

Candidate supervisor's information summary form

Name and surname, degree, title: dr hab. Mateusz Grygoruk, prof. SGGW	
Discipline/ disciplines of science	Environmental Engineering, Mining and Energetics
Professional development (degrees and titles) in chronological order	Associate Professor – 2020 Habilitation – 2019 PhD in Agricultural/Engineering Sciences – 2013 M.Sc. Earth Sciences (Geography) - 2007
Most important publications/patens over the last 3 years (maximum 10)	Kharanzhevskaya, Y., Sinyutkina A., Maloletko, A., Giełczewski, M., Kirschej, T., Michałowski, R., Mirosław-Świątek, D., Okruszko, T., Osuch, T., Trandziuk, P., Grygoruk, M. 2020. Assessing mire-river interaction in a pristine Siberian bog-dominated watershed – Case study of a part of the Great Vasyugan Mire, Russia. <i>Journal of Hydrology</i> 590, 125315. Walton, C., Zak, D., Audet, J., Peterson, R.J., Lange, J., Oehmke, C., Wichtmann, W., Kreyling, J., Grygoruk, M. , Jabłońska, E., Kotowski, W., Wiśniewska, M., Ziegler, R., Hoffmann, C.C., 2020. Wetland buffer zones for nitrogen and phosphorus retention: impacts of soil type, hydrology and vegetation. <i>Science of the Total Environment</i> 727, 138709. Grygoruk, M. , Rannow, S. 2017. Mind the Gap! Lessons from science-based stakeholder dialogue in climate-adapted management of wetlands. <i>Journal of Environmental Management</i> 186, 108-119.
Experience in work with doctoral students (defended doctoral dissertations, doctoral programmes opened) in chronological order	Assisting promotor – Ewelina Szalkiewicz, PhD. (Uniwersytet Przyrodniczy w Poznaniu) – Ph.D. defended in March 2021 r. Assisting promotor –Katarzyna Suska, M.Sc. (Instytut Rybactwa Śródlądowego w Olsztynie) – Ph.D. to be defended in June 2021 r. Promotor - Marta Stachowicz, M.Sc. (SGGW w Warszawie) Promotor – Shoab Jamro, M.Sc. (SGGW w Warszawie)
Project/grants achievements (from the last 10 years)	2018-2021 - DESIRE – Development of sustainable adaptive peatland management by restoration and paludiculture for nutrient retention and other ecosystem services in the Neman river catchment (Interreg Baltic Sea Programme; project coordinator in SGGW). 2017-2020 - CLEARANCE – Circular economy approach to river pollution by agricultural nutrients with use of carbon-storing

	<p>ecosystems (ERA-NET WaterWorks 2016; project coordinator in SGGW).</p> <p>2017-2019 - SIBWET - Modelling hydrology of the Vasyugan mire in West Siberian Plain for effective land management and climate change mitigation (NABU; project leader).</p> <p>2013-2016 - MIRACLE – Mires and climate: towards enhancing functional resilience of fen peatlands (Norweski Mechanizm Finansowy; task leader)</p>
<p>Topic – research problem – for which the candidate supervisor seeks a doctoral student</p>	<p>1) Analysis of responses of riverine and wetland ecosystems to pressures from human activities and to restoration measures (distinguishing between biotope and biocenosis responses);</p> <ul style="list-style-type: none"> - research tools - hydrological modelling, statistical analysis, case study, research protocol before-after control-impact. - Study area - any, to be agreed. <p>2) Assessment of the possibility to achieve carbon neutrality through restoration of peatlands - quantification of peatland water retention, carbon sequestration in open peat soils, changes in peatland recharge as a result of ongoing hydrological transformations in the catchment;</p> <ul style="list-style-type: none"> - research tools - field research, statistical analysis, case study, spatial analysis (upscaling of results to European scale). - Study area - any (indicating the objects researched so far in Poland - Biebrza Valley, Rospuda Valley; in Niemen river basin, in Norway - Kaldvassmyra, Aurstadmasan, Midtfjellmosen)
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