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Education

- Professor titular 2008
- University Professor 2002
- D.Sc. 2000
- Ph.D.1989

Main research areas

Fish ecology in rivers and reservoirs, ecohydrology, biomanipulation, hydroacoustic, trophic interactions in freshwater ecosystems

Professional experience

- 1988 - One month's stay at University of Galway, Ireland
- 1990 - Two months' stay in Pitlochry Freshwater Fisheries Laboratory, Scotland
- 1991 - Two months' stay at University of Vienna, Austria
- 1992 - One month's stay at University of Vienna, Austria
- 1993 - One month's stay at University of Vienna, Austria
- 1996 - Six week stay at Columbus University (USA)

Research projects

In years 1981-2020 participation in 20 national and international research grants.

- Head of two projects granted by State Committee for Scientific Research
- Researches on structure and dynamics of fish communities in the Sulejow Reservoir from the point of view of their pressure on filtrating zooplankton (1996-1999).
- The influence of diurnal and seasonal fish migrations on the efficiency of biomanipulation in the lowland reservoir (2002 – 2004).

International cooperation

- Polish-Austrian program "Integrating hydroacoustics into strategies for quantification of underyearling fish" 2003-2004
- Polish-Austrian program "Distributions patterns within and among fish populations studied on widely differing spatial scales" 2005-2006
- Co-ordination of the scientific and technological international cooperation joint project POLONIUM: „Sampling lake fish populations: intercalibration for the Water Framework Directive" 2006-2007
- Polish-Chinese scientific and technological international cooperation: „Early warning system of Cyanobacteria bloom in freshwater reservoirs and lakes" 2009-2010
- Horizon 2020 project "AMBER: Adaptive Management of Barriers in European Rivers" 2016-2020

Main publications

Author of 83 publications and 63 conference's presentations (including 34 at international level)

Selected publications:

