CV for Philipp Mayer (*1968)

Orcid: 0000-0001-5138-7506

Degrees:

2000	PhD (Dutch dr.), Research Institute of Toxicology, Utrecht University, NL.
1995	MSc in Env. Engineering, DTU (DK). Final year University of Wisconsin (US).

Positions:

2013-	Professor in Applied Environmental Chemistry, DTU-Environment.
2009-2013	Professor in Environmental Chemistry, Aarhus University, Risø, Denmark.
2001-2009	Senior scientist at National Environmental Research Institute, Risø, Denmark.
2000-2001	Study director (GLP) and product manager at TNO, Delft, The Netherlands.

Research Area:

The fate, exposure and effects of organic contaminants in the environment. This includes (1) analytical techniques to determine the available exposure of organic contaminants, (2) passive dosing as a novel platform for research and testing and (3) research at interfaces between environmental chemistry, analytical chemistry and toxicology.

Distinctions and awards:

2008-2013	Adjunct Full Professor at University of Copenhagen
1996-1999	3 year Ph.D. scholarship by the Danish Research Academy
1994-1995	Fulbright Scholarship

Memberships of scientific committees, review:

2020	Committee member for large Danish Green Transition Research Program under the Independent Research Fund Denmark (DFF).
2013-18	Member, Danish Council for Independent Research in Technology & Production Sciences (FTP).
2010-22	Member of international expert groups on “Passive Sampling”, “Chemical Activity” and “UVCBs”, including expert workshops.
2000-2002	Convenor of ISO working group “toxicity to aquatic plants” (TC147/SC5/WG5).

Web of Science publications: 176**; Citations:** 6627**; *h*-index:** 46**;**
Other publications: 6**; Patents:** 1.

Supervision of PhDs, 2017 – present (ongoing or finished in 2017 or later):

Main supervisor for 5 PhD and co-supervisor for 1 PhD in this period.

Selected grants, 2017 – present (ongoing or finished in 2017 or later):

Research Institute of Fragrance Materials (rifm), “How to determine the persistence of UVCBs”, Amount granted to Dept.: 2,980,000 DKK, Project period: 2021-2024.

Unilever, Biodegradation kinetics research of chemicals in mixtures with emphasis on personal care chemicals. Project period 2019-2022.

CEFIC-LRI, Fate-directed toxicity testing and risk assessment of UVCBs. Amount granted to Dep. 1,264,000 DKK, Project period 2018-2021.

CEFIC-LRI, Cross-validation for improving determinations of water solubility for difficult to test substances. Amount granted to Dep. 1,517,000 DKK, Project period 2017-2020.

CONCAWE/rifm, Quantifying Primary Degradation of Hydrophobic Organic Chemicals in Mixtures using a partitioning based platform. Amount granted to Dep 7,585,000 DKK, 3 projects within period 2014-2021.

Other significant contributions:

2021	Assessor and Rapporteur, Impact Assessment of the European Joint Research Center (JRC).
1999-2022	Chair of > 20 sessions at SETAC Annual Meetings in Europe and North America.

ES&T publications (2017 or later):

Birch H, Sjøholm KK, Dechesne A, Sparham C, van Egmond R & **P Mayer** (2022). Biodegradation Kinetics of Fragrances, Plasticizers, UV Filters, and PAHs in a Mixture - Changing Test Concentrations over 5 Orders of Magnitude. Environmental Science & Technology (ES&T) 56, 293.

Wang H, Birch H, Sjøholm KK, Xia A & **P Mayer** (2022). In-Tube Passive Dosing of Hydrophobic Organic Chemicals. Environmental Science & Technology Letters 9, 339.

Sjøholm KK, Birch H, Hammershøj R, Saunders DMV, Dechesne A, Loibner AP & **P Mayer**. (2021) Determining the Temperature Dependency of Biodegradation Kinetics for 34 Hydrocarbons while Avoiding Chemical and Microbial Confounding Factors. 2021. Environmental Science & Technology (ES&T) 55, 11091.

Trac LN, Sjøholm KK, Birch H & **P Mayer**. (2021) Passive dosing of petroleum and essential oil UVCBs – Whole mixture toxicity testing at controlled exposure. Environmental Science & Technology (ES&T) 55, 6150.

Sühring R, Sjøholm KK, **Mayer P** & M MacLeod. (2021) Bioaccumulation kinetics testing of hydrophobic UVCBs – combining non-target analysis with internal benchmarking to quantify the bioconcentration of individual Cedarwood oil constituents. Environmental Science & Technology (ES&T) 55, 11125.

Hammershøj R, Birch H, Sjøholm KK & **P Mayer**. (2020) Accelerated Passive Dosing of Hydrophobic Complex Mixtures− Controlling the Level and Composition in Aquatic Tests. ES&T, 54, 4974.

Mueller MT, Fueser H, Trac LN, **Mayer P**, Traunspurger W and S Höss. (2020). Surface-Related Toxicity of Polystyrene Beads to Nematodes & the Role of Food Availability. ES&T 54, 1790.

Hammershøj R, Birch H, Redman AD & **P Mayer**. (2019). Mixture Effects on Biodegradation Kinetics of Hydrocarbons in Surface Water: Increasing Concentrations Inhibited Degradation whereas Multiple Substrates Did Not. ES&T 53, 3087.

Trac LN, Schmidt SN, Holmstrup M and **P Mayer**. (2019) Headspace Passive Dosing of Volatile Hydrophobic Organic Chemicals from a Lipid Donor - Linking Their Toxicity to Well-Defined Exposure for an Improved Risk Assessment. ES&T 53, 13468−13476.

Shrestha P, Meisterjahn B, Klein M, **Mayer P**, Birch H, Hughes CB & D Hennecke. (2019). Biodegradation of Volatile Chemicals in Soil: Separating Volatilization and Degradation in an Improved Test Setup. ES&T 53, 20.

Birch H, Hammershøj RH & **P Mayer**. (2018). Determining Biodegradation Kinetics of Hydrocarbons at Low Concentrations: Covering 5 and 9 Orders of Magnitude of Kow and Kaw. ES&T 52, 2143.

Schmidt SN, AP Wang, Gidley PT, Wooley AH, Lotufo GR, Burgess RM, Ghosh U, Fernandez LA & **P Mayer**. (2017).Cross validation of two partitioning-based sampling approaches in mesocosms containing PCB contaminated field sediment, biota, and activated carbon amendment. ES&T 51, 9996.

Humel S, Schmidt SN, Sumetzberger-Hasinger M, **Mayer P** & AP Loibner. (2017) Enhanced Accessibility of Polycyclic Aromatic Hydrocarbons (PAHs) and Heterocyclic PAHs in Industrially Contaminated Soil after Passive Dosing of a Competitive Sorbate. ES&T. 51: 8017-8026.