



ACADEMIC TEACHER PROFESSIONAL EXPERIENCE

DOCTORAL SCHOOL OF WROCLAW UNIVERSITY OF SCIENCE AND TECHNOLOGY

1. Basic information

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| Name, surname: | Marta, Fiedot |
| Grade / Title: | PhD |
| Scientific discipline | automatyka, elektronika, elektrotechnika i technologie kosmiczne / control, electronic, electrical engineering and space technologies |
| Faculty: | W3 Wydział Chemiczny / Faculty of Chemistry |
| Email address: | marta.fiedot-tobola@pwr.edu.pl |
| Link to home page and/or research profiles (Google Scholar, ResearchGate, etc.) | https://www.researchgate.net/profile/Marta-Fiedot |

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. | Podstawczyk, D., Nizioł, M., Szymczyk-Ziółkowska, P., & Fiedot-Toboła, M. (2021). Development of thermoinks for 4D direct printing of temperature-induced self-rolling hydrogel actuators. <i>Advanced Functional Materials</i> , 31(15), 2009664. | 2021 |
| 2. | <u>Fiedot-Toboła, M.*</u> , Dmochowska, A., Potaniec, B., Czajkowska, J., Jędrzejewski, R., Wilk-Kozubek, M., ... & Cybińska, J. (2021). Gallic Acid Based Black Tea Extract as a Stabilizing Agent in ZnO Particles Green Synthesis. <i>Nanomaterials</i> , 11(7), 1816. | 2021 |
| 3. | <u>Fiedot-Toboła, M.*</u> , Dmochowska, A., Jędrzejewski, R., Stawiński, W., Kryszak, B., & Cybińska, J. (2021). Pectin-organophilized ZnO nanoparticles as sustainable fillers for high-density polyethylene composites. <i>International Journal of Biological Macromolecules</i> , 182, 1832-1842. | 2020 |
| 4. | <u>Bastrzyk, A.*</u> , <u>Fiedot-Toboła, M.*</u> , Maniak, H., Polowczyk, I., & Płaza, G. (2020). Surfactin as a green agent controlling the growth of porous calcite microstructures. <i>International Journal of Molecular Sciences</i> , 21(15), 5526. | 2020 |
| 5. | Dmochowska, A., Czajkowska, J., Jędrzejewski, R., Stawiński, W., Migdał, P., & <u>Fiedot-Toboła*</u> , M. (2020). Pectin based banana peel extract as a stabilizing agent in zinc oxide nanoparticles synthesis. <i>International Journal of Biological Macromolecules</i> , 165, 1581-1592. | 2020 |
| 6. | <u>Fiedot-Toboła, M.*</u> , Suchorska-Woźniak, P., Startek, K., Rac-Rumijowska, O., Szukiewicz, R., Kwoka, M., & Teterycz, H. (2020). Correlation between microstructure and chemical composition of zinc oxide gas sensor layers and their gas-sensitive properties in chlorine atmosphere. <i>Sensors</i> , 20(23), 6951. | 2020 |
| 7. | <u>Fiedot-Toboła, M.*</u> , Ciesielska, M., Maliszewska, I., Rac-Rumijowska, O., Suchorska-Woźniak, P., Teterycz, H., & Bryjak, M. (2018). Deposition of zinc oxide on different polymer textiles and their antibacterial properties. <i>Materials</i> , 11(5), 707. | 2018 |



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| 8. | Fiedot, M.*, Maliszewska, I., Rac-Rumijowska, O., Suchorska-Woźniak, P., Lewińska, A., & Teterycz, H. (2017). The relationship between the mechanism of zinc oxide crystallization and its antimicrobial properties for the surface modification of surgical meshes. <i>Materials</i> , 10(4), 353. | 2017 |
| 9. | Rac-Rumijowska, O.*, Fiedot, M., Karbownik, I., Suchorska-Woźniak, P., & Teterycz, H. (2017). Synthesis of silver nanoparticles in NMMO and their in situ doping into cellulose fibers. <i>Cellulose</i> , 24, 1355-1370. | 2017 |
| 10. | Karbownik, I., Fiedot, M.*, Rac, O., Suchorska-Woźniak, P., Rybicki, T., & Teterycz, H. (2015). Effect of doping polyacrylonitrile fibers on their structural and mechanical properties. <i>Polymer</i> , 75, 97-108. | 2015 |

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.) | principal investigator |
| | Project title | Food freshness indicators based on pectin and natural dyes |
| | Sources of funding | MNiSW |
| | Name of the call | Internal grant, PWr/W3 |
| | Implementation period | 2023-2024 |
| 2. | Role in the project (e.g., principal investigator, work package leader, etc.) | principal investigator |
| | Project title | Polymer composites with fungicidal and bactericidal properties for use in the furniture industry |
| | Sources of funding | MNiSW |
| | Name of the call | Internal grant, PORT-Łukasiewicz |
| | Implementation period | 2017-2018 |
| 3. | Role in the project (e.g., principal investigator, work package leader, etc.) | principal investigator |
| | Project title | Assessment of the influence of platinum on the parameters of a resistance chlorine sensor |
| | Sources of funding | MNiSW |
| | Name of the call | Internal grant, PWr/W12 |
| | Implementation period | 2016-2017 |
| 4. | Role in the project (e.g., principal investigator, work package leader, etc.) | principal investigator |
| | Project title | Modern antibacterial materials based on zinc oxide |
| | Sources of funding | MNiSzW |
| | Name of the call | Diamentowy Grant |
| | Implementation period | 2013 – 2017 |
| 5. | Role in the project (e.g., principal investigator, work package leader, etc.) | principal investigator |
| | Project title | Gas-sensitive properties of one-dimensional zinc oxide structures |



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|-----------------------|---------------------|
| Sources of funding | Urząd Marszałkowski |
| Name of the call | Grant Plus |
| Implementation period | 2015-2016 |

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. | N/A | |
| 2. | | |
| 3. | | |

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. | “Modern macromolecular engineering materials” (W03INC-SD0114W): co-preparing the course card, course materials, conducting classes in English | 2024 |
| 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. | N/A | | |
| 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. | Scholarship of the Minister of Science and Higher Education for achievements in science, received 3 times | 2011, 2012, 2015 |
| 2. | The best graduate of Wrocław University of Science and Technology in the 2012/2013 academic year | 2013 |
| 3. | Honored in the national competition "Gold Medal of Chemistry" organized by the Institute of Physical Chemistry of the Polish Academy of Sciences | 2012 |

8. Other significant achievements



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

CONFERENCE PRIZES:

- 1) international conference, presentation "Microstructure of zinc oxide and concentration of oxygen vacancies", 42th International Spring Seminar on Electronics Technology 2019, Wrocław, first place in the competition for the best presentation,
- 2) international conference, poster "The effect of doping active layer with gold nanoparticles on the response of chlorine sensor", 40th International Microelectronics and Packaging IMAPS 2016 Conference, Wałbrzych, an award for a woman of science awarded by the Visegrad Network for Microelectronics Engineering Scientists (VISmes),
- 3) international conference, poster "Chlorine sensing properties of zinc oxide resistive gas sensor doped with platinum", 4th International Conference on Optical and Electronic Sensors COE'2016, Gdansk, first place in the competition for the best poster,
- 4) international conference, poster in English "The effect of humidity on the resistive gas sensor response in chlorine", 3th EuCheMS Inorganic Chemistry Conference, Wrocław, first place in the competition for the best poster.