


<b>Title, Name and surname</b> Prof. Katarzyna Zarębska	
<b>Faculty and Department</b> Faculty of Energy and Fuels, Dep. of Coal Chemistry and Environmental Sciences	
<b>Keywords.</b> nanoporous materials; adsorption, deformation, carbon dioxide sequestration, mathematical modeling, LCA analysis, Electromobility, fly ash, carbonation, geopolymers, circular economy; clean coal technology, Pressure Swing Adsorption (PSA)	
<b>Scientific profile.</b> My research interests are focused on physicochemistry of hard coals and the preparation and modification of natural and synthetic sorbents, including activated carbons, and physicochemical methods of identifying the porous structures of these materials, both experimentally and theoretically..	
<b>Exemplary thesis titles</b> -Sorption of binary gaseous mixtures; - Synthesis of monoliths with sorption properties; - Adsorbent hydrogen storage; - Removal of ammonia by sorption methods	
<b>The form of conducting master's theses</b> Students participate in weekly meetings where the research progress and plans for the next week's are presented. The meeting is organized together with Ph.D. students and young staff members.	