Dr Isabella Romer Roche PhD

Research Fellow

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About

Dr Isabella Romer Roche is working with Eva Valsami-Jones in the NanoMILE project. She has wide experience in the synthesis and characterisation of nanoparticles, especially silver, working with a multimethod approach. Her work also includes stability of nanoparticles in environmentally relevant conditions.

Qualifications

- 2013- PhD in Environmental Nanosciences, University of Birmingham, Birmingham, UK
  "The ecotoxicological and environmental behaviour and transformations of silver nanoparticles"
- 2007- MSc in Nanomolecular Science – Jacobs University Bremen, Bremen, Germany
- 2003- BSc in Chemistry – Universidad Central de Venezuela, Caracas, Venezuela

Biography

Dr Isabella Romer Roche obtained a BSc in Chemistry from Universidad Central de Venezuela, in 2003. After that, she worked for a food company in Venezuela for 2 years and moved to Germany where she completed a master degree in Nanomolecular Science from Jacobs University in 2007. After two more years of working at Jacobs University as a research associate in the field of polyoxometalates, Dr Romer Roche moved to Birmingham where she obtained a PhD in Environmental Nanosciences "The ecotoxicological and environmental behaviour and transformations of silver nanoparticles" in 2013, working with Jamie R. Lead. She is currently working with Eva Valsami-Jones as a Research Fellow, specifically for the NanoMILE project.

Research

- Environmental fate and behaviour of nanoparticles
- Synthesis and characterisation of nanoparticles
- Synthesis of novel nanomaterials

Publications

Ismail, A. H.; Bassil, B. S.; **Römer, I**; Kortz, U., Mono- and Di-Lanthanide Derivatives of 22-Tungsto-2-antimonate(III), $[Ln(H_2O)_4Sb_2W_{21}O_{72}(OH)]^{10-}$ and $[Ln_2(H_2O)_8Sb_2W_{20}O_{70})]^{8-}$, ZAAC, 2013, 639 (14), 2510-2515.

Römer, I.; Gavin A.J; White T.A.; Merrifield R.C.; Chipman K; Viant M.R.; Lead J.R. The critical importance of defined media conditions in *Daphnia magna* nanotoxicity studies. *Toxicology Letters*. 2013, 223 (1), 103-108.

Baalousha, M; Nur, Y; **Romer, I**; Tejamaya, M; Lead, J.R. Effect of monovalent and divalent cations, anions and fulvic acid on aggregation of citrate coated silver nanoparticles. *Sci. Total Environ.*, 2013, 454-455, 119-131.

Tejamaya, M; **Römer, I**; Merrifield, R. C; Lead, J. R. Stability of citrate, PVP and PEG coated silver nanoparticles in ecotoxicology media, *Environ. Sci. & Tech*. 2012, 46 (13), 7011-7017.

I. Römer, and M.E. Pettitt and J. Lead (2012). Nanoparticles: environmental fate and transport in Encyclopedia of Environmetrics Second Edition, A.-H. El-Shaarawi and W. Piegorsch (eds). John Wiley & Sons Ltd, Chichester, UK, pp. 1701-1707. DOI: 10.1002/9780470057339.vnn110.

M.E. Pettitt, **I. Römer** and J. Lead (2012). Nanoparticles: environmental effects in Encyclopedia of Environmetrics Second Edition, A.-H. El-Shaarawi and W. Piegorsch (eds). John Wiley & Sons Ltd, Chichester, UK, pp. 1707-1712. DOI: 10.1002/9780470057339.vnn130.

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Ismail, A. H.; Bassil, B. S.; **Römer, I.**; Redeker, N. C.; Kortz, U., Mono- and Di-Lanthanide Derivatives of 19-Tungsto-2-Arsenate(III) *Z. Naturforsch. B, 2010,* , 2010, 65b, 383 – 389.

Bassil, B. S.; Dickman, M. H.; **Römer, I.**; von der Kammer, B.; Kortz, U. The tungstogermanate $[Ce_{20}Ge_{10}W_{100}O_{376}(OH)_4(H2O)_{30}]^{56-}$: A polyoxometalate containing 20 Cerium(III) atoms, *Angew. Chem. Int. Ed.,* 2007, 46, 6192-6195.

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