Candidate supervisor's information summary form
maximum 2 pages – it should be a summary of most important achievements

Name and surname, degree, title: Jarosław Chormański, dr hab.	
Academic discipline/disciplines	1. Environmental engineering, mining and energy (75%) 2. Civil engineering and transport
Professional development (degrees and titles) in chronological order	**1994 - MSc** in Earth Science / Physical Geography /Hydrology, Sedimentology; Warsaw University Fac. Geography and Regional Studies **2003, PhD** in Agricultural Science / Environmental Engineering, Warsaw University of Life Science – SGGW, Fac. Civil and Environmental Eng. **2014, Postdoc. habilitation** in Technical Science/ Environmental Engineering, Technical University of Warsaw Fac. Environmental Eng.
Most important publications/ patents in the last 3 years (maximum 10)	1. 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. 2. 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 3. Sudra, P., Demarchi, L., Wierzbicki, G., and Chormański, J. 2023. A Comparative Assessment of Multi-Source Generation of Digital Elevation Models for Fluvial Landscapes Characterization and Monitoring. Remote Sensing 15, 1–26. 4. Wierzbicki, G., Sudra, P., Lewicki, T., Pawłowski, K., Jóźwiak, J., and Chormański, J. 2024. Dry Means Green. Using ALS LiDAR DEM to Determine the Geomorphological Reaction of a Large, Untrained, European River to Summer Drought (the Vistula River, Warsaw, Poland). IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing, 1–24. 5. Papierowska, E., Sikorska, D., Szporak-Wasilewska, S., et al. 2023. Leaf wettability and plant surface water storage for common wetland species of the Biebrza peatlands (northeast Poland). Journal of Hydrology and Hydromechanics 71, 169–176.
Experience in work with doctoral students (defended doctoral	**defended doctoral dissertations** 1. Tomasz Berezowski (Vrije Universitat Brussels)

dissertations, initiated doctoral procedures) in chronological order	2. Wojciech Ciężkowski **doctoral programmes opened :** 1. Jacek Jóźwiak [2021] **Doctoral school students:** 2. Paweł Łochowski [2022] 3. Kacper Pawłowski [2025] 4. Aziz Aitbaev [2025]
Achievements in the area of projects/grants (in the last 5 years)	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.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; 5.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.
Subject area of the research project for which the candidate student is being recruited	1. Spatial (classification) and statistical (machine learning, deep learning) analysis of thermal, hyperspectral, and LiDAR remote sensing data obtained from the aerial and UAV platforms, towards mapping natural habitats of river valleys, including aquatic and emergent vegetation, identification, and dynamics of changes in morphological units. 2. Integration of satellite imagery with aerial data (UAV) using a spatial resolution sharpening method called "super-resolution" in identifying threats to natural plant communities or morphological units.
<u>Contact details:</u> Institute E-mail address Telephone number	Faculty of Civil and Environmental Engineering, Institute of Environmental Engineering; Department of Environmental Development and Remote Sensing jaroslaw_chormanski@sggw.edu.pl +48 22 5935311; +48 60114668