



**Current positions**

Head of Division “Reactive Transport” at Institute of Resource Ecology, HZDR (since 2017)  
Privatdozent, Bremen Univ. (since 2013)

**Previous positions (two selected)**

Adjunct assistant professor, Earth Science Department, Rice Univ., Houston (2009-2015)  
Head of Junior Research Group , Göttingen Univ. (2008-2011)

**Scientific degrees**

Habilitation in Geology and Mineralogy, Göttingen Univ. (2011)  
Dr. rer. nat. (PhD), Earth Science Department, Jena Univ. (2002)

**Recent research topics**

Reactive transport concepts, fluid-rock interactions, surface reactivity, kinetic Monte Carlo, rate maps and rate spectra, particle sorption, radionuclide sorption, fluid mobility in host rocks

**Awards, honors, memberships**

Hermann Credner award, Deutsche Gesellschaft für Geowissenschaften (2012)  
Feodor Lynen fellowship, Alexander von Humboldt foundation (2006)

**Publications (5 most important)**

- **C. Fischer**, A. Lüttge, Pulsating dissolution of crystalline matter, *PNAS* 115, 897 (2018) [doi:10.1073/pnas.1711254115](https://doi.org/10.1073/pnas.1711254115)
- **C. Fischer**, A. Lüttge, Beyond the conventional understanding of water–rock reactivity, *EPSL* 457, 100 (2017) [doi:10.1016/j.epsl.2016.10.019](https://doi.org/10.1016/j.epsl.2016.10.019)
- **C Fischer**, I. Kurganskaya, T. Schäfer, A. Lüttge, Variability of crystal surface reactivity: what do we know? *Appl. Geochem.* 43, 132 (2014) [doi: 10.1016/j.apgeochem.2014.02.002](https://doi.org/10.1016/j.apgeochem.2014.02.002)
- **C. Fischer**, I Kurganskaya, A. Lüttge, Inherited control of crystal surface reactivity, *Appl. Geochem.* 91, 140 (2018) [doi:10.1016/j.apgeochem.2018.02.003](https://doi.org/10.1016/j.apgeochem.2018.02.003)
- **C. Fischer**, S. Finkeldei, F. Brandt, D. Bosbach, A. Lüttge, Direct measurement of surface dissolution rates in potential nuclear waste forms: the example of pyrochlore, *ACS Appl. Mater. Interfaces* 7, 17857 (2015) [doi:10.1021/acsami.5b04281](https://doi.org/10.1021/acsami.5b04281)