Curriculum Vitae

MICHAEL BERG, Ph.D., Prof.
Head of Department of Water Resources and Drinking Water, Lecturer at ETH Zurich.

Eawag, Swiss Federal Institute for Aquatic Science and Technology, Dübendorf, Switzerland.

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EDUCATION

Karlsruhe Institute of Technology (KIT), Germany, Institute of Mineralogy and Geochemistry, Research Center Environment, Ph.D. in Natural Sciences, 2007.
Zurich University of Applied Sciences (ZHAW), Switzerland, Department of Chemistry, B.Sc. in Chemistry, 1987.

PROFESSIONAL EXPERIENCE

Eawag, Swiss Federal Institute of Aquatic Science & Technology, Dübendorf, Switzerland, Water Resources and Drinking Water Department, Contaminant Hydrology Group,
Head of Department (2014-present), Research Group Leader (2002-present).
Adjunct Professor with the School of Civil Engineering and Surveying, University of Southern Queensland, Australia (2018).
Curtin Univerity and CSIRO, Perth, Australia. Sabbatical year as Adjunct Professor (09.2013-07.2014)
ETH Zurich, Lecturer (2006-present).
University of Karlsruhe, Germany, Institute of Mineralogy and Geochemistry, Research Center Environment, Doctoral Fellow (2005-2007).
Hanoi University of Science, Vietnam, Scientific Advisor and Manager for the Swiss Agency for Development and Cooperation in Vietnam (1998-2008). Capacity Building in Environmental Science and Technology in Northern Vietnam.
Swiss Federal Institute of Aquatic Science & Technology (EAWAG), Chemistry Department, Scientific Coworker, Environmental Inorganic Chemistry (1988-1991), Environmental Organic Chemistry (1992-1999).

RESEARCH INTERESTS

- Occurrence, fate and behavior of organic and inorganic contaminants in aquatic environments.
- Geochemical and physical processes determining the mobility of contaminants.
- Development of methodologies involving compound-specific isotope analysis.
- Geogenic groundwater contamination.
- Surface water and drinking water pollution.

SELECTED ACTIVITIES

2015-to date Manager of the Groundwater Assessment Platform (www.gapmaps.org)
2013–2014 Sabbatical stay as Adjunct Professor at Curtin University and CSIRO, Perth, Western Australia, October 2013–July 2014
2013–2014 Guest Editor, *Science of the Total Environment*.
2011 Co-organizer, International Conference on Arsenic in Groundwater in Southern Asia, Hanoi, Vietnam, November 2011
2011 Organizing Committee, International Conference on Chemistry and the Environment (ICCE 2011), Zurich, Switzerland, September 2011.
2008 Organizing Committee, National Workshop on Groundwater Arsenic Contamination in Vietnam, Hanoi University of Science, Hanoi, Vietnam, November 2008.
2008 Co-organizer, Swiss National Symposium on Rehabilitation of Industrial Sites Contaminated by Chlorinated Solvents, May 2008, Bern, Switzerland.
2007 Guest Editor, *Applied Geochemistry*.
2007 Co-organizer, Joint Eawag/University of Manchester Workshop on “Arsenic in Southeast Asian Aquifers with emphasis on Cambodia and Vietnam”, Manchester, UK, October 2007.

2006-to date Lecturer at ETH Zurich, Department of Environmental Systems Science, Switzerland.
1998-2008 Scientific Advisor and Manager for the Swiss Agency for Development and Cooperation in Vietnam (1998-2008). Capacity Building in Environmental Science and Technology in Northern Vietnam. Hanoi University of Science, Vietnam.

AWARDS

2019 Sandmeyer Prize for experimental and modelling studies on drinking water contamination by arsenic and other geogenic elements. Awarded at the 2019 Fall meeting of the Swiss Chemical Society. http://scg.ch/index.php?option=com_content&view=category&layout=blog&id=91&Itemid=580

Oct 2018 appointed Adjunct Professor with the School of Civil Engineering and Surveying at the University of Southern Queensland, Australia.

