

Sunday 18 June

Satellite meetings and workshops:

Time:

- 10:00 - 16:00 **New emerging PFAS: International regulation strategies**
Convenors: Lena Vierke (Federal Environmental Agency, Berlin, Germany) & Zhanyun Wang (ETH Zurich, Switzerland)
Location: Helga Engs hus, Auditorium 1
- 10:00 - 16:00 **Algal toxins: Methods and implications**
Convenors: George B. Cobb (Baylor University, TX, USA) & Dion Dionysiou (University of Cincinnati, IL, USA)
Location: Helga Engs hus, Auditorium 2
- 10:00 - 16:00 **New contaminants, new risks: Analysis and environmental implications**
Convenor: Silvia Lacorte (Institute of Environmental Assessment and Water Research, Barcelona, Spain) & Rosa Marie Marcé (University Rovira i Virgili, Tarragona, Spain)
Location: Helga Engs hus, Auditorium 3
- 10:00 - 16:00 **Isotopic techniques and their applications in environmental research**
Convenors: Nives Ogrinc & David Heath (Institute Jozef Stefan, Ljubljana, Slovenia)
Location: Helga Engs hus, U35
- 17:00 **Opening Ceremony - Cultural/musical contribution**
Location: Georg Sverdrups hus: Auditorium 1
- 17:20 **Welcome Address from the Local Organisation Committee:**
Roland Kallenborn (Norwegian University of Life Sciences, Norway)
- Welcome addresses:**
President of the Norwegian Chemical Society (NKS): Øivind Mikkelsen (Norwegian University of Technology (NTNU), Norway)
- Dean of Faculty of Mathematics and Natural Sciences: Morten Dæhlen (University of Oslo (UiO), Norway)
- DCE Chairman: Santiago V. Luis Lafuente (University Jaume I, Castello de la Plana, Castellon, Spain)
- 18:00 **Plenary lecture:**
Leiv K. Sydnes (University of Bergen, Norway)
Chemistry in the service of society

Monday 19 June

Plenary session:

Location: Georg Sverdrups hus, Auditorium 1

Time:

- 09:00 **Introduction and Administrative notes**
- 09:10 Chairmen: Santiago Luis (Universitat Jaume I, Spain) & Walter Giger (Giger Research, Switzerland); Representing DCE - EuCheMS introduction:
DCE Life Time Achievement award presented to Prof. Dr. Søren Jensen (Stockholm University, Sweden) in the occasion of 50 year anniversary of polychlorinated biphenyls (PCBs) identified as environmental pollutants
- 09:25 Søren Jensen (Stockholm University, Sweden) - **personal impressions and notes**
- 09:45 **Plenary lecture:**
Åke Bergman (SWETOX - Academic Research Center for Chemicals, Health and Environment, Sweden)
Persistent Organic Pollutants (POPs): History, lessons learned and the way ahead
- 11:00 - 15:15 **Thematic sessions - see detailed schedule**
- 13:45 - 15:15 **Thematic sessions - see detailed schedule**

Monday 19 June

Microplastics

Location and time: Helga Engshaus, Auditorium 1, 11:00 - 13:00

Chair: Thorsten Hüffer (University of Vienna)

Oral presentations:

