



# FRANK MENGER

PH.D. IN ENVIRONMENTAL CHEMISTRY

## PERSONAL PROFILE

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Driven to develop my skills, collaborate and grow professionally.

Confident in my ability to think critically and excited to share my research ideas.

## CONTACT

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 @MengerAcademic

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## LANGUAGES

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- German (mother tongue)
- English
- Latin
- Swedish (understanding)

## CAREER OBJECTIVES

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- tackling the issue of chemical pollution by advancing LC-HRMS-based non-target screening.
- improving my science communication skills
- engaging in cross-disciplinary research.

## COMPETENCES

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- strong background in analytical chemistry
- >5 years experience with non-target screening
- (ultra)trace analysis of organic pollutants
- leaching of plastic additives into water

## TEACHING & SCIENCE COMMUNICATION

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- Teaching in the course “Ecology and Environmental Chemistry” at Leuphana University Lüneburg (Oct 2023 - Feb 2024)
- Supervision of 2 x master and 1 x bachelor students
- Inspiration lectures for 1st year bachelor students (2018 & 2020)
- Science project with high school students (2018)

## EDUCATION & DEGREES

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**Swedish University of Agricultural Sciences, Ph.D. in Environmental Chemistry**  
OCT 2017 - JUN 2021 (UPPSALA, SWEDEN)

- Thesis: Hidden in the Water - Development of screening strategies to identify new organic contaminants of emerging concern



**Friedrich-Alexander-University Erlangen-Nuernberg, State Exam in Food Chemistry**

OCT 2012 - APR 2017 (ERLANGEN, GERMANY)

- Thesis: Toxicological evaluation and bioconcentration of per- and polyfluoroalkyl substances (PFASs) in zebrafish (*Danio rerio*) embryos

## RESEARCH VISITS & EXPEDITIONS

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- SAS21 expedition to the Central Arctic Ocean (Aug - Sep 2021)
- Research stay in Castellòn de la Plana, Spain (Feb - Apr 2019)
- Research stay in Uppsala, Sweden (Oct 2016 - Apr 2017)

## SELECTED CONFERENCE CONTRIBUTIONS

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- 2023 - Healthy Environments And Lives (HEAL) Conference; Collective Action for Health, Environment and Climate, virtual and on-site, Australia (invited speaker)
- 2023, 2021 & 2019 - International conference on non-target screening (ICNTS), Erding, Germany (2 x oral presentation)
- 2019 - International conference on chemistry and the environment (ICCE), Thessaloniki, Greece (oral presentation, award for best oral presentation)
- 2018 - American Chemical Society (ACS) annual meeting, New Orleans, USA (oral presentation)

## PERSONAL

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- Field hockey player (hockey club co-chair 2018-2020, youth trainer 2019-2020)
- Pètanque player (Bavarian youth champion 2008)
- Dance enthusiast (Lindy Hop, Balboa)
- Cooking

## LIST OF PUBLICATIONS

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- **F. Menger**, M. Römerscheid, S. Lips, O. Klein, D. Nabi, J. Gandrass, H. Joerss, K. Wendt-Potthoff, D. Bedulina, T. Zimmermann, M. Schmitt-Jansen, C. Huber, A. Böhme, N. Ulrich, A.J. Beck, D. Pröfrock, E.P. Achterberg, A. Jahnke, L. Hildebrandt, Screening the release of chemicals and microplastic particles from diverse plastic consumer products into water under accelerated UV weathering conditions, *Journal of Hazardous Materials* (2024) 135256. <https://doi.org/10.1016/j.jhazmat.2024.135256>.
- **F. Menger**, P.L. Andersson, J.M. Weiss, Integration of Chemicals Market Data with Suspect Screening Using In Silico Tools to Identify Potential New and Emerging Risk Chemicals, in: Springer, Berlin, Heidelberg, 2024: pp. 1-20. [https://doi.org/10.1007/698\\_2023\\_1056](https://doi.org/10.1007/698_2023_1056).
- H. Joerss, **F. Menger**, The complex 'PFAS world' - How recent discoveries and novel screening tools reinforce existing concerns, *Current Opinion in Green and Sustainable Chemistry* 40 (2023) 100775. <https://doi.org/10.1016/j.cogsc.2023.100775>.
- H. Mohammed Taha, R. Aalizadeh, N. Alygizakis, J.-P. Antignac, H.P.H. Arp, R. Bade, N. Baker, L. Belova, L. Bijlsma, E.E. Bolton, W. Brack, A. Celma, W.-L. Chen, T. Cheng, P. Chirsir, L. Čirka, L.A. D'Agostino, Y. Djoumbou Feunang, V. Dulio, S. Fischer, P. Gago-Ferrero, A. Galani, B. Geueke, N. Głowacka, J. Glüge, K. Groh, S. Grosse, P. Haglund, P.J. Hakkinen, S.E. Hale, F. Hernandez, E.M.-L. Janssen, T. Jonkers, K. Kiefer, M. Kirchner, J. Koschorreck, M. Krauss, J. Krier, M.H. Lamoree, M. Letzel, T. Letzel, Q. Li, J. Little, Y. Liu, D.M. Lunderberg, J.W. Martin, A.D. McEachran, J.A. McLean, C. Meier, J. Meijer, **F. Menger**, C. Merino, J. Muncke, M. Muschket, M. Neumann, V. Neveu, K. Ng, H. Oberacher, J. O'Brien, P. Oswald, M. Oswaldova, J.A. Picache, C. Postigo, N. Ramirez, T. Reemtsma, J. Renaud, P. Rostkowski, H. Rüdell, R.M. Salek, S. Samanipour, M. Scheringer, I. Schliebner, W. Schulz, T. Schulze, M. Sengl, B.A. Shoemaker, K. Sims, H. Singer, R.R. Singh, M. Sumarah, P.A. Thiessen, K.V. Thomas, S. Torres, X. Trier, A.P. van Wezel, R.C.H. Vermeulen, J.J. Vlaanderen, P.C. von der Ohe, Z. Wang, A.J. Williams, E.L. Willighagen, D.S. Wishart, J. Zhang, N.S. Thomaidis, J. Hollender, J. Slobodnik, E.L. Schymanski, The NORMAN Suspect List Exchange (NORMAN-SLE): facilitating European and worldwide collaboration on suspect screening in high resolution mass spectrometry, *Environ Sci Eur* 34 (2022) 104. <https://doi.org/10.1186/s12302-022-00680-6>.
- **F. Menger**, A. Celma, E.L. Schymanski, F.Y. Lai, L. Bijlsma, K. Wiberg, F. Hernández, J.V. Sancho, L. Ahrens, Enhancing spectral quality in complex environmental matrices: Supporting suspect and non-target screening in zebra mussels with ion mobility, *Environment International* 170 (2022) 107585. <https://doi.org/10.1016/j.envint.2022.107585>.
- A. Celma, P. Gago-Ferrero, O. Golovko, F. Hernández, F.Y. Lai, J. Lundqvist, **F. Menger**, J.V. Sancho, K. Wiberg, L. Ahrens, L. Bijlsma, Are preserved coastal water bodies in Spanish Mediterranean basin impacted by human activity? Water quality evaluation using chemical and biological analyses, *Environment International* 165 (2022) 107326. <https://doi.org/10.1016/j.envint.2022.107326>.
- H. Joerss, F. Menger, J. Tang, R. Ebinghaus, L. Ahrens, Beyond the Tip of the Iceberg: Suspect Screening Reveals Point Source-Specific Patterns of Emerging and Novel Per- and Polyfluoroalkyl Substances in German and Chinese Rivers, *Environ. Sci. Technol.* 56 (2022) 5456-5465. <https://doi.org/10.1021/acs.est.1c07087>