Aug 2013 Cover story of the journal "Science", combined with an international press conference organized by "Science" on our publication entitled *Groundwater arsenic contamination throughout China* (Rodriguez-Lado et al. 2013, Science. See doi:10.1126/science.1237484

Jul 2008 & Jan 2011 Extensive media coverage by international press (including CNN, CBS, BBC) on our work on arsenic prediction in groundwaters in Southeast Asia (Winkel et al., Nature Geoscience 2008, and Winkel et al., PNAS 2011). See doi:10.1073/pnas.1011915108 and doi:10.1038/ngeo254

2008 Medal of Honour for achievements in training and research in Vietnam, Ministry of Education and Training, Vietnam.
2008 Publication Award, American Chemical Society, Environmental science 1st runner-up paper of the year 2007, "Carbon and Chlorine Isotope Effects During Abiotic Reductive Dechlorination of Polychlorinated Ethanes", *Environmental Science and Technology*. See doi:10.1021/es087066v
2006 Publication Award, American Chemical Society, Environmental technology top paper of the year 2005, "Bacterial Bioassay for Rapid and Accurate Analysis of Arsenic in Highly Variable Groundwater Samples", *Environmental Science and Technology*. See doi:10.1021/es0626537

PUBLICATIONS

Online list, Google Scholar http://scholar.google.com/citations?user=keesbKYAAAAJ

1. Peer-reviewed articles and book chapters

Muhammad Sadiq, Syed Ali M.A.S. Eqani, Joel Podgorski, Shazia Ilyas, Syed Sayyam Abbas, Mustafa N. Shafqat, Ismat Nawaz, **Michael Berg**. *Geochemical Insights of Arsenic Mobilization into the Aquifers of Punjab, Pakistan*. Science of the Total Environment, **935**, 173452 (2024). https://doi.org/10.1016/j.scitotenv.2024.173452

Joel Podgorski*, Oliver Kracht, Luis Araguas-Araguas, Stefan Terzer-Wassmuth, Jodie Miller, Ralf Straub, Rolf Kipfer, **Michael Berg***. *Groundwater vulnerability to pollution in Africa's Sahel region.* Nature Sustainability, **7**, 558–567 (2024). https://doi.org/10.1038/s41893-024-01319-5 (Open Access)

https://doi.org/10.1038/s41893-024-01319-5 (Open Access)Dahyann Araya*, Joel Podgorski, **Michael Berg***. *Groundwater salinity in the Horn of Africa: Spatial prediction modeling and estimated people at risk*. Environment International, **176**, 107925 (2023). https://doi.org/10.1016/j.envint.2023.107925 (Open Access)

Alexandra K. Lightfoot, Emiliano Stopelli, **Michael Berg**, Matthias Brennwald, Rolf Kipfer. *Noble gases in aquitard provide insight into underlying subsurface stratigraphy and free gas formation*. Vadose Zone Journal, **22**, e20232 (2023). https://doi.org/10.1002/vzj2.20232 (Open Access)

Caroline M.C. de Meyer, Ingo Wahnfried, Juan M. Rodriguez Rodriguez, Rolf Kipfer, Pilar A. García Avelino, Edward A. Carpio Deza, **Michael Berg***. *Hotspots of geogenic arsenic and manganese contamination in groundwater of the floodplains in lowland Amazonia (South America)*. Science of the Total Environment, **860**, 160407 (2023). http://dx.doi.org/10.1016/j.scitotenv.2022.160407 (Open Access)

Jonas Wielinski, Joaquin Jimenez-Martinez, Jörg Göttlicher, Ralph Steininger, Stefan Mangold, Stephan Hug, **Michael Berg**, Andreas Voegelin. *Spatiotemporal mineral phase evolution and arsenic retention in*

microfluidic models of zerovalent iron-based water treatment. Environmental Science & Technology, **56**, 13696–13708 (2022). https://doi.org/10.1021/acs.est.2c02189 (Open Access)