Time:		Abstract ID:
11:00	<u>Thorsten Hüffer</u> , Antonia Praetorius, Stephan Wagner, Frank von der Kammer, Thilo Hofmann Microplastic exposure assessment from the perspective of nanoparticle research	83
11:15	<u>Saskia Rehse</u> , Andrea Zikova, Wibke Kleiner, Wener Kloas, Christiane Zarfl Microplastics in interaction with pollutants – Insights from laboratory experiments on impacts on freshwater fauna	341
11:30	<u>Caroline Goedecke</u> , Ulrike Mülów-Stollin, Selina Hering, Andrea Paul, Ulrike Braun Investigation of sorption of environmental pollutants to virgin and aged microplastics	91
11:45	Linn Merethe Brekke Olsen, Naiara Berrojalbiz, Dieter Issler, <u>Hans Peter Arp</u> The Sinking Behavior of Fresh and Weathered Microplastics in Surface Water	111
12:00	Jan H. Sundet, <u>Dorte Herzke</u> , Maria Jenssen Microplastic in the marine environment of Svalbard, Norway	114
12:15	<u>Jonatan Fengler</u> , Christina Apel, Jürgen Gandrass, Ralf Ebinghaus Development of a LC-MS/MS method to determine synthetic antioxidants from plastic products in the marine environment	123
12:30	<u>Andrea Paul</u> , Roland Becker, Lukas Wander, Steffen Breittfeld, Martin Kogler, Andreas Sauer, Ulrike Braun An alternative spectroscopic approach for the monitoring of micro-plastic in environmental samples	167
12:45	<u>Anna Elert</u> , Roland Becker, Erik Dümichen, Paul Eisentraut, Jana Falkenhagen, Heinz Sturm, Ulrike Braun Challengers in microplastics identification: Is one detection method enough?	278

Microplastics

Posters are located at Georg Sverdrups Hus basement. Authors should be available for discussion and questions 15 minutes after discussion is announced.

Posters:

Abstract ID:

France Collard, Bernhard Gilbert, Gauthier Eppe, Sam Azimi, Vincent Rocher, Bruno Tassin, Johnny Gasper Microplastics found in the stomach contents of the European chub (<i>Squalius cephalus</i>) from the Seine River	228
Marina Albentosa, Victor M. León, Juan Bellas, Juan Santos-Echeandia, Juan A. Campillo Comparative exposure of mussels to chlorpyrifos through microplastic and microalgal particles	287
Ana V. Figueiras, Jesús Gago, Olga Carretero, Juan Santos-Echeandia, Victor M. León Microplastic distribution along Spanish Mediterranean coast and Mar Menor lagoon	289
Claudia Halsband, Dorte Herzke Do microplastics impact the productivity of arctic marine food webs?	330
Sven Seldensticker, Greta Fellenberg, Christiane Zarfl, Peter Grathwohl Microplastic particles as a transport vector for organic wastewater contaminants to dissolved organic matter	304

Monday 19 June

Atmospheric aerosols and pollutants

Location and time: Helga Engshus, Auditorium 2, 11:00 - 12:45

Chair: Stephan Weinbruch (Technical University of Darmstadt, Germany) & Yngvar Thomassen (National Institute of Occupational Health, Norway)

Oral presentations:

Time:		Abstract ID:
11:00	<p>Chen Wang, Tiange Yuan, Stephen A. Wood, Kai-Uwe Goss, Jingyi Li, Qi Ying, <u>Frank Wania</u> Uncertain Henry's law constants compromise equilibrium partitioning calculations of atmospheric oxidation products</p>	15
11:15	<p><u>A. Albinet</u>, S. Tomaz, D. Srivastava, G.M. Lanzafame, O. Favez, J.-L. Jaffrezo, J.-L. Besombes, N. Bonnaire, V. Gross, L. Y. Alleman, F. Lucarelli, E. Perraudin, E. Villenave Study of the chemical processes involving nitro- and oxy-PAHs in ambient air and evaluation of SOA PAH contribution on PM via annual and intensive field campaigns</p>	34
11:30	<p><u>Monique Teich</u>, Dominik van Pinxteren, Michael Wang, Simonas Kecorius, Zhibin Wang, Thomas Müller, Griša Močnik, Hartmut Herrmann Measurements of nitrated aromatic compounds in aerosol particles and their contribution to the light absorption of brown carbon</p>	67
11:45	<p><u>Pérola Castro Vasconcellos</u>, Guilherme Martins Pereira, Kimmo Teinilä, Danilo Custódio, Aldenor Gomes Santos, Huang Xian, Risto Hillamo, Célia Alves, Jailson Bittencourt De Andrade, Gisele Olímpio Da Rocha, Prashant Kumar, Rajasekhar Balasubramanian, Maria Fátima Andrade Chemical composition and source apportionment for particulate matter in São Paulo, Brazil</p>	80
12:00	<p><u>Thorsten Hüffer</u>, Antonia Praetorius, Stephan Wagner, Frank Von Der Kammer, Thilo Hofmann Microplastic exposure assessment from the perspective of nanoparticle research</p>	83
12:15	<p><u>Sofia Caumo</u>, Ana Vicente, Danilo Custódio, Célia Alves, Pérola Vasconcellos Measurements of organic compounds in particulate matter and gaseous phase collected at the neighbourhood of an industrial complex in São Paulo (Brazil)</p>	133
12:30	<p><u>G. Spindler</u>, A. Grüner, K. Müller, B. Stieger, D. van Pinxteren, H. Herrmann A 24 year long-term trend for PM at Melpitz site in Germany – Results for different Weather Type Classification Methods</p>	135

