

CURRICULUM VITAE

GENERAL INFORMATION

First name: **Daniel**
Last name: **Gebler**

Date of birth: 31.10.1985
Nationality: Polish
Gender: Male



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RESEARCH ACTIVITY

My research activities focus mainly on theoretical and applied aspects of freshwater ecosystem functioning. My primary domain is the ecology of aquatic plants, river ecology, habitat quality and hydromorphological degradation, ecological quality assessment and monitoring, and biodiversity assessment. The research is related to human pressure on freshwaters and includes blue and green infrastructure, ecosystem services, water quality, river restoration and environmental impact assessment. His study includes the use of artificial neural networks in ecological modelling and big data analysis.

WORK EXPERIENCE

Since 01.10.2016 Poznan University of Life Sciences – Assistant professor;
01.10.2015 – 30.09.2016 Poznan University of Life Sciences – Assistant;
01.10.2012 – 30.09.2015 Poznan University of Life Sciences – Academic teacher.

EDUCATION

01.10.2010 – 21.05.2015 **PhD studies in Environmental protection and management**
Poznan University of Life Sciences
21.05.2015 defence of PhD thesis titled: *Analysis of possible use of macrophytes in the ecological status assessment of modified rivers using neural networks*

01.10.2005 – 17.06.2010 **MSc studies in Environmental Protection**
Poznan University of Life Sciences

17.06.2010 defence of MSc thesis titled: *Calibration of flowing waters assessment systems in the variable habitat conditions of different river types in Poland.*

FOREIGN LANGUAGES

English – advanced;
German – basic.

EXPERIENCE ABROAD

24.07.2024 – 05.08.2024 study visit at the University of Lisbon, Portugal;

01.10.2023 – 14.10.2023 study visit at the Connecticut Agricultural Experiment Station, USA;

18.09.2023 – 30.09.2023 study visit at the University of Waterloo, Canada;

12.09.2022 – 23.09.2022 study visit at the University of Waterloo, Canada;

05.09.2022 – 09.09.2022 study visit at McGill University, Canada;

12.08.2022 – 25.08.2022 internship at the University of Lisbon, Portugal;

09.08.2021 – 26.08.2021 study visit at the University of Lisbon, Portugal;

01.02.2019 – 31.08.2019 internship at the University of Lisbon, Portugal;

11.09.2018 – 29.09.2018 study visit at the Northwest A&F University, China;

01.09.2016 – 30.11.2016 internship at the Department of Aquatic Ecology, University of Duisburg-Essen, Germany;

18.04.2016 – 22.04.2016 study visit at the Department of Biology, Erciyes University, Turkey;

02.11.2015 – 01.12.2015 internship at the Centre for Ecology & Hydrology in Edinburgh, Scotland;

01.10.2013 – 31.12.2013 internship at the Department of Aquatic Ecology, University of Duisburg-Essen, Germany;

15.10.2011 – 29.10.2011 study visit at the Norwegian Institute for Water Research in Oslo, Norway.

RESEARCH PROJECTS

2024-2027 *Diversity, distribution and ecological requirements of macroscopic algae in river ecosystems in anthropopressure gradient* –project founded by Polish National Science Centre (project leader);

2022 – 2025 *Bringing nature back – biodiversity-friendly nature-based solutions in cities* – project founded by European Biodiversity Partnership – BIODIVERSA+ (participant);

- 2019 *Utilising big data from river monitoring in freshwater ecological research* – project founded by Polish National Agency of Academic Exchange (project leader);
- 2017 – 2020 *Environmental requirements of water crowfoots (*Ranunculus sect. Batrachium*, *Ranunculaceae*, *Plantae*) in running waters in Poland as the basis for the effective protection and river bioindication development* – project founded by Polish National Science Centre (participant);
- 2013 – 2015 *Estimation of the possibility of assessing ecological potential of the artificial and heavily modified water bodies by macrophytes* – project founded by Polish National Science Centre (project leader);
- 2013 *Are aquatic plants suitable bioindicators of eutrophication in heavily modified water bodies?* – short research project carried out in Germany, funded by The German Academic Exchange Service (project leader);
- 2011 *Monitoring of species and habitats with particular emphasis on special areas of conservation of the Natura 2000 - the third phase* – works carried out on behalf of the Institute of Nature Conservation Polish Academy of Sciences (participant);
- 2010 *Development and validation of methods for integrated assessment of ecological status of rivers and lakes to support river basin management plans. Acronym deWELopment* – project supported by Norway Grants (participant).