- Zalewski M., **Frankiewicz P.**, Brewińska B. 1985: The factors limiting growth and survival of brown trout, *Salmo trutta m. fario* L. introduced to different types of streams. *Journal of Fish Biology* 27 (suppl. A): 59-73
- Bańbura J., Przybylski M., **Frankiewicz P.** 1989: Selective predation of the pike *Esox lucius*: comparison of lateral plates and some metric features of the three-spined stickleback *Gasterosteus aculeatus*. *Zoologica Scripta* 18 (2): 303-309
- Zalewski M., Brewińska-Zaraś B., **Frankiewicz P.** 1990: Fry communities as a biomanipulating tool in a temperate lowland reservoir. *Arch. Hydrobiol. Beih., Ergebn. Limnol.* 33: 763-774
- Zalewski M., Brewińska-Zaraś B., **Frankiewicz P.**, Kalinowski S. 1990: The potential for biomanipulation using fry communities in a lowland reservoir: concordance between water quality and optimal recruitment. *Hydrobiologia* 200/201: 549-556
- Zalewski M., **Frankiewicz P.**, Nowak M. 1995: Biomanipulation by ecotone management in a lowland reservoir. In: Schiemer F., Zalewski M., Thorpe J.E. (eds), *The Importance of Aquatic-Terrestrial Ecotones for Freshwater Fish. Hydrobiologia* 303: 49-60
- **Frankiewicz P.**, Dąbrowski K., Zalewski M. 1996: Mechanism of establishing bimodality in a size distribution of age-0 pikeperch, *Stizostedion lucioperca* (L.) in the Sulejów Reservoir. *Annales Zoologici Fennici* 33: 321-327
- Keckeis H., **Frankiewicz P.**, Schiemer F. 1996: The importance of inshore areas for spawning nase *Chondrostoma nasus* (Cyprinidae) in a free-flowing section of a large river (Danube, Austria). *Archive fur Hydrobiologie. Suppl.* 113. Large Rivers 10: 51-64
- **Frankiewicz P.**, Schiemer F., Dabrowski K., Zalewski M. 1997: Vertical distribution of planktivorous age-0 pikeperch, *Stizostedion lucioperca* (L.) in relation to particulate or filter feeding. *Fisheries Management and Ecology* 4: 93-101
- Zalewski M., Bis B., Łapińska M., **Frankiewicz P.**, Puchalski W. 1998: The importance of the riparian ecotone and river hydraulics for sustainable basin-scale restoration scenarios. *Aquatic Conservation: Marine and Freshwater Ecosystems* 8: 287-307
- Zalewski M., **Frankiewicz P.** 1998: The influence of riparian ecotones on the dynamics of riverine fish communities. In: Waal L.C, Large A.R.G., Wade P.M. (eds), *Rehabilitation of Rivers. Principles and Implementation* 87-96. Wiley & Sons, Ltd.
- **Frankiewicz P.**, Dabrowski K., Martyniak A., Zalewski M. 1999: Cannibalism as a regulatory force of pikeperch, *Stizostedion lucioperca* (L.), population dynamics in the lowland Sulejow reservoir (Central Poland). *Hydrobiologia* 408/409: 47-55
- Wojtal A., **Frankiewicz P.**, Zalewski M. 1999: The role of the invertebrate predator *Leptodora kindti* in the trophic cascade of a lowland reservoir. *Hydrobiologia* 416: 215-223
- Czesny K., Dabrowski K., **Frankiewicz P.** 2001: Foraging patterns of juvenile walleye (*Stizostedion vitreum*) in a system consisting of a single predator and two prey species: testing model predictions. *Canadian Journal of Zoology* 79 (8): 1394-1400
- Wojtal A., **Frankiewicz P.**, Izydorczyk K., Zalewski M. 2003. Horizontal migrations of zooplankton in a littoral zone of the lowland Sulejow Reservoir (Central Poland). *Hydrobiologia* 506/509: 339-346
- Wojtal A., **Frankiewicz P.**, Wagner I., Zalewski M. 2004. The evaluation of the role of pelagic invertebrate versus vertebrate predators on the seasonal dynamics of filtering Cladocera in a shallow, eutrophic reservoir. *Hydrobiologia* 515: 123-135
- Wojtal A., **Frankiewicz P.**, Andziak M., Zalewski M. 2007. The influence of invertebrate predators on *Daphnia* spatial distribution and survival in laboratory experiments: support for *Daphnia* horizontal migration in shallow lakes. *Internat. Rev. Hydrobiol.* 92: 23-32
- Wojtal A., Bogusz D., Menshutkin V., Izydorczyk K., **Frankiewicz P.**, Wagner-Lotkowska I., Zalewski M. 2008. A study of *Daphnia-Leptodora*-juvenile Percids interactions using a mathematical model in the biomanipulated Sulejow Reservoir. *Ann. Limnol. - Int. J. Lim.* 44 (1): 7-23
- McCarthy T.K., **Frankiewicz P.**, Cullen P., Blaszkowski M., O'Connor W., Doherty D. 2008. Long-term effects of hydropower installations and associated river regulation on River Shannon eel populations: mitigation and management. *Hydrobiologia* 609: 109-124

