

# Meret Aeppli

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## Current Position

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EPF Lausanne, Switzerland, Tenure Track Assistant Professor, <a href="#">SOIL</a> laboratory	09/2022 - present
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## Education and Training

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Stanford University, United States, Postdoctoral Fellow	09/2019 - 08/2022
ETH Zürich, Switzerland, Doctor of Sciences (degree obtained 01.04.2019)	01/2015 - 04/2019
ETH Zürich, Switzerland, M.Sc. in Environmental Sciences	09/2012 - 01/2015
ETH Zürich, Switzerland, B.Sc. in Environmental Sciences	09/2009 - 10/2012

## Funded Project Grants

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<b>ENAC Transdisciplinary Cluster grant</b>	05/2023 - 04/2024
“Quantifying soil organic matter formation under microbial consortia amendments (BioSoilStock)”; sponsored by the <i>School of Architecture, Civil and Environmental Engineering, EPFL</i> ; CHF 50'000.	

<b>European Joint Programme SOIL Project Funding</b>	05/2023 - 04/2026
“The effects of tillage practice on soil carbon sequestration mechanisms (TilSoilC)”; sponsored by the <i>Swiss National Science Foundation</i> ; CHF 432'844.	

<b>SNSF Project Funding</b>	02/2023 - 01/2026
“Soil organic carbon in Swiss mountain soils: abundance, distribution, and susceptibility to climate change”; sponsored by the <i>Swiss National Science Foundation</i> ; CHF 510'928.	

<b>Research Partnership Grant with the ASEAN region</b>	02/2023 - 01/2024
“Web viewer development for public flood risk communications”; sponsored by the <i>ETH Zürich, Leading House Asia</i> ; CHF 15'000.	

<b>SNSF Early Postdoc Mobility Fellowship</b>	09/2019 - 02/2021
“The role of particulate terminal electron acceptors in controlling organic matter mineralization in freshwater sediments and soils”; fellowship for postdoctoral research at Stanford University sponsored by the <i>Swiss National Science Foundation</i> ; CHF 120'000.	

## Honors

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<b>Rising Environmental Leaders Program</b>	01/2020 - 06/2020
Run by the <i>Stanford Woods Institute for the Environment</i> ; aimed at honing participant's leadership and communication skills to maximize their research impact and connect research to policy and people; one of 20 participants selected from a field of applicants from all seven schools at Stanford.	

<b>ETH Medal for Outstanding Doctoral Thesis</b>	09/2019
Awarded for “solving important knowledge gaps in the redox reactivity of iron using an interdisciplinary approach”. ETH Zürich awards the medal and CHF 2'000 to the top 8% of doctoral candidates.	

<b>Chemistry Travel Award</b>	05/2017
Travel award for the attendance of <i>Goldschmidt Conference 2017</i> ; sponsored by the <i>Swiss Chemical Society</i> and <i>Platform Chemistry</i> of the <i>Swiss Academy of Sciences</i> ; CHF 1'000.	

## Selected Bibliography

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**Aeppli, M**; Schladow, G; Lezama Pacheco, J S; Fendorf, S. Iron Reduction in Profundal Sediments of Ultraoligotrophic Lake Tahoe under Oxygen-Limited Conditions. *Environmental Science & Technology*, **2023**, 57 (3), 1529-1537, [doi:10.1021/acs.est.2c05714](https://doi.org/10.1021/acs.est.2c05714).

**Aeppli, M**; Thompson, A; Dewey, C; Fendorf, S. Redox Properties of Solid Phase Electron Acceptors Affect Anaerobic Microbial Respiration under Oxygen-Limited Conditions in Floodplain Soils. *Environmental Science & Technology*, **2022**, 56 (23), 17462-17470, [doi:10.1021/acs.est.2c05797](https://doi.org/10.1021/acs.est.2c05797).

Lopez, AM; Nicolini, CM; **Aeppli, M**; Luby, SP; Fendorf, S; Forsyth, JE. Assessing Analytical Methods for the Rapid Detection of Lead Adulteration in the Global Spice Market. *Environmental Science & Technology*, **2022**, 56 (23), 16996-17006, [doi:10.1021/acs.est.2c03241](https://doi.org/10.1021/acs.est.2c03241).

**Aeppli, M**; Babey, T; Engel, M; Fendorf, S; Bargar, JR; Boye, K. Export of Organic Carbon From Reduced Fine-Grained Zones Governs Biogeochemical Reactivity in Simulated Aquifer. *Environmental Science & Technology*, **2022**, 56 (4), 2738-2746, [doi:10.1021/acs.est.1c04664](https://doi.org/10.1021/acs.est.1c04664).

**Aeppli, M**; Giroud, S; Vranic, S; Voegelin, A; Hofstetter, TB; Sander, M. Thermodynamic Controls on Rates of Iron Oxide Reduction by Extracellular Electron Shuttles. *Proceedings of the National Academy of Sciences of the United States of America*, **2022**, 119 (3), e2115629119, [doi:10.1073/pnas.2115629119](https://doi.org/10.1073/pnas.2115629119).

**Aeppli, M**; Vranic, S; Kaegi, R; Kretzschmar, R; Brown, AR; Voegelin, A; Hofstetter, TB; Sander, M. Decreases in Iron Oxide Reducibility during Microbial Reductive Dissolution and Transformation of Ferrihydrite. *Environmental Science & Technology*, **2019**, 53 (15), 8736–8746, [doi:10.1021/acs.est.9b01299](https://doi.org/10.1021/acs.est.9b01299).

**Aeppli, M**; Voegelin, A; Gorski, CA; Hofstetter, TB; Sander, M. Mediated Electrochemical Reduction of Iron (Oxyhydr-)Oxides under Defined Thermodynamic Boundary Conditions. *Environmental Science & Technology*, **2018**, 52 (2), 560-570, [doi:10.1021/acs.est.7b04411](https://doi.org/10.1021/acs.est.7b04411).