SCHOLARSHIPS

- 2019 Outgoing scholarship for a research project – Polish National Agency for Academic Exchange (NAWA);
- 2016 Outgoing scholarship for short-term research – German Academic Exchange Service (DAAD);
- 2013/2014 Scholarship under the program "Support for PhD Students in the fields considered strategic for the development of Greater Poland";
- 2013 Outgoing scholarship for short-term research – German Academic Exchange Service (DAAD);
- 2012/2013 Scholarship under the program "Support for PhD Students in the fields considered strategic for the development of Greater Poland";
- 2012/2013 Scientific Scholarship of the Rector for PhD Students;
- 2011/2012 Scholarship under the program "Support for PhD Students in the fields considered strategic for the development of Greater Poland";
- 2005/2006 Educational Enterprise Foundation Scholarship in the year 2005/2006;
- 2004/2005 Scholarship of the Prime Minister in the years 2004-2005 for high school students.

MEMBERSHIPS

Association for the Sciences of Limnology and Oceanography (ASLO);

International Aquatic Plants Group (IAPG);

Polish Hydrobiological Society (part of the European Federation for Freshwater Sciences)

Polish Ecological Society

SCIENTIFIC PAPERS

Yates, A.G., Brua, R.B. Culp, J.M., Aguiar, F.C., Ajayan, A.P., Aspin, T., Bundschuh, M., Calderón, M.R., Csabai, Z., Dallas, H., Datry, T., Dias Silva, K., Dzavi, J., England, J., Erős, T., **Gebler, D.**, Goedkoop, W., González-Ferreras, A.M., Hamilton, D.P., Hughes, R.M., Juen, L., Kefford, G.J., Koroiva, R., Krynak, E.M., Lavoie, I., Lento, J., Ligeiro, R., Martins, R.T., Masese, F.O., Fogaça de Assis Montag, L., Musetta-Lambert, J., Painter, K.J., Poikane, S., Rico, A., Ruaro, R., Sabater, S., Sala Michelan, T., Schoelynck, J., Smucker, N.J., Stanković, I., Stubbington, R., van Deventer, H., van Niekerk, L., Van den Brink, P.J., Várбірó, G. & Wanderi, E.W. 2025. Charting a course for freshwater biomonitoring: The grand challenges identified by the global scientific community. *Ecological Indicators*, 176: 113646;

Szoszkiewicz, K., Achtenberg, K., Debbaut, R., Dekan Carreira, V., **Gebler, D.**, Jusik, S., Kałuża, T., Karttunen, K., Lehti, N., Martin Muñoz, S., Sojka, M., Pereira, A.J., Pinho, P., Schoelynck, J., Staes, J., Tetzlaff, D., Warter, M.M. & Vierikko, K. (2025). Diversification of macrophytes within aquatic nature-based solutions (NBS) developing under urban environmental conditions across European cities. *Ecological Indicators*, 172: 113331;

Warter, M.M., Tetzlaff, D., Soulsby, C., Goldhammer, T., **Gebler, D.**, Vierikko, K., Monaghan, M.T. 2025. Understanding ecohydrology and biodiversity in aquatic nature-based solutions in urban streams and ponds through an integrative multi-tracer approach(link is external). *Hydrology and Earth System Sciences*, 29: 2707–2725;

Gebler D., Segurado P., Ferreira M.T., Aguiar F.C. 2024. Predicting freshwater biological quality using macrophytes: a comparison of empirical modelling approaches. *Environmental Science and Pollution Research*, 31(56): 65092–65108;

Najafzadeh M., Sadat Ahmadi-Rad E., **Gebler D.** 2024. Ecological states of watercourses regarding water quality parameters and hydromorphological parameters: deriving empirical equations by machine learning models. *Stochastic Environmental Research and Risk Assessment*, 38: 665–688;

Marciniak, M., **Gebler, D.**, Grygoruk, M., Zalewska-Gałosz, J., Szoszkiewicz, K. 2024. Different intensities and directions of hyporheic water exchange in habitats of aquatic *Ranunculus* species in rivers—a case study in Poland. *Environmental Science and Pollution Research*, 31: 26315–26319;

