



8th Late Summer Workshop 2019

22th – 25th September 2019 in Haltern am See

- Chemical and biological transformation processes and tools
for their investigation -

- Programme -
Update

Sunday, 22nd September

16.30 – 18.30	◆ Registration	Conference Office
19.00	- Dinner -	Restaurant
Afterwards	- Cometogether for a cocktail -	Hotel-Bar

– End of day 1 –

Monday, 23rd September

9.00 – 9.15	◆ Prof. Dr. Torsten C. Schmidt, <i>Chair of Water Chemistry Society, University Duisburg-Essen, Essen, DE:</i> Welcome and opening remarks	Conference room "Drusus/Caesar"
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Chair: Dr. Holger Lutze

9.15 – 10.15	◆ Prof. Dr. Urs von Gunten, <i>Eawag Water Resources and Drinking Water, Dübendorf, CH:</i> Oxidation processes for water treatment: Are we on track?	
10.15 – 10.45	◆ Dr. Fabian Itzel, <i>Institut für Energie- und Umwelttechnik e.V. (IUTA), Duisburg, DE:</i> Evaluation of a biological post-treatment after full-scale ozonation at a municipal wastewater treatment plant	

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10.45 – 12.00 - Coffee break & Poster time –

Conference room "Drusus/Caesar"

12.00 – 12.30 ♦ **Stephanie Remke,**
Eawag EPFL, Dübendorf, CH:
The role of "long-lived" photooxidants in the transformation of aquatic organic compounds photosensitized by dissolved organic matter

12.30 – 13.30 ♦ **Dr. Peter Tentscher,**
Aalborg Øst, DK:
Chemical oxidation: How quantum chemical calculations can support experimental studies

13.30 – 16.00 - Lunch & Poster time -

Restaurant + Room "Cicero"

Chair: Dr. Arne Wick

Conference room "Drusus/Caesar"

16.00 – 17.00 ♦ **Prof. Dr. Damian E. Helbling,**
School of Civil and Environmental Engineering at Cornell University, Ithaca, New York, USA:
Can micropollutant biotransformations be predicted from microbial community biomolecular parts lists?

17.00 – 17.30 ♦ **Nina Henning,**
Federal Institute of Hydrology (BfG), Dep. G2, Aquatic Chemistry, Koblenz, DE:
Elucidating the biological transformation of fexofenadine and sitagliptin by carrier-attached biomass and suspended sludge from a hybrid moving bed biofilm reactor

18.00 – 19.30 - Dinner -

Restaurant

19.30 – 20.30 ♦ **Prof. Dr. Michael Dodd,**
University of Washington, Department of Civil and Environmental Engineering, Seattle, USA:
Antibiotic Resistance Gene Fate during (Waste)water Disinfection Processes: Degradation, Deactivation, and Implications for Mitigation of Antibiotic Resistance Dissemination

Conference room "Drusus/Caesar"



Monday, 23rd September

20.30 – 21.00 ♦ **Katharina Hupperich,**
*University of Duisburg-Essen, Instrumental Analytical Chemistry,
Essen, DE:*
Reaction of chlorine dioxide with organic matter – Formation of
inorganic products

Afterwards - *Cometotogether* -

[Hotel-Bar](#)

– End of day 2 –

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Tuesday, 24th September

Chair: Prof. Dr. Christian Zwiener

Conference room "Drusus/Caesar"

- 9.00 – 10.00 ♦ **Dr. Imma Ferrer,**
University of Colorado, Environmental Engineering, Boulder, USA:
 Identification of transformation products by LC/Q-TOF-MS -
 examples from pesticides in plants to surfactants in hydraulic
 fracturing waters
- 10.00 – 10.30 ♦ **Dr. Martina Werneburg,**
*Eberhard Karls University of Tübingen, Environmental Analytical
 Chemistry, Center for Applied Geoscience, Tuebingen, DE:*
 Targeted and non-targeted LC-MS workflows for the identification of
 input and transformation of emerging pollutants in a small river
 system
- 10.30 – 12.00 - *Coffee break & Poster time* – Room "Cicero"
- Conference room "Drusus/Caesar"
- 12.00 – 12.30 ♦ **Dr. Maolida Nihemaiti,**
*Université Paris-Est Créteil, Laboratoire Eau Environnement et
 Systèmes Urbains, Créteil Cedex, FR:*
 Screening of micropollutants and their transformation products in
 performic acid treated wastewater

Chair: Prof. Dr. Thorsten Reemtsma

- 12.30 – 13.30 ♦ **Prof. David Sedlak,**
*University of California, Department of Civil & Environmental
 Engineering, Berkeley, USA:*
 Oxidative Treatment in Potable Water Reuse: Understanding the
 Formation and Fate of Transformation Products
- 13.30 – 15.30 - *Lunch & Poster time* – Restaurant + Room "Cicero"
- Conference room "Drusus/Caesar"
- 15.30 – 16.00 ♦ **Daniel Sauter,**
*Berliner Wasserbetriebe, Research and Development,
 Berlin, DE:*
 Post-treatment options for ozonation in tertiary municipal
 wastewater treatment



Tuesday, 24th September

Chair: Dr. Maik Jochmann

- 16.00 – 17.00 ◆ **Prof. Dr. Martin Elsner,**
*Technical University of Munich, Chair of Analytical Chemistry
and Water Chemistry, Munich, DE:*
Exploring Transformation Pathways and Limits of Biodegradation by
Stable Isotope Fractionation
- 17.00 – 17.30 ◆ **Jens Terhalle,**
*University of Duisburg-Essen, Instrumental Analytical Chemistry,
Essen, DE:*
Isotopic effect of ozonation of specific reaction sites
- From 18.00 ◆ *Dinner* [Halturner Seeterrassen](#)
Barbecue at lido Lake of Haltern

– End of day 3 –



Wednesday, 25th September

Chair: Dr. Maik Jochmann

Conference room "Drusus/Caesar"

- 9.00 – 10.00 ♦ **Prof. Dr. Thomas Ternes,**
*Federal Institute of Hydrology (BfG), Qualitative Hydrology,
Koblenz, DE:*
Transformation products in the urban water cycle: a hidden problem?
- 10.00 – 10.30 ♦ **Stefanie Lorenz,**
*Leuphana University of Lüneburg, Institute of Sustainable and
Environmental Chemistry, Lüneburg, DE:*
Design of fluoroquinolones with improved environmental
mineralization
- 10.30 – 11.00 ♦ **Nina Hermes,**
*Federal Institute of Hydrology (BfG), Dep. G2, Aquatic Chemistry,
Koblenz, DE:*
Ozonation of the antidiabetic sitagliptin: determination of reaction
kinetics and identification of transformation products
- 11.00 – 11.30 - Coffee break – Room "Cicero"

Chair: Dr. Arne Wick

Conference room "Drusus/Caesar"

- 11.30 – 12.30 ♦ **Prof. Dr. Jeppe Lund Nielsen,**
*Aalborg University, Department of Chemistry and Bioscience,
Aalborg DK:*
Who and how do they degrade micropollutants?
- 12.30 – 13.00 ♦ **Jonas Schaper,**
*Leibniz Institute of Freshwater Ecology and Inland Fisheries (IGB),
Berlin, DE:*
Removal and Transformation of Trace Organic Compounds in
Hyporheic Reactors of Urban Freshwater Systems
- 13.00 – 13.15 ♦ **Prof. Dr. Torsten Schmidt,**
*Chair of Water Chemistry Society, University Duisburg-Essen,
Essen, DE:*
Closing remarks
- 13.15 - Lunch – Restaurant

– End of workshop –