



Curriculum Vitae

Personal information **Silvia Berkner**

Work experience

1. Employer: Federal Environment Agency
 - Start date: 01/2009
 - End date:
 - Position: Scientist/Risk Assessor
 - Activities:
 - Country: Germany

Education and training

1. Subject: Biochemistry
 - Start date: 03/2003
 - End date: 09/2007
 - Qualification: PhD in Biochemistry
 - Organisation: University of Bayreuth
 - Country: Germany
2. Subject: Environmental Sciences (Geoecology)
 - Start date: 11/1996
 - End date: 04/2002
 - Qualification: Diplom in Environmental Sciences
 - Organisation: University of Bayreuth
 - Country: Germany

Additional information

Publications

- 1) Berkner, S., Streck, G., Herrmann, R., 2004: Development and validation of a method for the determination of trace levels of alkylphenols and bisphenol A in atmospheric samples. *Chemosphere*, 54(4):575-584.
- 2) Söllner, S., Berkner, S., Lipps, G., 2006: Characterisation of the novel restriction endonuclease SuiII from *Sulfolobus islandicus*. *Extremophiles*, 10(6):629-634.
- 3) Berkner, S., Lipps, G., 2007: An active nonautonomous mobile element in *Sulfolobus islandicus* REN1H1. *Journal of Bacteriology*, 189(5):2145-2149.
- 4) Berkner, S., Lipps, G., 2007: Characterization of the transcriptional activity of the cryptic plasmid pRN1 from *Sulfolobus islandicus* REN1H1 and regulation of its replication operon. *Journal of Bacteriology*, 189(5):1711-1721.
- 5) Berkner, S., Grogan, D.W., Albers, S.V., Lipps, G., 2007: Small multicopy, non-integrative shuttle vectors based on the plasmid pRN1 for *Sulfolobus acidocaldarius* and *Sulfolobus solfataricus*, model organisms of the (cren-) archaea. *Nucleic Acids Research*, doi: 10.1093/nar/gkm449.
- 6) Berkner, S., Lipps, G., 2008: Mutation and reversion frequencies of different *Sulfolobus* species and strains. *Extremophiles*, 12(2):263-270.
- 7) Berkner, S., Lipps, G., 2008: Genetic tools for *Sulfolobus* spp.: vectors and first applications. *Archives of Microbiology*, 190(3):217-230.
- 8) Wagner M, Berkner S, Ajon M, Driessen AJ, Lipps G, Albers SV, 2009: Expanding and understanding the genetic toolbox of the hyperthermophilic genus *Sulfolobus*. *Biochemical Society Transactions*, 37:97-101.
- 9) Berkner, S., Włodkowski, A., Albers, S.V., Lipps, G., 2010: Inducible and constitutive promoters for genetic systems in *S. acidocaldarius*. *Extremophiles*, 14: 249-259.
- 10) Berkner, S. and Thierbach, C., 2013: Biodegradability and transformation of human pharmaceutical active ingredients in environmentally relevant test systems. *Environmental Sciences and Pollution Research*, DOI 10.1007/s11356-013-1868-6
- 11) Berkner, S, Konradi, S, Schönfeld, J 2014: Antibiotic resistance and the environment-there and back again: *Science & Society series on Science and Drugs*. *EMBO Rep.* 15(7):740-4.
- 12) Berkner S, Hinojosa MP, Prangishvili D, Lipps G, 2014. Identification of the minimal replicon and the origin of replication of the crenarchaeal plasmid pRN1. *Microbiologyopen* 3(5):688-701.
- 13) Berkner S, Schwirn K, Voelker D, 2016. Nanopharmaceuticals: Tiny challenges for the environmental risk assessment of pharmaceuticals. *Environ Toxicol Chem.* 35(4):780-7.
- 14) Richter E, Berkner S, Ebert I, Förster B, Graf N, Herrchen M, Kühnen U, Römbke J and Simon M, 2016. Results of extended plant tests using more realistic exposure scenarios for improving environmental risk assessment of veterinary pharmaceuticals. *Environ Sci Eur* 28 (22). Doi: 10.1186/s12302-016-0089-2.
- 15) Wohde M, Berkner S, Junker T, Konradi S, Schwarz L, Düring R-A, 2016. Occurrence and transformation of veterinary pharmaceuticals and biocides in manure: A literature review. *Environ Sci Eur* 28 (1):23. doi: 10.1186/s12302-016-0091-8.
- 16) Junker T, Atorf C, Berkner S, Düring RA, Hennecke D, Herrchen M, Konradi S, Merrettig-Bruns U, Römbke J, Wagner J, Weinfurtner K, 2020. Development of a test method for transformation of veterinary pharmaceuticals and biocides in anaerobic liquid manure. *Environ Sci Eur* 32, 39. <https://doi.org/10.1186/s12302-020-00323-8>.
- 17) Berkner S, Schwirn K, Voelker D, 2022. Too advanced for assessment? Advanced materials, nanomedicine and the environment. *Environ Sci Eur.* 34(1):71. doi: 10.1186/s12302-022-00647-7.
- 18) Berkner S, Anke JM, Düring RA, Fiebig S, Junker T, Hennecke D, Herrchen M, Meinerling M, Römbke J, Thiele-Bruhn S, Topp E, Völkel W, Walter-Rohde S, 2023. Validation of a method to determine transformation of chemicals in anaerobic liquid pig and cattle manure for the OECD test guideline programme. *Chemosphere.* 312(Pt 1):137210. doi: 10.1016/j.chemosphere.2022.137210.
- 19) Berkner S, Brandt U. 2023. Comparing pharmaceutical persistence across terrestrial and aquatic environments:

do studies according to OECD 307 and OECD 308 lead to similar outcomes? Environ Sci Eur 35,72.
<https://doi.org/10.1186/s12302-023-00783-8>.

Projects

Memberships

Other Relevant Information