- B. Schulze, D. van Herwerden, I. Allan, L. Bijlsma, N. Etxebarria, M. Hansen, S. Merel, B. Vrana, R. Aalizadeh, B. Bajema, F. Dubocq, G. Coppola, A. Fildier, P. Fialová, E. Frøkjær, R. Grabic, P. Gago-Ferrero, T. Gravert, J. Hollender, N. Huynh, G. Jacobs, T. Jonkers, S. Kaserzon, M. Lamoree, J. Le Roux, T. Mairinger, C. Margoum, G. Mascolo, E. Mebold, **F. Menger**, C. Miège, J. Meijer, R. Moilleron, S. Murgolo, M. Peruzzo, M. Pijnappels, M. Reid, C. Roscioli, C. Soulier, S. Valsecchi, N. Thomaidis, E. Vulliet, R. Young, S. Samanipour, Inter-laboratory mass spectrometry dataset based on passive sampling of drinking water for non-target analysis, *Sci Data* 8 (2021) 223. <https://doi.org/10.1038/s41597-021-01002-w>.
- **F. Menger**, G. Boström, O. Jonsson, L. Ahrens, K. Wiberg, J. Kreuger, P. Gago-Ferrero, Identification of Pesticide Transformation Products in Surface Water Using Suspect Screening Combined with National Monitoring Data, *Environ. Sci. Technol.* 55 (2021) 10343–10353. <https://doi.org/10.1021/acs.est.1c00466>.
- R. Tröger, H. Ren, D. Yin, C. Postigo, P.D. Nguyen, C. Baduel, O. Golovko, F. Been, H. Joerss, M.R. Boleda, S. Polesello, M. Roncoroni, S. Taniyasu, **F. Menger**, L. Ahrens, F. Yin Lai, K. Wiberg, What's in the water? – Target and suspect screening of contaminants of emerging concern in raw water and drinking water from Europe and Asia, *Water Research* 198 (2021) 117099. <https://doi.org/10.1016/j.watres.2021.117099>.
- **F. Menger**, L. Ahrens, K. Wiberg, P. Gago-Ferrero, Suspect screening based on market data of polar halogenated micropollutants in river water affected by wastewater, *Journal of Hazardous Materials* 401 (2021) 123377. <https://doi.org/10.1016/j.jhazmat.2020.123377>.
- **F. Menger**, P. Gago-Ferrero, K. Wiberg, L. Ahrens, Wide-scope screening of polar contaminants of concern in water: A critical review of liquid chromatography-high resolution mass spectrometry-based strategies, *Trends in Environmental Analytical Chemistry* 28 (2020) e00102. <https://doi.org/10.1016/j.teac.2020.e00102>.
- **F. Menger**, J. Pohl, L. Ahrens, G. Carlsson, S. Örn, Behavioural effects and bioconcentration of per- and polyfluoroalkyl substances (PFASs) in zebrafish (*Danio rerio*) embryos, *Chemosphere* 245 (2020) 125573. <https://doi.org/10.1016/j.chemosphere.2019.125573>.