Monday 19 June

Atmospheric aerosols and pollutants

Location and time: Helga Engshus, Auditorium 2, 13:45 - 15:15

Chair: Stephan Weinbruch (Technical University of Darmstadt, Germany) & Yngvar Thomassen (National Institute of Occupational Health, Norway)

Oral presentations:

Time:		Abstract ID:
13:45	<u>Yiming Yao</u> , Shuai Chang, Yangyang Zhao, Zhiwei Gan, <u>Hongwen Sun</u> Neutral and Ionic Per- and Polyfluoroalkyl Substances (PFASs) in the Atmosphere: Occurrence and Distribution Associated with Particulate Matter	450
14:00	<u>Ivano Vassura</u> , Elena Bernardi, Ezio Bolzacchini, Marco Casati, Luca Ferrero, Lara Nobili, Mariagrazia Perrone, Simona Raffo, Elisa Venturini A new sampling system to study the effects of atmospheric particle matter in material decay	194
14:15	<u>Celine Degrendele</u> , Roman Prokes, Petr Kukucka, Pourya Shahpoury, Jana Klánová, Gerhard Lammel Are atmospheric PBDE levels declining in Europe? Examination of seasonal variations, gas-particle partitioning and implications for long-range atmospheric transport	265
14:30	<u>Nicholas A. Warner</u> , Vladimir Nikiforov, Ingjerd S. Krogseth, Pernilla Bohlin-Nizzetto Is Octamethylcyclotetrasiloxane (D4) a persistent organic Pollutant? Weighing the evidence and risk to Arctic Environments	274
14:45	<u>Stephan Weinbruch</u> , Nathalie Benker, Konrad Kandler, Katharina Schütze, Kirsten Kling, Balázs Berlinger, Yngvar Thomassen, Tatiana Drotikova, Roland Kallenborn Source apportionment of individual soot agglomerates in ambient air on Svalbard: A transmission electron microscopy study	295
15:00	<u>Pourya Shahpoury</u> , Zoran Kitanovski, Roman Prokes, Ondrej Sanka, Roland Kallenborn, Gerhard Lammel Wet scavenging of nitrated and oxygenated aromatic hydrocarbons in urban and remote sites in Europe; levels and distribution in phase-segregated precipitation	312

Atmospheric aerosols and pollutants

Posters are located at Georg Sverdrups Hus basement. Authors should be available for discussion and questions 15 minutes after discussion is announced.

