

Curriculum Vitae

Helena Banning
Dessau, Germany
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Education

- Since 10/2017 **Technical University Kaiserslautern, Distance and Independent Study Center (DISC)**
cand. M.A. Sustainable Development Cooperation (distance studies)
- 07/2012 – 02/2016 **Karlsruhe Institute of Technology (KIT)**
Ph.D. in Environmental Geochemistry
Topic: “Selenium Isotope Studies in Plants – Development and Validation of a Novel Geochemical Tool and its Application to Organic Samples”
- 10/2009 – 06/2012 **Technical University Berlin**
M.Sc. Geotechnology
Majors: Hydrogeology, Exploration Geology
Master Thesis: “Characterization and Evaluation of Environmental Risks of Four Tailings Dams from the Gold Mining Industry in Matjhabeng, South Africa” (in cooperation with geotec GmbH, Berlin)
- 10/2006 – 09/2009 **Technical University Braunschweig**
B.Sc. Environmental Sciences (Geoecology)
Bachelor Thesis on Retention and Mobility of bromine and iodine with regard to plancton and sediment in limnic systems (in German)

Work Experience

- Since 03/2016 **Research Associate and Scientific Policy Advisor, Federal Environment Agency Germany (Umweltbundesamt), Dessau**
Plant Protection Division
Environmental Exposure and Groundwater Risk Assessment
- 07/2012 – 02/2016 **Research Associate and Ph.D. candidate, KIT, Karlsruhe**
Institute of Applied Geosciences
Research within “Young Investigator Group”: Anthropogenic Influence on Substance Cycles within the Critical Zone – Selenium as essential nutrient and toxic pollutant
- 05/2011 – 06/2012 **Intern, geotec GmbH, Environmental Consultancy, Berlin**
Project on environmental impacts of gold mining and sustainable economic perspectives in Matjhabeng, South Africa
- 09/2008 – 04/2009 **Intern and student assistant, Federal Institute for Geosciences and Natural Resources Germany (BGR), Hannover**
Groundwater Quality and Protection Division

International Experience

- 12/2012 **Visiting Scientists, University of Illinois, Urbana-Champaign, Illinois, USA**
Academic exchange on stable isotope investigations and instrumental analytics in the geochemical laboratories
- 05-06/2011, 08-09/2011, 03/2012 **Internship Project with geotec GmbH, South Africa**
Project related work in Matjhabeng Municipality, Johannesburg and Bloemfontein

Extracurricular and voluntary activities

- Since 11/2013 **Volunteer at the NGO Go Ahead!, decentralized in Germany**
Fundraising for education and health projects for sustainable development cooperation in Southern Africa
- 03/2018 – 03/2019 **Guest Editor at the German scientific journal GRUNDWASSER, special issue “Emerging Contaminants in Groundwater”**
- 09/2016, 03/2018, 09/2019 **Lecturer at Ruhr University Bochum (RUB)**
International Summer School on Integrated Hydrology
Interdisciplinary Spring School on Resilience and Sustainability
- 03/2013 – 10/2015 **Ph.D. students’ representative at KIT and Helmholtz Association**

Skills

- Language skills
- German, native speaker
 - English, fluent in written and spoken form
 - French, moderate
 - Portuguese, basic
 - Russian, basic
- Management and public relations
- Project planning and management in development cooperation and academic research
 - Writing and editing: i.a. research papers, reports, opinions
 - Visual presentation and research communications
- IT skills
- MS Office: Word, Excel, Outlook
 - Exposure and Groundwater modelling
 - Management and cooperation tools: i.a. Sharepoint, Slack, Podio

Selected publications

Banning H., Bialek K., Czub G., Müller A., Pickl C., Scheithauer M., Straus G., Tüting W. (2019): Empfehlungsliste für das Monitoring von Pflanzenschutzmittel-Metaboliten in deutschen Grundwässern. www.umweltbundesamt.de/empfehlungsliste

Banning A., Banning H. (2019): Schadstoffe im Grundwasser: aktuelle Herausforderungen. Editorial of Special Issue on Emerging Contaminants in GRUNDWASSER. <http://link.springer.com/article/10.1007/s00767-018-00414-7>

Banning H., Stelling M., König S., Schoenberg R., Neumann T. (2018): Preparation and purification of organic samples for selenium isotope studies. PLoS ONE 13(3): e0193826. <https://doi.org/10.1371/journal.pone.0193826>

Banning H., König W., Müller A., Pickl C. (2017): Not relevant? The significance of non-regulated pesticide metabolites. SETAC Europe 2017, Brussels. Platform presentation and extended abstract.

Banning H., Stelling M., Schoenberg R., Koenig S., Neumann T. (2015): Preparing biological samples for organic sensitive Se isotope analytics - validation of various approaches. Goldschmidt Conference 2015, Prague. Platform presentation and extended abstract.

Banning H., Stelling M., Schoenberg R., Eiche E., Nothstein A., Riemann M., Nick P., Neumann T. (2014): Use of stable isotope signatures in plants as a tool to explore the selenium cycle in the critical zone. In: G.S. Banuelos, Z.-Q. Lin, X. Yin (Eds.) (2014): Selenium in the Environment and Human Health. CRC Press.

Banning H. (2014): Selen - essentieller Nährstoff und Schadstoff in Umweltsystemen. In: A. Banning, A. Englert, F. Wisotzky, S. Wohnlich (Eds.) (2014): Zukunftsfragen der Hydrogeologie. Bochumer Geowiss. Arbeiten Heft 21

Memberships

- Environmental Justice Institute
- Environmental Peacebuilding Association
- Society of Environmental Toxicology and Chemistry (SETAC)
- International Society of Selenium Research (ISSR)
- Arbeitsgruppe Stabile Isotope (ASI), Germany
- Go Ahead! e.V.