- Wojtal-Frankiewicz A., **Frankiewicz P.**, Jurczak T., Grennan J., McCarthy T. K. 2010. Comparison of fish and phantom midge influence on cladocerans diel vertical migration in a dual basin lake. *Aquatic Ecology* 44: 243–254
- Wojtal-Frankiewicz A., Sieczko A., Izydorczyk K., Jurczak T., **Frankiewicz P.** 2010. Competitive influence of zebra mussel (*Dreissena polymorpha polymorpha*) on *Daphnia longispina* population dynamics on the presence of cyanobacteria. *International Review of Hydrobiology* 95(4-5): 313-329
- Wojtal-Frankiewicz A., Frankiewicz P. 2011. The impact of pelagic (*Daphnia longispina*) and benthic (*Dreissena polymorpha*) filter feeders on chlorophyll and nutrient concentration. *Limnologica* 41: 191-200
- **Frankiewicz P.**, Wojtal-Frankiewicz A. 2012. Two different feeding tactics of young-of-the-year perch, *Perca fluviatilis* L., inhabiting the littoral zone of the lowland Sulejow Reservoir (Central Poland). *Ecohydrology and Hydrobiology* 12 (1): 35-41
- Wojtal-Frankiewicz A., Bernasińska J., Jurczak T., Gwoździński K., **Frankiewicz P.**, Wielanek M. 2013. Microcystin assimilation and detoxification by *Daphnia* spp. in two ecosystems of different cyanotoxin concentrations. *Journal of Limnology* 72 (1): 154-171
- Wojtal-Frankiewicz A., Bernasińska J., **Frankiewicz P.**, Gwoździński K., Jurczak T. 2014. Response of *Daphnia*'s antioxidant systems to spatial heterogeneity in cyanobacteria concentrations in a lowland reservoir. *PLoS ONE* 9(11): e112597. doi:10.1371/journal.pone.0112597
- Wojtal-Frankiewicz A., Kruk A., **Frankiewicz P.**, Oleksińska Z., Izydorczyk K. 2015. Long-Term Patterns in the Population Dynamics of *Daphnia longispina*, *Leptodora kindtii* and Cyanobacteria in a Shallow Reservoir: A Self-Organising Map (SOM) Approach. *PLoS ONE* 10(12): e0144109. DOI:10.1371/journal.pone.0144109
- Wojtal-Frankiewicz A., Bernasińska J., **Frankiewicz P.**, Gwoździński K., Jurczak T. 2017. The role of environmental factors in the induction of oxidative stress in zebra mussel (*Dreissena polymorpha*). *Aquatic Ecology* 51 (2): 289-306
- Kaczkowski Z., Wojtal-Frankiewicz A., Gągała I., Mankiewicz-Boczek J., Jaskulska A., **Frankiewicz P.**, Izydorczyk K., Jurczak T., Godlewska M. 2017. Relationships among cyanobacteria, zooplankton and fish in sub-bloom conditions in the Sulejow Reservoir. *Journal of Limnology* 76 (2): 380-396 doi: 10.4081/jlimnol.2017.1521
- Kaczkowski Z., **Frankiewicz P.** 2017. Long-term changes in fish community structure revealed by gillnet monitoring in a shallow, lowland reservoir. *Acta Ichthyologica et Piscatoria* 47 (3): 279-288
- Jurczak T., Wojtal-Frankiewicz A., **Frankiewicz P.**, Kaczkowski Z., Oleksińska Z., Bednarek A., Zalewski M. 2019. Comprehensive approach to restoring urban recreational reservoirs. Part 2 – Use of zooplankton as indicators for the ecological quality assessment. *Science of The Total Environment* 653: 1623-1640
- Kaczkowski Z., **Frankiewicz P.**, Góralczyk A. 2019. Relationship between fish assemblage and angler catch in the Sulejów Reservoir, central Poland, in the context of a warming climate. *Fisheries Management and Ecology* 2019: 1–13. DOI: 10.1111/fme.12337
- Jurczak T., Wagner I., Wojtal-Frankiewicz A., **Frankiewicz P.**, Bednarek A., Łapińska M., Kaczkowski Z., Zalewski M. 2019. Comprehensive approach to restoring urban recreational reservoirs. Part 1 – Reduction of nutrient loading through low-cost and highly effective ecohydrological measures. *Ecological Engineering* 131: 81–98
- Chen X., Dolinova I., Sevcu A., Jurczak T., **Frankiewicz P.**, Wojtal-Frankiewicz A., Wan L., Deng Q., Song C., Zhou Y. and Cao X. 2020. Research Strategies adopted by *Aphanizomenon flos-aquae* in response to phosphorus deficiency and their role on growth. *Environmental Sciences Europe* 32: 45. <https://doi.org/10.1186/s12302-020-00328-3>
- Włodarczyk-Marciniak R., **Frankiewicz P.**, Krauze K. 2020. Socio-cultural valuation of Polish agricultural landscape components by farmers and its consequences. *Journal of Rural Studies* 74: 190-200. <https://doi.org/10.1016/j.jrurstud.2020.01.017>

Organisational memberships

- Polish Hydrobiological Society

Main honours and awards

- Scientific Awards of the Rector of Lodz University: 1986, 1991, 1995, 2002
- Didactic Award of the Rector of Lodz University: 1989, 2005, 2006
- Scientific Award of the Minister of National Education: 1998
- Organizational Award of the Rector of Lodz University: 2016