- Marciniak M., **Gebler D.**, Grygoruk M., Zalewska-Gałosz J., Szoszkiewicz K. 2023. Hyporheic flow in aquatic Ranunculus habitats in temperate lowland rivers in Central Europe. *Ecological Indicators*, 153: 110422;
- Zalewska-Gałosz J., Kwiatkowska M., Prančl, L. Skubała K., Lučanová M., **Gebler D.**, Szoszkiewicz K. 2023. Origin, genetic structure and evolutionary potential of the natural hybrid *Ranunculus circinatus* × *R. fluitans*. *Scientific Reports*, 13: 9030;
- Gebler D.**, Zalewska-Gałosz J., Jopek M., Szoszkiewicz K. 2022. Molecular identification and habitat requirements of the hybrid *Ranunculus circinatus* × *R. fluitans* and its parental taxa *R. circinatus* and *R. fluitans* in running waters. *Hydrobiologia*, 849: 2999-3014;
- Rivaes R.P., Feio M.J., Almeida S.F.P., Calapez A.R., Sales M., **Gebler D.**, Lozanovska I., Aguiar F.C. 2022. River ecosystem endangerment from climate change-driven regulated flow regimes. *Science of The Total Environment*, 818: 151857;
- Gebler D.**, Szoszkiewicz K. 2022. Response of Aquatic Plants to Extreme Alterations in River Morphology. *Water*, 14: 3746;
- Gebler D.**, Kolada A., Pasztaleniec A., Szoszkiewicz K. 2021. Modelling of ecological status of Polish lakes using deep learning techniques. *Environmental Science and Pollution Research*, 28: 5383–5397;
- Rivaes R.P., Feio M.J., Almeida S.F.P., Vieira C., Calapez A.R., Sales M., Mortagua A., **Gebler D.**, Lozanovska I., Aguiar F.C. 2021. Multi-biologic group analysis for an ecosystem response to longitudinal river regulation gradients. *Science of the Total Environment*, 767: 144327;
- Shah V., Jagupilla S.C.K., Vaccari D.A., **Gebler D.** 2021. Non-linear visualization and importance ratio analysis of multivariate polynomial regression ecological models based on river hydromorphology and water quality. *Water*, 13: 2708;
- Szoszkiewicz K., Jusik S., Pietruczuk K., **Gebler D.** 2020. The Macrophyte Index for Rivers (MIR) as an Advantageous Approach to Running Water Assessment in Local Geographical Conditions. *Water*, 12: 108;
- Szoszkiewicz K., Jusik S., **Gebler D.**, Achtenberg K., Adynkiewicz-Piragas M., Radecki-Pawlik A., Okruszko T., Gielczewski M., Marcinkowski P., Pietruczuk K., Przesmycki M., Nawrocki P., Chmist J., Szostak M. 2020. Hydromorphological Index for Rivers: A New Method for Hydromorphological Assessment and Classification for Flowing Waters in Poland. *Journal of Ecological Engineering*, 21(8): 261-271;
- Iversen L. L., Winkel A., Baastrup-Spohr L., Hinke A. B., Alahuhta J., Baattrup-Pedersen A., Birk S., Brodersen P., Chambers P.A., Ecke F., Feldmann T., **Gebler D.**, Heino J., Jespersen T. S., Moe S. J., Riis T., Sass L., Vestergaard O., Maberly S.C., Sand-Jensen K., Pedersen O. 2019. Catchment properties and the photosynthetic trait composition of 1 freshwater plant communities. *Science*, 366(6467): 878-881;

- Murphy K., Efremov A., Davidson T.A., Molina-Navarro E., Fidanza K., Crivelari Betiol T.C., Chambers P., Tapia Grimaldo J., Varandas Martins S., Springuel I., Kennedy M., Mormul R.P., Dibble E., Hofstra D., Lukács B.A., **Gebler D.**, Baastrup-Spohr L., Urrutia-Estrada J. 2019. World distribution, diversity and endemism of aquatic macrophytes. *Aquatic Botany*, 158: 103127;
- Gebler D.**, Wiegleb G., Szoszkiewicz K. 2018. Integrating river hydromorphology and water quality into ecological status modelling by artificial neural networks. *Water Research*, 139: 395-405;
- Gebler D.**, Szoszkiewicz K., Pietruczuk K. 2017. Modeling of the river ecological status with macrophytes using artificial neural networks. *Limnologica*, 65: 46-54;
- Szoszkiewicz K., Budka A., Pietruczuk K., Kayzer D., **Gebler D.** 2017. Is the macrophyte diversification along the trophic gradient distinct enough for river monitoring? *Environmental Monitoring and Assessment*, 189: 4;
- Wiegleb G., **Gebler D.**, Van de Weyer K., Birk S. 2016. Comparative test of ecological assessment methods of lowland streams based on long-term monitoring data of macrophytes. *Science of the Total Environment*, 541: 1269-1281;
- Muratov R., Szoszkiewicz K., Zhamangara A., Jusik S., **Gebler D.**, Beisenova R., Akbayeva L. 2015. An attempt to prepare Macrophyte Index for Rivers for assessment watercourses in Kazakhstan. *Meteorol. Hydrol. Water Managem.*, 3(2): 27-32;
- Gebler D.**, Kayzer D., Szoszkiewicz K., Budka A. 2014. Artificial neural network modelling of macrophyte indices based on physico-chemical characteristics of water. *Hydrobiologia*, 737: 215-224;
- Błachuta J., Szoszkiewicz K., **Gebler D.**, Schneider S.C. 2014. How do environmental parameters relate to macroinvertebrate metrics – prospects for river water quality assessment. *Polish Journal of Ecology*, 62: 111-122;
- Gebler D.**, Szoszkiewicz K., Bielak S.R., 2013. Diversity of hydromorphological conditions of rivers in the lowland and mountain catchment scale. *Nauka Przyr. Technol.*, 7, 4, #50;