



ACADEMIC TEACHER PROFESSIONAL EXPERIENCE

DOCTORAL SCHOOL OF WROCLAW UNIVERSITY OF SCIENCE AND TECHNOLOGY

1. Basic information

Name, surname:	Konrad Szustakiewicz
Grade / Title:	Ph.D., D.Sc.
Scientific discipline	inżynieria chemiczna / chemical engineering
Faculty:	W3 Wydział Chemii / Faculty of Chemistry
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Link to home page and/or research profiles (Google Scholar, ResearchGate, etc.)	https://www.researchgate.net/profile/Konrad-Szustakiewicz-2

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	Ujčić, A., Sobótka, M., Šlouf, M., Róžański, A., & Szustakiewicz, K. Structure-property relationships in PCL porous scaffolds obtained by means of the TIPS and TIPS-PL methods. <i>Polymer Testing</i> , 118, 107906. https://doi.org/10.1016/J.POLYMERTESTING.2022.107906	2023
2	Kryszak, B., Szustakiewicz, K., Dzienny, P., Junka, A., Paleczny, J., Szymczyk-Ziółkowska, P., Hoppe, V., & Antończak, A. Functionalization of the PLLA surface with a femtosecond laser: Tailored substrate properties for cellular response. <i>Polymer Testing</i> , 116, 107815. https://doi.org/10.1016/J.POLYMERTESTING.2022.107815	2022
3	Kryszak, B., Szustakiewicz, K., Dzienny, P., Junka, A., Paleczny, J., Szymczyk-Ziółkowska, P., Hoppe, V., Grzymajło, M., & Antończak, A. 'Cookies on a tray': Superselective hierarchical microstructured poly(l-lactide) surface as a decoy for cells. <i>Biomaterials Advances</i> , 133, 112648. https://doi.org/10.1016/J.MSEC.2022.112648	2022
4	Piszko, P., Włodarczyk, M., Zielińska, S., Gazińska, M., Płociński, P., Rudnicka, K., Szwed, A., Krupa, A., Grzymajło, M., Sobczak-Kupiec, A., Słota, D., Kobielarz, M., Wojtków, M., & Szustakiewicz, K. PGS/HAp microporous composite scaffold obtained in the TIPS-TCL-SL method: An innovation for bone tissue engineering. <i>International Journal of Molecular Sciences</i> , 22(16). https://doi.org/10.3390/IJMS22168587	2021
5	Marycz, K., Smieszek, A., Targonska, S., Walsh, S. A., Szustakiewicz, K., & Wiglusz, R. J. Three dimensional (3D) printed polylactic acid with nano-hydroxyapatite doped with europium(III) ions (nHAp/PLLA@Eu3+) composite for osteochondral defect regeneration and theranostics. <i>Materials Science and Engineering: C</i> , 110, 110634. https://doi.org/10.1016/J.MSEC.2020.110634	2020



6	Kryszak, B., Szustakiewicz, K., Stępak, B., Gazińska, M., & Antończak, A. J. Structural, thermal and mechanical changes in poly(l-lactide)/hydroxyapatite composite extruded foils modified by CO2 laser irradiation. <i>European Polymer Journal</i> , 114, 57–65. https://doi.org/10.1016/J.EURPOLYMJ.2019.02.030	2019
7	Szustakiewicz, K., Gazińska, M., Kryszak, B., Grzymajło, M., Pigłowski, J., Wiglusz, R. J., & Okamoto, M. (2019). The influence of hydroxyapatite content on properties of poly(L-lactide)/hydroxyapatite porous scaffolds obtained using thermal induced phase separation technique. <i>European Polymer Journal</i> , 113, 313–320. https://doi.org/10.1016/J.EURPOLYMJ.2019.01.073	2019
8	Szustakiewicz, K., Stępak, B., Antończak, A. J., Maj, M., Gazińska, M., Kryszak, B., & Pigłowski, J. Femtosecond laser-induced modification of PLLA/hydroxyapatite composite. <i>Polymer Degradation and Stability</i> , 149, 152–161. https://doi.org/10.1016/J.POLYMDEGRADSTAB.2018.01.015	2018
9	Stępak, B. D., Antończak, A. J., Szustakiewicz, K., Koziół, P. E., & Abramski, K. M. Degradation of poly(l-lactide) under KrF excimer laser treatment. <i>Polymer Degradation and Stability</i> , 110, 156–164. https://doi.org/10.1016/J.POLYMDEGRADSTAB.2014.08.028	2014
10	Antończak, A. J., Stępak, B. D., Szustakiewicz, K., Wójcik, M. R., & Abramski, K. M. Degradation of poly(l-lactide) under CO2 laser treatment above the ablation threshold. <i>Polymer Degradation and Stability</i> , 109, 97–105. https://doi.org/10.1016/J.POLYMDEGRADSTAB.2014.07.004	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.)	Group leader of WUST
	Project title	Multifunctional biologically active composites for applications in bone regenerative medicine
	Sources of funding	FNP
	Name of the call	TEAM-NET
	Implementation period	10.2019-6.2023
2.	Role in the project (e.g., principal investigator, work package leader, etc.)	Group leader of WUST
	Project title	Multifunctional composite material with antimicrobial and pro-regenerative properties for use in bone surgery
	Sources of funding	NCBiR
	Name of the call	Techmatstrateg 2
	Implementation period	2018-2023



3.	Role in the project (e.g., principal investigator, work package leader, etc.)	investigator
	Project title	Preparation and characterisation of biocomposites based on nanoapatites for theranostic
	Sources of funding	NCN
	Name of the call	Opus 10
	Implementation period	2016-2021
4.	Role in the project (e.g., principal investigator, work package leader, etc.)	investigator
	Project title	The influence of technological parameters of laser process on bio, physicochemical properties of biodegradable polymers
	Sources of funding	NCN
	Name of the call	Opus 5
	Implementation period	2014-2017
5.	Role in the project (e.g., principal investigator, work package leader, etc.)	investigator
	Project title	Nanocomposites and smart materials
	Sources of funding	EIT+
	Name of the call	NANOMAT
	Implementation period	2010-2014

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.	Research Stay: Toyota Technological Institute, Nagoya, Japan, prof. Masami Okamoto group; financed by Matsumae International Foundation (Tokio, Japan)	(04-09) 2017
2.	Cooperation with prof Joerg Kressler, University of Halle who is a foreign mentor for my PhD student in TEAM-NET program; cooperation in the field of polymer synthesis	2021-now
3.	Research Stay: UC Berkeley, Department of Materials Science and Engineering, prof. Ting Xu group (TOP500 Innovators Program)	05-08.2013

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.	Lecture: "Polymeric foam scaffolds for bone tissue engineering" which is a part of "Najnowsze Kierunki Badań"	2021-now
2.		
3.		



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.	Michał Grzymajło		2022
2.	Bartłomiej Kryszak		2021
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.	Matsumae International Foundation scholarship	2017
2.		
3.		

8. Other significant achievements

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

During my work, I participated in the implementation of 8 scientific projects. I also designed a laboratory for cooperation with business entities. So far, together with my group, I have carried out research for more than 100 companies from Poland and the EU.