Joel Podgorski*, **Michael Berg***. *Global analysis and prediction of fluoride in groundwater*. Nature Communications, **13**, 4232 (2022). https://doi.org/10.1038/s41467-022-31940-x (Open Access)

Data repository at ERIC/open: Code, data and maps associated with the article Podgorski, J., and M. Berg (2022), Global analysis and prediction of fluoride in groundwater. Nature Communications, 13, 4232. https://doi.org/10.25678/0006GQ

Jochen Bundschuh, Nabeel Khan Niazi, Mohammad Ayaz Alam, **Michael Berg**, Indika Herath, Barbara Tomaszewska, Jyoti Prakash Maity, Yong Sik Ok. *Global arsenic dilemma and sustainability*. Journal of Hazardous Materials, **436**, 129197 (2022). https://doi.org/10.1016/j.jhazmat.2022.129197 (Open Access)

Yuya Ling, Joel Podgorski*, Muhammad Sadiq, Hifza Rasheed, Syed A.M.A.S. Eqani, **Michael Berg**. *Monitoring and prediction of high fluoride concentrations in groundwater in Pakistan*. Science of the Total Environment, **839**, 156058 (2022). https://doi.org/10.1016/j.scitotenv.2022.156058 (Open Access)

Joel Podgorski, Dahyann Araya, **Michael Berg**. *Geogenic manganese and iron in groundwater of Southeast Asia and Bangladesh – Machine learning spatial prediction modeling and comparison with arsenic.* Science of the Total Environment, **833**, 155131 (2022). https://doi.org/10.1016/j.scitotenv.2022.155131 (Open Access)

Alexandra K. Lightfoot, Matthias S. Brennwald, Henning Prommer, Emiliano Stopelli, **Michael Berg**, Martyna Glodowska, Magnus Schneider, Rolf Kipfer. *Noble gas constraints on the fate of arsenic in groundwater*. Water Research, **214**, 118199 (2022). http://dx.doi.org/10.1016/j.watres.2022.118199 (Open Access)

Dahyann Araya*, Joel Podgorski, Michael Kumi, Patrick A. Mainoo, **Michael Berg***. *Fluoride contamination of groundwater resources in Ghana: Country-wide hazard modeling and estimated population at risk*. Water Research, **212**, 118083 (2022). https://doi.org/10.1016/j.watres.2022.118083 (Open Access)

Lena Schinkel*, Pablo A. Lara-Martín, Walter Giger, Juliane Hollender, **Michael Berg***. *Synthetic surfactants in Swiss sewage sludges: Analytical challenges, concentrations and per capita loads.* Science of the Total Environment, **808**, 151361 (2022). https://doi.org/10.1016/j.scitotenv.2021.151361 (Open Access)

Thi Duyen Vu, The Anh Lang, Thi Kim Trang Pham, Hung Viet Pham, **Michael Berg**. *Variations of arsenic in groundwater from a transect in Van Phuc village, Hanoi*. Version B of Vietnam Journal of Science and Technology, **63(11)**, 18–22 (2021). (in Vietnamese). https://b.vjst.vn/index.php/ban_b/article/view/1138 (Open Access). https://doi.org/10.31276/VJST.63(11).17-22

Ruohan Wu, Joel Podgorski, **Michael Berg**, David Polya. *Geostatistical model of the spatial distribution of arsenic in groundwaters in Gujarat State, India*. Environmental Geochemistry and Health, **43**, 2649–2664 (2021). https://doi.org/10.1007/s10653-020-00655-7 (Open Access)

Emiliano Stopelli, Vu T. Duyen, Henning Prommer, Martyna Glodowska, Andreas Kappler, Magnus Schneider, Elisabeth Eiche, Alexandra K. Lightfoot, Rolf Kipfer, AdvectAs team members, Carsten J. Schubert, Pham K.T. Trang, Pham H. Viet, Lenny H.E. Winkel, **Michael Berg***. *Carbon and methane cycling in arsenic-contaminated aquifers*. Water Research, **200**, 117300 (2021). https://doi.org/10.1016/j.watres.2021.117300 (Open Access)

