

Vanessa Marzetz

Contact

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Ecology and Ecosystem modelling
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Scientific career

- Since 2016 PhD candidate, 'Theoretical Aquatic Ecology', University of Potsdam
- 2014-2016 Research Assistant, 'Theoretical Aquatic Ecology'
- 2013/2014 Semester abroad, study focus 'Marine Biology', University of Technology Sydney, Australia
- 2012-2016 Master of Science in 'Ecology, Evolution and Conservation', University of Potsdam, Major in Aquatic Ecology and Modelling
- 2010-2013 Student and Research Assistant, 'Ecology/ Ecosystem Modelling'
- 2008-2012 Bachelor of Science in Biosciences at the University of Potsdam, Specialization in 'Organismic Biology'

Publications

- 2017 **Marzetz, V.**, Koussoroplis, A-M., Martin-Creuzburg, D., Striebel, M. & Wacker, A. (2017) Linking primary producer diversity and food quality effects on herbivores: A biochemical perspective. *Scientific Reports* 7: 11035. DOI: [10.1038/s41598-017-11183-3](https://doi.org/10.1038/s41598-017-11183-3)
- 2015 Wacker A., **Marzetz V.** & Spijkerman, E. (2015) Interspecific competition in phytoplankton drives the availability of essential mineral and biochemical nutrients. *Ecology* 96 (9): 2467-2477. DOI: [10.1890/14-1915.1](https://doi.org/10.1890/14-1915.1)

Awards

- 2018 Schwoerbel-Benndorf Young Talent Award of the German Limnological Society (DGL) for the publication in *Scientific Reports*

Conference contributions

- 2018 Plenary talk, Schwoerbel-Benndorf Young Talent Award of the German Limnological Society (DGL), Kamp-Lintfort, Germany "Linking primary producer diversity and food quality effects on herbivores: A biochemical perspective"
- 2018 Aquatic Science Summer Meeting of the Association for the Sciences of Limnology and Oceanography (ASLO) Victoria, Canada, "Light quality effects on phytoplankton communities" (Oral presentation)
- 2017 British Ecological Society (BES) Annual Meeting, Ghent, Belgium, "Assessing physiological changes in phytoplankton communities" (Poster).
- 2017 DynaTrait conference, Hannover, Germany "Linking primary producer diversity and food quality effects on herbivores: A biochemical perspective" (Oral presentation).
- 2017 Aquatic Science Meeting of the Association for the Sciences of Limnology and Oceanography (ASLO), Honolulu, USA "Does the diversity of phytoplankton communities drive zooplankton into co-limitation?" (Oral presentation)
- 2015 Annual conference of the German Limnological Society (DGL), Essen, Germany "Interspezifische Konkurrenz im Phytoplankton beeinflusst die Verfügbarkeit von essentiellen mineralischen und biochemischen Nährstoffen" (Oral presentation)
- 2015 Aquatic Science Meeting of the Association for the Sciences of Limnology and Oceanography (ASLO), Granada, Spain "Does interspecific competition lead to changed composition of essential mineral and biochemical nutrients in phytoplankton?" (Oral presentation)

Research interests

- Ecology of aquatic organisms and food webs
- Mineral and biochemical composition of phytoplankton
- Biodiversity of phytoplankton communities
- Interspecific competition in phytoplankton communities
- Environmental influences on phytoplankton species, communities and its impact on their biochemical composition
- Food quality effects of phytoplankton communities on daphnids

Techniques

- Cultivation and experimental study of phyto- and zooplankton species
- Determination of elemental nutrient content and sterol/fatty acid analysis of phytoplankton (i.e. gas chromatography)

- PhytoPAM measurements
- Determination of phytoplankton abundances with light and epifluorescence microscopy as well as flow cytometry
- Basic Limnological field work (Sampling of lake descriptors, sampling and determination of phyto- and zooplankton)

Current and recently completed research

- Phytoplankton and the competition for light
- Changes in biochemical composition of phytoplankton species and communities under fluctuating environmental conditions
- Interspecific competition in phytoplankton communities and the effect on *Daphnia magna* (Master thesis)
- ¹³C discrimination in four green algae species in dependency of P and CO₂ (Vertiefungsmodul)
- Effects of biodiversity on the biochemical composition of phytoplankton communities (Bachelor thesis)