

Candidate supervisor's information summary form

Name and surname, degree, title: Dr hab. Jarosław Chormański, prof. SGGW	
Discipline/ disciplines of science	<ol style="list-style-type: none"> 1. Environmental engineering, mining and energy 2. Civil engineering, geodesy and transport
Professional development (degrees and titles) in chronological order	<p>1994 - MSc in Earth Science / Physical Geography /Hydrology, Sedimentology; Warsaw University Fac. Geography and Regional Studies</p> <p>2003, PhD in Agricultural Science / Environmental Engineering, Warsaw University of Life Science – SGGW, Fac. Civil and Environmental Eng.</p> <p>2014, Postdoc. habilitation in Technical Science/ Environmental Engineering, Technical University of Warsaw Fac. Environmental Eng.</p>
Most important publications/patens over the last 3 years (maximum 10)	<ol style="list-style-type: none"> 1. Ciężkowski, .; Kleniewska, M.; Chormański, J. 2020 Thermal and Optical Indices for Wetland Habitats, are They Showing the Same Thing? JSTARS, 13, 3951-3957 2. Demarchi, L.; Kania, A.; Ciężkowski, W.; Piórkowski, H; Oświecimska-Piasko, Z.; Chormański, J. 2020 Recursive Feature Elimination and Random Forest Classification of Natura 2000 Grasslands in Lowland River Valleys of Poland Based on Airborne Hyperspectral and LiDAR Data Fusion. Remote Sens., 12 (11), 1842 3. Barrios, J.M.; Arboleda, A.; cDe Pue, J.; Chormański, J.; Gellens-Meulenberghs, F. 2020 Continuous Daily Evapotranspiration with Optical Spaceborne Observations at Sub-Kilometre Spatial Resolution. Remote Sens., 12 (14), 2218. 4. Ciężkowski, W.; Szporak-Wasilewska, S.; Kleniewska, M.; Jóźwiak, J.; Gnatowski, T.; Dąbrowski, P.; Góraj, M.; Szatyłowicz, J.; Ignar, S.; Chormański, J. 2020 Remotely Sensed Land Surface Temperature-Based Water Stress Index for Wetland Habitats. Remote Sens., 12, 631. 5. da Silva, A.R., Demarchi, L., Sikorska, D., et al. 2022. Multi-source remote sensing recognition of plant communities at the reach scale of the Vistula River, Poland. Ecological Indicators 142, 1–10. 6. Mielczarek D., Sikorski P., Archiciński P., Ciężkowski W., Zaniewska E., and Chormański J., The Use of an Airborne Laser Scanner for Rapid Identification of Invasive Tree Species Acer negundo in Riparian Forests, „Remote Sensing”, 2022, t.15, pp. 1–19 7. Berezowski, T., Partington, D., Chormański, J., Batelaan, O., 2019, Spatiotemporal Dynamics of the Active Perirheic Zone in a Natural Wetland Floodplain. Water Resources Research. 55 (11), 9544-9562 8. Berezowski, T.; Wassen, M.; Szatyłowicz, J.; Chormański, J.; Ignar, S.; Batelaan, O. & Okruszko, T. 2018, Wetlands in flux: looking for the drivers in a central European case, Wetlands Ecology and Management, 26, 849-

	<p>863,</p> <p>9. Ciężkowski, W.; Berezowski T.; Kleniewska, M.; Szporak-Wasilewska, S.; Chormański, J. 2018 Modelling Wetland Growing Season Rainfall Interception Losses Based on Maximum Canopy Storage Measurements. <i>Water</i> , 10 (1), 41</p> <p>10. Piotr Sikorski, Beata Gawryszewska, Daria Sikorska, Jarosław Chormański, Axel Schwerk, Agata Jojczyk, Wojciech Ciężkowski, Piotr Archiciński, Łepkowski Maciej, Izabela Dymitryszyn, Arkadiusz Przybysz, Marzena Wińska-Krysiak, Barbara Zajdel, Jarosław Matusiak, Edyta Łaszkiwicz. 2021; The value of doing nothing – How informal green spaces can provide comparable ecosystem services to cultivated urban parks. <i>Ecosystem Services</i>. 50, 1-12</p>
<p>Experience in work with doctoral students (defended doctoral dissertations, doctoral programmes opened) in chronological order</p>	<p>defended doctoral dissertations</p> <ol style="list-style-type: none"> 1. Tomasz Berezowski (Vrije Universitat Brussels) 2. Wojciech Ciężkowski <p>doctoral programmes opened :</p> <ol style="list-style-type: none"> 1. Małgorzata Słapińska [2018] 2. Joanna Suliga [2018] - (Vrije Universitat Brussels/SGGW) 3. Jacek Józwiak [2021] <p>Doctoral school students:</p> <ol style="list-style-type: none"> 1. Paweł Łochowski [2022]
<p>Project/grants achievements (from the last 10 years)</p>	<ol style="list-style-type: none"> 1. NCN OPUS: Interception-TRanspiration-EVaporation, interdependencies of hydrological processes on WETland ECOsystems INTREV-WetEco (2013-2016), Principal Investigator; 2. NCN OPUS - MARSH-ALL – The experimental use of innovative remote sensing techniques (Pol-In-SAR, HyperSpectral) for the assessment of the selected ecohydrological elements of lowland river valleys (2013-2017), Key investigator; 3. STEREO III (BELSPO) Earth Observation - SR/00/301 HIWET - High-resolution modelling and monitoring of water and energy transfers in wetland ecosystems (2014- 2018). Leader of Polish Research Group; 4. 7FP REFORM 2011-2015- REstoring rivers FOR effective catchment Management, Investigator; 5. HABITARS – 2016-2019 - Innovative approach supporting monitoring of the non-forest Natura 2000 habitats – using remote sensing method. BIOSTRATEG/Edition II. Leader of Working Group, Key investigator; 6. NCN 2018-2020 - 2017/25/B/ST10/02967 Reach-scale hydromorphological characterization of European rivers using Hyperspectral and LiDAR data acquired from airborne and UAV platforms. Principal Investigator;
<p>Topic – research problem – for which the candidate supervisor seeks a doctoral student</p>	<ol style="list-style-type: none"> 1. Spatial (classification) and statistical (machine learning, deep learning) analysis of thermal, hyperspectral and LiDAR remote sensing data obtained from the satellite, aerial and UAV platforms, towards mapping of urbanised and environmental valuable area. 2. Integration of satellite imagery with aerial data using the method of sharpening spatial resolution called "superresolution" in classification of

	urbanised areas 3. The role of low impact development in the water balance modelling in the urban catchment
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