Martyna Glodowska, Magnus Schneider, Elisabeth Eiche, Agnes Kontny, Thomas Neumann, Daniel Straub, **Michael Berg**, Henning Prommer, Benjamin C. Bostick, Athena A. Nghiem, AdvectAs project members, Sara Kleindienst, Andreas Kappler. *Fermentation, methanotrophy and methanogenesis influence sedimentary Fe and As dynamics in As-affected aquifers in Vietnam*. Science of the Total Environment, **779**, 146501 (2021). https://doi.org/10.1016/j.scitotenv.2021.146501

Ralf Kaegi, Alexander Gogos, Voegelin Andreas, Stephan J. Hug, Lenny H.E. Winkel, Andreas M. Buser, **Michael Berg**. *Quantification of individual Rare Earth Elements from industrial sources in sewage sludge*. Water Research X, **11**, 100092 (2021). https://doi.org/10.1016/j.wroa.2021.100092 (Open Access)

Agnes Kontny, Magnus Schneider, Elisabeth Eiche, Emiliano Stopelli, Martyna Glodowska, Bhasker Rathi, Jörg Göttlicher, James M. Byrne, Andreas Kappler, **Michael Berg**, Duyen Vu Thi, Pham T.K. Trang, Pham H. Viet, Thomas Neumann. *Iron mineral transformations and their impact on As (im)mobilization at redox interfaces in As-contaminated aquifers*. Geochimica et Cosmochimica Acta, **296**, 189–209 (2021). https://doi.org/10.1016/j.gca.2020.12.029

Harald Neidhardt, Sebastian Rudischer, Elisabeth Eiche, Magnus Schneider, Emiliano Stopelli, Vu T. Duyen, Pham T.K. Trang, Pham H. Viet, Thomas Neumann, **Michael Berg.** *Phosphate immobilization dynamics and interaction with arsenic sorption at redox transition zones in floodplain aquifers: Insights from the Red River Delta, Vietnam*. Journal of Hazardous Materials, **411**, 125128 (2021). https://doi.org/10.1016/j.jhazmat.2021.125128

Martyna Glodowska, Emiliano Stopelli, Daniel Straub, Duyen Vu Thi, Pham T.K. Trang, Pham H. Viet, AdvectAs team members, **Michael Berg,** Andreas Kappler, Sara Kleindienst. *Arsenic behavior in groundwater in Hanoi (Vietnam) influenced by a complex biogeochemical network of iron, methane, and sulfur cycling*. Journal of Hazardous Materials, **407**, 124398 (2021). https://doi.org/10.1016/j.jhazmat.2020.124398 (Open Access)

Michael Berg*, Elke Suess, Lara Cayo, Sylvain Bouchet, Stephan J. Hug, Ralf Kaegi, Andreas Voegelin, Lenny H.E. Winkel, Andreas M. Buser. *Quecksilber im Schweizer Abwasser – Konzentrationen, Massenflüsse, Speziierung und Rückhalt.* Aqua & Gas, **1/2021**, 14–20 (2021). https://www.aquaetgas.ch/wasser/abwasser/20210106_ag1_-quecksilber-im-schweizer-abwasser (Open Access)

Martyna Glodowska, Emiliano Stopelli, Magnus Schneider, Bhasker Rathi, Daniel Straub, Alex Lightfoot, Rolf Kipfer, **Michael Berg**, Mike Jetten, Sara Kleindienst, Andreas Kappler & AdvectAs Team Members. *Arsenic mobilization by anaerobic iron-dependent methane oxidation*. Nature Communications Earth & Environment, **1**, 42 (2020). https://www.nature.com/articles/s43247-020-00037-y (Open Access)

Stephan J. Hug, Lenny H.E. Winkel, Andreas Voegelin, **Michael Berg**, Annette C. Johnson. *Arsenic and other Geogenic Contaminants in Groundwater – A Global Challenge (Sandmeyer Award 2019)*. Chimia, **74 (7-8)**, 524-537 (2020). https://doi.org/10.2533/chimia.2020.524 (Open Access)

