

Prof. Dr. Kirsten Küsel

*14.02.1965 (female)

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Current position: Professor (W3), Friedrich Schiller University Jena
Member, German National Academy of Sciences Leopoldina (ML)

Education

- 2003 Habilitation and *venia legendi* for Microbiology, University of Bayreuth; mentor: Prof. Dr. Harold Drake
- 1995 Dissertation in Ecological Microbiology (Dr. rer. nat., *summa cum laude*), Bayreuth Institute for Terrestrial Ecosystem Research, University of Bayreuth; supervisor: Prof. Dr. Harold Drake
- 1986–1992 Diploma studies in Geoecology (with highest honors, major subject Hydrology), University of Bayreuth; thesis supervisor: Prof. Dr. Reimer Herrmann

Academic career

- Since 2014 Full Professor W3 “Aquatic Geomicrobiology”, Friedrich-Schiller-University Jena
- Summer 2014 Sabbatical at Montana State University, Centre for Biofilm Engineering Bozeman, USA
- 2009–2014 Apl. Professor of Limnology, Friedrich-Schiller-University Jena
- 2004–2009 Associate Professor of Limnology, Friedrich-Schiller-University Jena
- 2003–2004 Scientific Assistant (C2), Ecological Microbiology, University of Bayreuth
- 1997–2003 Scientific Assistant (C1), Ecological Microbiology, University of Bayreuth
- 1997–1998 Postdoctoral fellow, Environmental Protection Agency, Florida, USA
- 1995–1996 Postdoctoral research associate, Bayreuth Institute for Terrestrial Ecosystem Research (BITÖK)

Scientific focus

Microorganisms are vital for maintaining global biochemical cycles essential for life, including climate regulation. They break down organic matter, recycle nutrients and metals, and even sequester CO₂, playing a crucial role in sustaining human existence. Due to my interdisciplinary background, my research group investigates microbial processes and biogeochemistry in various aquatic ecosystems, with a particular focus on groundwater, freshwater lakes, peatlands, as well as metal-contaminated flowing waters. We employ omics methods and field measurements to understand microbial community dynamics and species interactions in a world of global change.

Committees and memberships

Since 2025	Member of the Scientific Advisory Board of the Centre for Microbiology and Environmental Systems Science (CeMESS) University of Vienna, Austria
Since 2022	Spokesperson of the Cluster of Excellence “Balance of the Microverse”, Friedrich-Schiller-University Jena
Since 2020	Senior Editor of <i>ISME Communications</i>
2020-2024	Elected Member of the DFG Review Board, Microbial Ecology and Applied Microbiology (Fach-Nr.204-02)
Since 2019	Board of Trustees, Alfred-Wegener-Institute, Helmholtz-Centre for Polar and Marine Science
Since 2019	Member of the Directorate of the Jena Graduate Academy (JGA)
Since 2019	Executive Board member, Cluster of Excellence “Balance of the Microverse”
2017-2025	Director of the Institute for Biodiversity, Friedrich-Schiller-University Jena
2013-2025	Speaker of the CRC 1076 AquaDiva
2019-2022	Elected member of Science Strategy Board of the German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig
2020-2022	Mentor at yDiv (Graduate academy of iDiv)
2020-2021	Co-Chair of iDiv Science Strategy Board
2019-2021	Selection committee member of the for the Heinz Maier-Leibnitz-Preis (DFG)
2013-2021	Founding member and member of yDiv, the graduate academy of iDiv
2015-2020	International board member of the International Society of Microbial Ecology (ISME)
2012-2020	Member of the Editorial Board of <i>Frontiers of Terrestrial Microbiology</i>
2016-2019	Member of the Senate, Friedrich-Schiller-University Jena
2016-2019	Elected councilor of the European Association of Geochemistry (EAG)
2012-2019	Founding Member and Co-Director of iDiv
2008-2017	Member of DFG Senate Commission on Water Research (KoWa)
2013-2016	Member of the Directorate of the Water Science Alliance
2008-2016	Associate Editor of <i>Biogeosciences</i>
2005-2013	Member of the Editorial Board of <i>Applied and Environmental Microbiology</i>

Awards

2026	Elected member, Saxon Academy of Sciences and Humanities in Leipzig
2025	Elected Member, German National Academy of Sciences Leopoldina (ML)
2024	Fellow of the American Academy of Microbiology
2017	Elected as co-Chair (2017) and Chair (2019) for the Gordon Research Conference Applied and Environmental Microbiology
2012	Eminent Speaker Award of the European Association for Geochemistry (EAG)
2005	Award for application of third-party funds for young scientists, FSU

Coordinated Projects

- Excellence Cluster “Balance of the Microverse” (Spokesperson)
- Collaborative Research Centre 1076 “AquaDiva” (Speaker)
- German Centre for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig (PI)

- Collaborative Research Centre 1127 “ChemBioSys” Chemical Mediators in Complex Biosystems (PI)
- International Max-Planck-Research School for Global Biogeochemical Cycles, IMPRS (PI)
- Graduate School of Excellence GSC 214 Jena School for Microbial Communication (PI) finished
- Research Training Group RTG 1257: Alteration and element mobility at the microbe-mineral interface (PI) finished

Publications:

ORCID: <https://orcid.org/0000-0002-5396-0975>

Scopus: <https://www.scopus.com/authid/detail.uri?authorId=6701425191>