

### Data of Supervisors of the Doctoral School at WPUT

Supervisor: (academic titles and degrees, name and surname)	<b>Dr hab. inż. Magdalena Zdanowicz, prof. ZUT</b>
Units:	Center of Bioimmobilisation and Innovative Packaging Materials, Faculty of Food Sciences and Fisheries, West Pomeranian University of Technology in Szczecin
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ORCID	0000-0002-7049-1656
Scientific Discipline(s):	Food Technology Material Engineering
Research Areas (max. 2000 characters):	<p>Supervisor conducts research on plastics processing (mainly as packaging materials) and their functionalization including active packaging (antimicrobial, antioxidative properties). Research areas also include the preparation and characterization of novel, environmentally friendly media/solvents called: Deep Eutectic Solvents (DES) used as solvents and/or plasticizers for different polymers, functional additives/modifiers of plastics and biocomposites, catalysts or extractants (e.g. for polymers, active compounds).</p> <p>Research focuses mainly on biobased and biodegradable polymers and naturally-originated materials as well as edible coatings/packaging and utilization of side products.</p> <p>Scientific interest also revolves around chemical recycling of packaging materials.</p> <p>Material characteristics: FTIR, mechanical properties (stretching, puncture, friction), barrier properties, DMTA, UV-Vis analysis (barrier towards UV, DPPH, TPC), color changes, accelerated ageing.</p>
Keywords (max. 10):	biopolymers, polysaccharides, deep eutectic solvents, plastics processing, packaging, active packaging, plasticization, functionalization, hydrocolloids