Joel Podgorski*, **Michael Berg***. *Global threat of arsenic in groundwater*. Science, **368**, 845–850 (2020). https://science.sciencemag.org/content/368/6493/845

Data repository at ERIC/open: Code, data and maps associated with the article Podgorski, J., and M. Berg (2020), Global threat of arsenic in groundwater. http://dx.doi.org/10.25678/0001ZT

Martyna Glodowska, Emiliano Stopelli, Magnus Schneider, Alexandra Lightfoot, Bhasker Rathi, Daniel Straub, Monique Patzner, Vu T. Duyen, AdvectAs team members, **Michael Berg**, Sara Kleindienst, Andreas Kappler. *Role of in situ natural organic matter in mobilizing As during microbial reduction of FeIII-mineral-bearing aquifer sediments from Hanoi (Vietnam).* Environmental Science & Technology, **54**, 4149–4159 (2020). https://dx.doi.org/10.1021/acs.est.9b07183

Ika Wallis, Henning Prommer, **Michael Berg**, Adam J. Siade, Jing Sun, Rolf Kipfer. *The river-groundwater interface as a hotspot for arsenic release*. Nature Geoscience, **13**, 288–295 (2020). https://www.nature.com/articles/s41561-020-0557-6

Elke Suess, **Michael Berg*,** Sylvain Bouchet, Lara Cayo, Stephan J. Hug, Ralf Kaegi, Andreas Voegelin, Lenny H.E. Winkel, Emanuel Tessier, David Amouroux, Andreas M. Buser. Mercury loads and fluxes from wastewater: A nationwide survey in Switzerland. Water Research, **175**, 115708 (2020). https://doi.org/10.1016/j.watres.2020.115708 (Open Access)

Emiliano Stopelli, Vu T. Duyen, Tran T. Mai, Pham T.K. Trang, Pham H. Viet, Alexandra Lightfoot, Rolf Kipfer, Magnus Schneider, Elisabeth Eiche, Agnes Kontny, Thomas Neumann, Martyna Glodowska, Monique Patzner, Andreas Kappler, Sara Kleindienst, Bhasker Rathi, Olaf Cirpka, Henning Prommer, Lenny H. E. Winkel, **Michael Berg***. *Spatial and temporal evolution of groundwater arsenic contamination in the Red River delta, Vietnam: Interplay of mobilisation and retardation processes*. Science of the Total Environment, **717**, 137143 (2020). https://doi.org/10.1016/j.scitotenv.2020.137143 (Open Access)

Christian Moeck, Nicolas Grech-Cumbo, Joel Podgorski, Anja Bretzler, Jason J. Gurdak, **Michael Berg**, Mario Schirmer. *A global-scale dataset of direct natural groundwater recharge rates: A review of variables, processes and relationships*. Science of the Total Environment, **717**, 137042 (2020). https://doi.org/10.1016/j.scitotenv.2020.137042

Shanyun Wang, Guibing Zhu, Linjie Zhuang, Yixiao Li, Lu Liu, Gaute Lavik, **Michael Berg**, Sitong Liu, Xi-En Long, Jianhua Guo, Mike S.M. Jetten, Marcel M.M. Kuypers, Fangbai Li, Lorenz Schwark, Chengqing Yin. *Anaerobic ammonium oxidation is a major N-sink in aquifer systems around the world*. ISME Journal, **14**, 151–163 (2020). https://www.nature.com/articles/s41396-019-0513-x

Joel Podgorski, **Michael Berg**, Rolf Kipfer. *Prediction Isotope mapping of groundwater pollution and renewal.* IAEA Bulletin, **60(1)**, 31–32 (2019). https://www.iaea.org/bulletin (Open Access)

