

**Current position**

Postdoctoral researcher in “Reactive Transport” Group at Institute of Energy and Climate Research (IEK-6) Nuclear Waste Management, FZJ (since 2016)

Previous positions

Doctoral researcher at Laboratory for waste management (LES), Paul Scherrer Institut (PSI) (2012-2016)

Scientific degrees

Dr. rer. nat. (PhD) in Earth Sciences, University of Bern, Switzerland (2016)

Recent research topics

Reactive transport experiments and modelling focusing on the hydro-chemical couplings, geochemical modelling, radionuclide uptake in secondary phases

Awards

PhD award of the Nuclear Energy and Safety Department of PSI for three consecutive years (2013-2015)

Publications (5 most important)

- **J. Poonoosamy**, C. Wanner, P. Alt Epping, et al., Benchmarking of reactive transport codes for 2D simulations with mineral dissolution/precipitation reactions and feedback on transport parameters, *Comput. Geosci.* 1 (2018) <https://doi.org/10.1007/s10596-018-9793-x>
- N.I. Prasianakis, E. Curti, G. Kosakowski, **J. Poonoosamy**, S.J. Churakov, Deciphering pore-level precipitation mechanism, *Scientific Reports*, 7, 13765 (2017) <https://doi.org/10.1038/s41598-017-14142-0>
- M. Descostes, I. Pointeau, J. Radwan, **J. Poonoosamy**, et al., Adsorption and retarded diffusion of EuIII-EDTA-through hard clay rock, *J. Hydrol.* 544, 125 (2016) <https://doi.org/10.1016/j.jhydrol.2016.11.014>
- **J. Poonoosamy**, E. Curti, G. Kosakowski, L. R. Van Loon, D. Grolimund, et al., Barite precipitation following celestite dissolution in a porous medium: a SEM/BSE and micro XRF/XRD study, *Geochim. Cosmochim. Acta* 182, 131 (2016) <https://doi.org/10.1016/j.gca.2016.03.011>
- **J. Poonoosamy**, G. Kosakowski, L.R Van Loon, U Mäder, Dissolution-precipitation processes in tank experiments for testing numerical models for reactive transport calculations: Experiments and modelling. *J. Contam. Hydrol.* 177-178, 1 (2015) <https://doi.org/10.1016/j.jconhyd.2015.02.007>