

Curriculum Vitae Bernhard Wehrli

Current position

Professor of Aquatic Chemistry, Institute of Biogeochemistry and Pollutant Dynamics, ETH Zurich, and Eawag, Department of Surface Waters, Kastanienbaum, Switzerland, wehrli@eawag.ch

Education

- 1983-1987 Doctorate in natural sciences, ETH Zurich
- 1983-1984 Post-graduate course in sanitary engineering and water protection ETH Zurich
- 1977-1982 Diploma, chemistry, ETH Zurich, Switzerland

Professional and academic experience

- 2001-today Professor of Aquatic Chemistry, Dept. of Environmental System Sciences, ETH Zurich
- 2011 Visiting professor at Institut National Polytechnique, Toulouse
- 2003 Visiting professor at Hebrew University, Jerusalem
- 1997-2001 Associate professor at ETH Zurich
- 1991-1997 Assistant professor at ETH Zurich
- 1991 Visiting scientist at CNRS, Lab. for Mineralogy and Crystallography, University Paris 6
- 1989-1991 Lecturer at ETH Zurich
- 1988-1991 Research scientist at Eawag Kastanienbaum
- 1987-1988 Postdoctoral fellow, Environmental Engineering Science, Caltech, Pasadena

Recent research projects

- 2016-2019 PI: From biogeochemistry to the ecological genomics of pelagic fish stocks – study across 4 trophic levels; Lake Tanganyika, (Swiss National Science Foundation).
- 2016-2020 co-PI: DAFNE – Decision analytical framework to explore the water-energy-food nexus in complex transboundary water resources systems (EU Horizon 2020)
- 2006-2016 PI: ADAPT – African Dams Project. (Competence Center of Environment and Sustainability, CCES, ETH Domain).

PhD supervision, mentoring young scientists

So far, 55 doctoral students and 17 postdoctoral fellows conducted their work under my supervision. Recently completed doctoral projects include:

- 2021 Benedikt Ehrenfels, Nitrogen cycling in Lake Tanganyika...
- 2020 Elisa Calamita, Modeling the effects of large dams on water quality in tropical rivers.
- 2019 Matthias Zimmermann, Modeling perspectives on microbial methane oxidation...
- 2018 Carole Guggenheim, The role of copper for methane-oxidizing bacteria in lakes.

Professional Activities (selection)

- 2018-2021 Study director, Environmental Science program ETH Zurich
2016-today Scientific Advisory Board of Leibnitz Institute of Freshwater Ecology & Inland Fisheries, IGB Berlin
2015-2018 Head of Institute of Biogeochemistry and Pollutant Dynamics, ETH Zurich
2005-2015 Member of the Directorate of Eawag, Dübendorf
2010-2014 Scientific Advisory Board of Helmholtz Center Munich
2009-2013 Science Advisory Group of International Continental Drilling Program, ICDP
2005-2011 Member of the National Research Council of the Swiss National Science Foundation
1996-2005 Department head at Eawag, Kastanienbaum

Organization of Conferences (selection)

- 2018 Nano- and microplastics in technical and freshwater systems, Ascona (co-organizer)
2016 ASLO summer meeting Santa Fé, USA (member of scientific committee)
2015 Goldschmidt Conference, Prague, Czech Republic (session convener)
2015 GEO Water Quality Summit, Geneva (organizing committee)
2015 International Conference on Contaminated Sediments, Ascona (co-organizer)

Some Outreach Activities

- 2016 – 2020 Steering committee Daylight Academy
2016 – 2019 Expert group Swiss Green Hydropower Label, Naturemade
2010 – 2015 Board Member of the Wasser Agenda 21 (Swiss platform for water policy)
1984 – 2014 Executive Board Member of the Swiss Greina Foundation

Five recent Publications:

(full list ORCID ID 0000-0001-7092-1972,

- Callbeck C., Ehrenfels B., Baumann K., Wehrli B., and Schubert C. 2021. Anoxic chlorophyll maximum enhances local organic matter remineralization and nitrogen loss in Lake Tanganyika. *Nature Communications* **12**:830, doi: 10.1038/s41467-021-21115-5
- Calamita E., Siviglia A., Gettel G., Franca M.J., Winton S.R., Teodoru C.R., Schmid M., Wehrli B. 2021. Unaccounted CO₂ leaks downstream of large hydroelectric reservoirs. *PNAS* **118** (25) e2026004118 doi: 10.1073/pnas.2026004118.
- Maier M.-S., Teodoru C.R., Wehrli B. 2021. Spatio-temporal variability in lateral and atmospheric carbon fluxes from the Danube Delta. *Biogeosciences* **18** 1417-1437, doi: 10.5194/bg-18-1417-2021
- Guggenheim C., Brand A., Bürgmann H., Sigg L., Wehrli B. (2019) Bioavailable copper controls methanotroph abundance in lacustrine methane consumption zones. *Scientific Reports*, **9**, 4817
- Winton R.S., Calamita E., Wehrli B. (2019) Reviews and syntheses: Dams, water quality and tropical reservoir stratification. *Biogeosciences*, **16**, 1657-1671.