Christian Möck, Dirk Radny, Peter Huggenberger, Annette Affolter, Adrian Auckenthaler, Juliane Hollender, **Michael Berg**, Mario Schirmer. *Verteilung anthropogen eingetragener Stoffe im Grundwasser: Ein Fallbeispiel aus der Nordschweiz*. Grundwasser, **23(4)**, 297–309 (2018). https://doi.org/10.1007/s00767-018-0403-6

Joel E. Podgorski*, Pawan Labhasetwar, Dipankar Saha, **Michael Berg***. *Prediction Modeling and Mapping of Groundwater Fluoride Contamination throughout India*. Environmental Science & Technology, **52,** 9889–9898 (2018). https://doi.org/10.1021/acs.est.8b01679 (Open Access)

Harald Neidhardt, Daniel Schoeckle, Anna Schleinitz, Elisabeth Eiche, Zsolt Berner, Pham T.K. Trang, Vi M. Lan, Pham H. Viet, Ashis Biswas, Santanu Majumder, Debashis Chatterjee, Yvonne Oelmann, **Michael Berg**. *Biogeochemical phosphorus cycling in groundwater ecosystems – Insights from South and Southeast Asian floodplain and delta aquifers*. Science of the Total Environment, **644**, 1357–1370 (2018). http://doi.org/10.1016/j.scitotenv.2018.07.056

Ondra Sracek, **Michael Berg**, Beat Müller. *Redox buffering and de-coupling of arsenic and iron in reducing aquifers across the Red River Delta, Vietnam, and conceptual model of de-coupling processes*. Environmental Science and Pollution Research, **25**, 15954–15961 (2018). https://doi.org/10.1007/s11356-018-1801-0

Harald Neidhardt, Lenny H.E. Winkel, Ralf Kaegi, Caroline Stengel, Pham T.K. Trang, Vi M. Lan, Pham H. Viet, **Michael Berg**. *Insights into arsenic retention dynamics of Pleistocene aquifer sediments by in situ sorption experiments.* Water Research, **129**, 123–132 (2018). http://doi.org/10.1016/j.watres.2017.11.018. dx.doi.org/10.1016/j.scitotenv.2017.07.211

Bhasker Rathi, Adam J. Siade, Michael J. Donn, Lauren Helm, Ryan Morris, James A. Davis, **Michael Berg**, Henning Prommer. *Multiscale Characterization and Quantification of Arsenic Mobilization and Attenuation During Injection of Treated Coal Seam Gas Coproduced Water into Deep Aquifers*. Water Resources Research, **53(12)**, 10779–10801 (2017). http://doi.org/10.1002/2017WR021240

Christian Moeck, Dirk Radny, Andrea Popp, Matthias Brennwald, Sebastian Stoll, Adrian Auckenthaler, **Michael Berg**, Mario Schirmer. *Characterization of a managed aquifer recharge system using multiple tracers*. Science of the Total Environment, **609**, 701–714 (2017). dx.doi.org/10.1016/j.scitotenv.2017.07.211

Caroline M.C. de Meyer, Juan M. Rodríguez, Edward A. Carpio, Pilar A. García, Caroline Stengel, **Michael Berg***. *Arsenic, manganese and aluminum contamination in groundwater resources of Western Amazonia (Peru)*. Science of the Total Environment, **607–608**, 1437–1450 (2017). dx.doi.org/10.1016/j.scitotenv.2017.07.059

Bas Vriens, Lenny H.E. Winkel, Ralf Kaegi, Andreas Voegelin, Stephan J. Hug, Andreas M. Buser, **Michael Berg***. *Quantification of Element Fluxes in Wastewaters: A Nationwide Screening in Switzerland*. Environmental Science & Technology, **51**, 10943–10953 (2017). dx.doi.org/10.1021/acs.est.7b01731 ES&T Cover story, October 3, 2017: http://pubs.acs.org/toc/esthag/51/19

Joel E. Podgorski, Syed Ali M.A.S. Eqani, Tasawar Khanam, Rizwan Ullah, Heqing Shen, **Michael Berg***. *Extensive arsenic contamination in high-pH unconfined aquifers in the Indus Valley*. Science Advances, **3**, e1700935 (2017). http://advances.sciencemag.org/content/3/8/e1700935

