of Wroclaw University of Technology for outstanding scientific achievement	2022

8. Other significant achievements

Information on other significant achievements related to research, development and teaching activities.