Name and surname:	Anna Karczewska
Academic Degree:	prof. dr hab. inż. (Prof.)
Institute/Department:	Institute of Soil Science, Plant Nutrition and Environmental Protection
e-mail address:	anna.karczewska@upwr.edu.pl
ORCID:	0000-0003-1457-1368
UPWr Base of Knowledge - link:	https://bazawiedzy.upwr.edu.pl/info/author/UPWr78599776ae6844018c22307835928c76?r=author&tab=&title=Profil%2Bosoby%2B%25E2%2580%2593%2BAnna%2BKarczewska%2B%25E2%2580%2593%2BUniwersytet%2BPrzyrodniczy%2Bwe%2BWroc%25C5%2582awiu&lang=pl
Researchgate:	www.researchgate.net/profile/Anna_Karczewska2
Personal website / Working group website:	http://www.org.up.wroc.pl/igosr/english/index_en.html
Participation in projects in last 5 years (chronological; with distinction into PI (kierownik) and RF (wykonawca)):	2015-2019: Project NCN 2014/13/B/ST10/02978 : Antimony speciation in soils of selected areas in Lower Silesia, as related to environmental risk – PI; 2017-2020: Project NCN 2016/21/B/ST10/02221: Bioavailability and ecotoxicity of arsenic in heavily contaminated soils in the sites of historical ore mining and processing - as related to environmental risk assessment - PI
Do you plan to engage support of second supervisor or auxiliary supervisor?	YES
	Auxiliary supervisor
Name and surname:	Dorota Kawałko
Academic Degree:	dr inż. (Dr. Eng.)
Faculty, Institute/Department:	Institute of Soil Science, Plant Nutrition and Environmental Protection
e-mail address:	dorota.kawalko@upwr.edu.pl
ORCID:	0000-0002-8339-648X
UPWr Base of Knowledge - link or most important publications from last 3 year (JCR) / patents from last 3 years (maximum 5):	https://bazawiedzy.upwr.edu.pl/info/author/UPWre49a6b0e5b3b4e7693dd135b88d603ae?r=author&tab=&title=Profil%2Bosoby%2B%25E2%2580%2593%2BDorota%2BKawa%25C5%2582ko%2B%25E2%2580%2593%2BUniwersytet%2BPrzyrodniczy%2Bwe%2BWroc%25C5%2582awiu&lang=pl
Researchgate:	https://www.researchgate.net/profile/Dorota-Kawalko-2
Personal website / Working group website:	http://www.org.up.wroc.pl/igosr/english/index_en.html
Projects in last 5 years (chronological; with distinction into PI (kierownik) and RF (wykonawca)):	Auxiliary supervisor in the PhD project "Selected aspects of the soil particle size analysis by measuring the apparent weight of a float immersed in suspension"
PhD topic:	Organic matter balance and soil health indices in urban green areas under diverse ecological conditions and various management
Research discipline in Doctoral School:	Agriculture and Horticulture
Short description of the research problem to be solved in the PhD (minimum 1000 characters):	The soils of urban green areas, such as parks, urban forests, lawns and other spaces covered by vegetation, constitute a valuable pool of natural resources in cities, providing various ecosystem services where most of the space is largely sealed. Urban soils are an important reservoir of organic matter, thus participating in carbon sequestration and its withdrawal from biogeochemical cycling. High content of soil organic matter determines soil fertility, water retention capacity, soil biodiversity and biological and chemical indicators of soil health. Planned research will be aimed at determining the impact of various factors on the processes of organic matter transformation and the ability to sequester carbon, in the conditions of a large city. The analyzed factors will include, among others: 1) various state of soil contamination resulting from the type of parent rocks that often contain construction waste with admixtures of rubble, sediments from dredging water reservoirs, ashes, etc., 2) and the type of materials used for soil fertilization, e.g. composts produced from urban waste, often highly enriched in heavy metals and other contaminants, 3) land management, including, among others: irrigation, fertilization, mowing lawns, and the way of managing leaf biomass. The research will be conducted in variously polluted urban green areas in several large cities. As a result of these studies, optimal conditions for accumulation of soil humus and ensuring the best possible soil health parameters in various urban settings will be determined.
Professional skills for PhD candidate (e.g. master program, specializations, softwares, language, analytical techniques, minimum 500 characters):	Graduation in chemical, biological, agricultural or environmental sciences. Good command of English language in reading, writing and talking. Basic knowledge in the field of soil science (in particular soil chemistry), botany, environmental microbiology and ecotoxicology. Experience in work in a chemical laboratory, basic skills in chemical analyses. Knowledge of issues related to the properties and transformation of organic matter will be an additional advantage. The ability to use MS Office package, and basic statistical tests. The knowledge of Statistica software, as well as graphical software (eg. Corel, Photoshop) will be welcome. Inquisitiveness and analytical mind will be necessary.
a) Project title:	none
b) Agreement number:	none
c) Number of months in the project to support PhD student (in months; starting from 1st of October 2024):	0
Project website:	