Christian Moeck, Dirk Radny, Adrian Auckenthaler, **Michael Berg**, Juliane Hollender, Mario Schirmer. *Estimating the spatial distribution of artificial groundwater recharge using multiple tracers*. Isotopes in Environmental and Health Studies, **53(5)**, 484–499 (2017). dx.doi.org/10.1080/10256016.2017.1334651

Anja Bretzler, **Michael Berg**, Lenny Winkel, Manoucher Amini, Luis Rodriguez-Lado, Chansopheaktra Sovann, David A. Polya, Annette Johnson. *Geostatistical modelling of arsenic hazard in groundwater*. Book chapter in "Best Practice Guide on the Control of Arsenic in Drinking Water", Eds. Prosun Bhattacharya, David A. Polya, Dragana Jovanovic. The International Water Association, IWA Publishing, London, UK (2017), pp. 153-160. dx.doi.org/10.2166/9781780404929

Joey Rawson, Adam Siade, Jing Sun, Harald Neidhardt, **Michael Berg**, Henning Prommer. *Quantifying reactive transport processes governing arsenic mobility after injection of reactive organic carbon into a Bengal Delta aquifer*. Environmental Science & Technology, **51**, 8471–8480 (2017). dx.doi.org/10.1021/acs.est.7b02097

Bhasker Rathi, Harald Neidhardt, **Michael Berg**, Adam Siade, Henning Prommer. *Processes governing arsenic retardation on Pleistocene sediments: Adsorption Experiments and Model-Based Analysis*. Water Resources Research, **53**, 4344–4360 (2017). dx.doi.org/10.1002/2017WR020551

Janet G. Hering, Ioannis A. Katsoyiannis, Gerardo Ahumada Theoduloz, **Michael Berg**, Stephan J. Hug. *Arsenic Removal from Drinking Water: Experiences with Technologies and Constraints in Practice*. Journal of Environmental Engineering ASCE, **143(5)**, 03117002, 1–9 (2017). dx.doi.org/10.1061/(ASCE)EE.1943-7870.0001225

Anja Bretzler, Franck Lalanne, Julien Nikiema, Joel Podgorski, Numa Pfenninger, **Michael Berg**, Mario Schirmer. *Groundwater arsenic contamination in Burkina Faso, West Africa: Predicting and verifying regions at risk*. Science of the Total Environment, **584–585**, 958–970 (2017). dx.doi.org/10.1016/j.scitotenv.2017.01.147

Elisabeth Eiche, **Michael Berg**, Sarah-Madeleine Hönig, Thomas Neumann, Vi Mai Lan, Thi Kim Trang Pham, Hung Viet Pham. *Origin and availability of organic matter leading to arsenic mobilisation in aquifers of the Red River Delta, Vietnam*. Applied Geochemistry, **77**, 184–193 (2017). dx.doi.org/10.1016/j.apgeochem.2016.01.006

Shanyun Wang, Dirk Radny, Shuangbing Huang, Linjie Zhuang, Siyan Zhao, **Michael Berg**, Mike S. M. Jetten, Guibing Zhu. *Nitrogen loss by anaerobic ammonium oxidation in unconfined aquifer soils*. Scientific Reports, **7**, Article number: 40173 (2017). https://www.nature.com/articles/srep40173

Christian Moeck, Dirk Radny, Paul Borer, Judith Rothardt, Adrian Auckenthaler, **Michael Berg**, Mario Schirmer. *Multicomponent statistical analysis to identify flow and transport processes in a highly-complex environment*. Journal of Hydrology, **542**, 437–449 (2016). doi:10.1016/j.jhydrol.2016.09.023

Vidhya Chittoor Viswanathan, Yongjun Jiang, **Michael Berg**, Daniel Hunkeler, Mario Schirmer. *An integrated spatial snap-shot monitoring method for identifying seasonal changes and spatial changes in surface water quality*. Journal of Hydrology, **539**, 567–576 (2016). doi:10.1016/j.jhydrol.2016.05.017

