

**Current positions**

Deputy Head, Institute for Nuclear Waste Disposal (INE), KIT (since 2018)
Head of Division "Radiochemistry" at INE (since 2012).

Previous position

Max Planck Institute for Cosmochemistry, Mainz (2000)

Scientific degrees

Diploma in Chemistry, University of Cologne (1996)

PhD Degree in Radiochemistry, University of Cologne (2000)

Recent research topics

Nuclear waste disposal, Radionuclide (geo)chemistry, Solubility phenomena, Source term estimations, Radionuclide retention, Coordination chemistry, Thermodynamic databases, Project coordination within Germany and EC Euratom frame

Memberships

OECD-NEA. Member of NEA-TDB management board and EG (2019)
German Chemical Society, Nuclear Chemistry Division – member of board (2016)
IUPAC Subcommittee on Solubility and Equilibrium Data (2012)

Publications

- **A. Tasi, X. Gaona, D. Fellhauer, M. Altmaier, H. Geckeis**, et al., Thermodynamic description of the plutonium – α -D-isosaccharinic acid system ii: Formation of quaternary Ca(II)–Pu(IV)–OH–ISA complexes, *Appl. Geochem.* 98, 351 (2018) [doi:10.1016/j.apgeochem.2018.06.014](https://doi.org/10.1016/j.apgeochem.2018.06.014)
- **M. Altmaier, E. Yalçintaş, X. Gaona, V. Neck**, R. Müller, et al., Solubility of U(VI) in chloride solutions. I. The stable oxides/hydroxides in NaCl systems, solubility products, hydrolysis constants and SIT coefficients, *J. Chem. Thermodynamics* 114, 2 (2017) [doi:10.1016/j.jct.2017.05.039](https://doi.org/10.1016/j.jct.2017.05.039)
- **D. Fellhauer, M. Altmaier, X. Gaona, J. Lützenkirchen, Th. Fanghänel**, Np(V) solubility, speciation and solid phase formation in alkaline CaCl₂ solutions. Part II: Thermodynamics and implications for source term estimations of nuclear waste disposal, *Radiochim. Acta* 104(6), 381 (2016). <https://doi.org/10.1515/ract-2015-2490>
- **E. Yalçintaş, X. Gaona, M. Altmaier, K. Dardenne, R. Polly**, et al., Thermodynamic description of Tc(IV) solubility and hydrolysis in dilute to concentrated NaCl, MgCl₂ and CaCl₂ solutions, *Dalton Trans.* 45, 8916 (2016) [doi:10.1039/c6dt00973e](https://doi.org/10.1039/c6dt00973e)
- **K. Hinz, M. Altmaier, X. Gaona, T. Rabung, D. Schild**, et al., Interaction of Nd(III) and Cm(III) with borate in dilute to concentrated alkaline NaCl, MgCl₂ and CaCl₂ solutions: Solubility and TRLFs studies, *New J. Chem.* 39(2), 849 (2015) <https://doi.org/10.1039/c4nj01203h>