

**Current positions**

Head of Group “Secondary Phases” at the Institute for Nuclear Waste Disposal (INE), KIT (since 2014)

Staff Scientist at INE, KIT (since 2018)

**Previous positions**

PostDoc at INE, KIT (2010-2018)

Doctoral researcher at INE, KIT (2006-2010)

**Scientific degree**

Dr. rer. nat. (PhD) in Geochemistry and Mineralogy, KIT (2010)

**Recent research topics**

Radionuclide-sequestration, Solid-solutions, Mineral-water-interfaces, Synchrotron X-ray methods, Geochemical modelling

**Publications (5 most important)**

- **F. Heberling, V. Metz, M. Böttle**, E. Curti, **H. Geckeis**, Barite recrystallization in the presence of  $^{226}\text{Ra}$  and  $^{133}\text{Ba}$ , *Geochim. Cosmochim. Acta* 232, 124 (2018) [doi:10.1016/j.gca.2018.04.007](https://doi.org/10.1016/j.gca.2018.04.007)
- Z. Nie, **N. Finck, F. Heberling, T. Pruessmann**, C. Liu, et al., Adsorption of Selenium and Strontium on Goethite: EXAFS Study and Surface Complexation Modeling of the Ternary Systems, *ES&T*, 51, 7, 3751 (2017) [doi:10.1021/acs.est.6b06104](https://doi.org/10.1021/acs.est.6b06104)
- M. Prieto, **F. Heberling, R.M. Rodríguez-Galán, F. Brandt**, Crystallization behavior of solid solutions from aqueous solutions: An environmental perspective, *Prog. Cryst. Growth Charact.* 62, 29 (2016) [doi:10.1016/j.pcrysgrow.2016.05.001](https://doi.org/10.1016/j.pcrysgrow.2016.05.001)
- **J. Lützenkirchen, F. Heberling**, F. Supljika, T. Preocanin, N. Kallay, et al., Structure-charge relationship - the case of hematite (001), *Faraday Discuss.* 180, 55 (2015) [doi:10.1039/c4fd00260a](https://doi.org/10.1039/c4fd00260a)
- **F. Heberling**, V.L. Vinograd, **R. Polly**, J.D. Gale, **S. Heck**, et al., A thermodynamic adsorption/entrapment model for selenium(IV) coprecipitation with calcite, *Geochim. Cosmochim. Acta*, 134, 16 (2014) [doi:10.1016/j.gca.2014.02.044](https://doi.org/10.1016/j.gca.2014.02.044)

## Publikationen seit 2014 mit > 9 Zitierungen:

- Z. Nie, N. Finck, F. Heberling, T. Pruessmann, C. Liu, et al., Adsorption of Selenium and Strontium on Goethite: EXAFS Study and Surface Complexation Modeling of the Ternary Systems. *ES&T*, 51, 7, 3751 (2017) doi: 10.1021/acs.est.6b06104 (Z=11)
- M. Prieto, F. Heberling, R. M. Rodríguez-Galán, F. Brandt, Crystallization behavior of solid solutions from aqueous solutions: An environmental perspective. *Prog. Cryst. Growth Charact.* 62, 3, 29 (2016) doi: 10.1016/j.pcrysgrow.2016.05.001 (Z=19)
- S. Li, P. Leroy, F. Heberling, N. Devau, D. Jougnot, et al., Influence of surface conductivity on the apparent zeta potential of calcite. *J. Coll. Int. Sci.* 468, 262 (2016) doi: 10.1016/j.jcis.2016.01.075 (Z=25)
- J. Lutzenkirchen, F. Heberling, F. Supljika, T. Preocanin, N. Kallay, F. et al., Structure-charge relationship - the case of hematite (001). *Faraday Discuss.* 180, 55 (2015) doi: 10.1039/c4fd00260a (Z=19)
- F. Heberling, V. L. Vinograd, R. Polly, J. D. Gale, S. Heck, et al., A thermodynamic adsorption/entrapment model for selenium(IV) coprecipitation with calcite. *Geochim. Cosmochim. Acta*, 134, 16 (2014) doi: 10.1016/j.gca.2014.02.044 (Z=23)
- F. Heberling, D. Bosbach, J. D. Eckhardt, U. Fischer, J. Glowacky, et al., Reactivity of the calcite–water-interface, from molecular scale processes to geochemical engineering. *Appl. Geochem.* 45, 158 (2014) doi: 10.1016/j.apgeochem.2014.03.006 (Z=25)
- J. Luetzenkirchen, A. Abdelmonem, R. Weerasooriya, F. Heberling, V. Metz, et al., Adsorption of dissolved aluminum on sapphire-c and kaolinite: implications for points of zero charge of clay minerals, *Geochem. Trans.* 15 (2014) doi: 10.1186/1467-4866-15-9 (Z=15)