Joey Rawson, Henning Prommer, Adam Siade, Jackson Carr, **Michael Berg**, James A. Davis, Scott Fendorf. *Numerical Modeling of Arsenic Mobility during Reductive Iron-Mineral Transformations*. Environmental Science & Technology, **50**, 2459–2467 (2016). doi:10.1021/acs.est.5b05956

Bas Vriens, Marcel Mathis, Lenny H.E. Winkel, **Michael Berg***. *Quantification of volatile-alkylated selenium and sulfur in complex aqueous media using solid-phase microextraction*. Journal of Chromatography A, **1407**, 11–20 (2015). doi:10.1016/j.chroma.2015.06.054

Jenny Norrman, Charlotte J. Sparrenbom, **Michael Berg**, Dang Duc Nhan, Gunnar Jacks, Peter Harms-Ringdahl, Pham Quy Nhan, Håkan Rosqvist. *Tracing sources of ammonium in reducing groundwater in a well field in Hanoi (Vietnam) by means of stable nitrogen isotope (δ15N) values*. Applied Geochemistry, **61**, 248–258 (2015). doi:10.1016/j.apgeochem.2015.06.009

Weixiao Qi, Heinz Singer, **Michael Berg***, Beat Müller, Benoit Pernet-Coudrier, Huijuan Liu*, Jiuhui Qu. *Elimination of polar micropollutants and anthropogenic markers by wastewater treatment in Beijing, China*. Chemosphere, **119**, 1054–1061 (2015). doi:10.1016/j.chemosphere.2014.09.027

Andreas Voegelin, Ralf Kaegi, **Michael Berg**, Katja Sonja Nitzsche, Andreas Kappler, Vi Mai Lan, Pham Thi Kim Trang, Jörg Göttlicher, Ralph Steininger. *Solid-phase characterization of an effective household sand filter for As, Fe and Mn removal from groundwater in Vietnam*. Environmental Chemistry **11**, 566–578 (2014). doi:10.1071/EN14011

Tim Blazina, Youbin Sun, Andreas Voegelin, Markus Lenz, **Michael Berg**, Lenny H.E. Winkel. Terrestrial selenium distribution in China is potentially linked to monsoonal climate. Nature Communications **5**, 4717 (2014). doi:10.1038/ncomms5717

Bas Vriens, Adrian A. Ammann, Harald Hagendorfer, Markus Lenz, **Michael Berg**, Lenny H.E. Winkel. *Quantification of Methylated Selenium, Sulfur, and Arsenic in the Environment*. PLoS ONE, **9(7)**: e102906 (2014). doi:10.1371/journal.pone.0102906

C. Annette Johnson, **Michael Berg**, David Sabatini. *Towards sustainable safe drinking water supply in low- and middle-income countries: The challenges of geogenic contaminants and mitigation measures*. Science of the Total Environment, **488-489**, 475–475 (2014). doi:10.1016/j.scitotenv.2014.01.131

Tetsuro Agusa, Pham Thi Kim Trang, Vi Mai Lan, Duong Hong Anh, Shinsuke Tanabe, Pham Hung Viet, **Michael Berg**. *Human exposure to arsenic from drinking water in Vietnam*. Science of the Total Environment, **488-489**, 562–569 (2014). doi:10.1016/j.scitotenv.2013.10.039

Bas Vriens, Markus Lenz, Laurent Charlet, **Michael Berg**, Lenny H.E. Winkel. *Natural wetland emissions of methylated trace elements*. Nature Communications **5**, 3035 (2014). doi:10.1038/ncomms4035

Weixiao Qi, Beat Müller, Benoit Pernet-Coudrier, Heinz Singer, Huijuan Liu, Jiuhui Qu, **Michael Berg**. *Organic micropollutants in the Yangtze River: Seasonal occurrence and annual loads*. Science of the Total Environment, **472**, 789–799 (2014). doi:10.1016/j.scitotenv.2013.11.019

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