

CV – Mathis von Ahnen

Date of birth: 13.10.1986; Male, Nationality: German

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Degrees

- 2016 Ph.D. in Aquaculture from DTU Aqua, Denmark
(Thesis title: *New Approaches to improve the removal of dissolved organic matter and nitrogen in aquaculture*)
- 2012 M.Sc. in Aquaculture from University of Rostock, Germany
- 2010 B.Sc. in Maritime Technologies from Bremerhaven University of Applied Sciences, Germany

Employments

- 2024-current Associate Professor, DTU Aqua, Section for Aquaculture, Hirtshals/Lyngby, Denmark
- 2017-2024 Assistant Professor, DTU Aqua, Section for Aquaculture, Hirtshals/Lyngby, Denmark
- 2016-2017 Postdoc, DTU Aqua, Section for Aquaculture, Hirtshals, Denmark
- 2016 Research Assistant, DTU Aqua, Section for Aquaculture, Hirtshals, Denmark
- 2013-2016 Ph.D. Student, DTU Aqua, Section for Aquaculture, Hirtshals, Denmark
- 2012 Working student at Fischzucht Hagedorn, Ohrensen, Germany
- 2010 Working student at Alfred-Wegener-Institute for Polar and Marine Research, Helgoland, Germany

Main research area

Technologies for removing nutrients, organic matter, antibiotics and disinfectants from recirculating aquaculture system effluents, including biofilters, constructed wetlands, sludge-fed denitrification systems, P-sorbing filters and denitrifying woodchip bioreactors.

Teaching activities

- Recirculating Aquaculture Systems (5 ECTS, M.Sc.) (Course responsible)
- Exercises in Recirculating Aquaculture Systems (5 ECTS, M.Sc.) (Course responsible)
- Fisheries and Aquaculture (5 ECTS, B.Sc.) (Contributing)
- Introduction to Living Systems (5 ECTS, B.Sc.) (Contributing)

Current and finished projects:

- BioMeka: New and improved biological and mechanical water treatment technologies for reduction of the environmental impact from aquaculture facilities (113290). von Ahnen, M., Pedersen, L.-F., Aalto, S.-L. H., de Jesus Gregersen, K. J. & Letelier-Gordo, C. O., 31/08/2023 → 12/12/2026
- Sund Akvakultur: Aquaculture without antibiotics (113333), Lorenzen, N., Schmidt, J. G., Madsen, L., von Ahnen, M., Donati, V. L., Hilario, J. A., Sholanke, O. E., Warnakula, L., Vardia, I. V. & Jessen, L., 31/08/2023 → 12/12/2026
- Reduced use and release of environmentally damaging antibiotics from fish farms (Healthy Fish Farm) (39934 & 39936). Lorenzen, N., Madsen, L., Schmidt, J. G., von Ahnen, M., Donati, V. L., Vardia, I. & Mouritsen, K. K., Tang, K., 05/03/2021 → 30/09/2023
- Innovative technologies for reducing the discharge of phosphorus from land-based aquaculture systems (FosVind) (39932) Dalsgaard, A. J. T. & von Ahnen, M. 02/03/2021 → 30/09/2023
- Environmentally friendly use of woodchip bioreactors in aquaculture (39585) von Ahnen, M. & Pedersen, P. B. 04/12/2017 → 07/12/2020
- End-of-pipe treatment at trout farms (EOP) (39429) Pedersen, P. B., von Ahnen, M. & Dalsgaard, A. J. T. 07/10/2016 → 21/12/2019
- Design and operation optimization of constructed wetlands at rainbow trout farms (39430) Pedersen, P. B., Dalsgaard, A. J. T. & von Ahnen, M. 06/10/2016 → 11/01/2019
- Traditional trout farms (39095) Dalsgaard, A. J. T., von Ahnen, M. & Pedersen, P. B. 05/07/2012 → 01/06/2016

Selected publications

- von Ahnen, M., Tang, K., van de Ven, I., Hambly, A. C., Andersen, H. R., Lorenzen, N. & Pedersen, P. B., 2025. Removal of residual antibiotics from aquaculture effluents by denitrifying woodchip bioreactors. *Aquaculture* 608, 9 p., 742761.
- von Ahnen, M., Pedersen, P.B., Dalsgaard, J., 2020. Improving denitrification in an aquaculture wetland using fish waste – a case study. *Ecological Engineering* 143, 105686
- von Ahnen, M., Pedersen, P.B., Dalsgaard, J., 2018. Performance of full-scale woodchip bioreactors treating effluents from commercial RAS. *Aquacultural Engineering* 83, p. 130-137.
- von Ahnen, M., Pedersen, L.-F., Pedersen, P.B., Dalsgaard, J., 2015. Degradation of urea ammonia and nitrite in moving bed biofilters operated at different feed loadings. *Aquacultural Engineering* 69, p. 50-59.