Posters:

	Abstract ID:
Andrea Bellmann, Hanan Atia, Jörg Radnik, Ursula Bentrup, Angelika Brückner Direct Cleaning of Flue Gas from Natural Gas Plants – How Co-ZSM-5 catalysts force Methane to reduce Nox	70
Terry F. Bildeman, Mats Tysklind Breakthrough During Air Sampling with Polyurethane Foam: What Do Trap2/Trap1 Ratios Mean?	417
Celine Degrendele, Lyassine Allou, Juhani Laurikko, Mavi Prati, Martin Weilenmann, Tamás Merétei, Isabelle Caplin, Robert Joumard, Michael André, Aurélie Charron Laboratory measurements of volatile organic compounds emissions from passenger cars	266
Stine Eriksen Hammer, Hans-Christian Clemen, Johannes Schneider, Stephan Mertes, Sarah Grawe, Martin Ebert, Stephan Weinbruch Comparison of the single particle measurement techniques “SCANNING ELECTRON MICROSCOPY” and “SINGLE PARTICLE MASS SPECTROMETRY	39
Therese Haugdahl Nøst, Anne Karine Halse, Martin Schlabach, Are Bäcklund, Sabine Eckhardt, Knut Breivik Low concentrations of persistent organic pollutants (POPs) in air at Cape Verde	180
Zoran Kitanovski, Gerhard Lammel, Roman Prokes, Constantini Samara, Poryy Shahpoury, Aristeidis Voliotis Nitro-monoaromatic compounds in urban aerosols of central and southeastern Europe: mass size distribution and solubility in simulated lung fluids	298
Mark M. Scerri, Konrad Kandler, Stephan Weinbruch Extricating the contribution of natural components to PM10 concentrations at a rural background station in the central Mediterranean	25
Laura Trabalón, Laura Vallecillos, Alba Maceira, Rosa Maria Marcé, Francesc Borrull Evaluation of sampling strategies to determine 1,3-butadiene in air	59

Monday 19 June

Persistent inorganic pollutants

Location and time: Helga Engshus, Auditorium 3, 11:00 - 13:00

Chair: Balazs Berlinger (National Institute of Occupational Health, Norway) & Sirpa Herve (Finnish Environment Institute, Finland)

Oral presentations:

Time:		Abstract ID:
11:00	<u>Georg Radermacher</u> , Heinz Rüdél, Peter Lepom, Anja Duffek Mercury burden of German freshwater fish depending on age, size and trophic level	72
11:15	<u>Peter Lepom</u> , Jörg Wellmitz Mercury Monitoring in Fish under the Water Framework Directive - A German Perspective	230
11:30	Gemma Elias, Marta Turull, Sergi Díez, <u>Claudia Fontas</u> Can polymer inclusion membranes be used as an integral tool to facilitate environmental analysis? The case of mercury	303
11:45	Manel Domínguez, Lorenzo Massimi, Verónica Verdugo, <u>Cristina Palet</u> Bio(Adsorption) Capacity of Cork for Antimony in Wastewaters	318
12:00	<u>Inger Marie B. Tyssebotn</u> , Andreas Fittschen, Ursula E. A. Fittchen Development of a novel CE-XRF system for the determination of elemental contaminants and their speciation in complex water systems	328
12:15	<u>Martyna Saba</u> , Jerzy Falandysz Mercury in a forest soil cores and tiny mushrooms from the regions in southwestern China	41
12:30	Lea Piscitelli, Pierre-Andrien Rivier, Donato Mondelli, Teodoro Miano, Daniel Rasse, <u>Erik Joner</u> Use of Biochar in filtration substrates mixtures for soil and water conservation	115
12:45	<u>Ida Vaa Johnsen</u> , Espen Mariussen The intake of copper and lead by sheep grazing on a contaminated shooting range	396

Persistent inorganic pollutants

Posters are located at Georg Sverdrups Hus basement. Authors should be available for discussion and questions 15 minutes after discussion is announced.

Posters:

	Abstract ID:
Susanne Birkeland, Marie Vollset, Sigrun Henjum, Elin Gjengedal Arsenic, bromine, and lead in breast milk and urine from Norwegian mothers – interactions which influence the levels	357
Iman Boukhohobza, Zahra Saadatmand Vanadium speciation within seawater and soil samples in the UAE: Simple HPLC method	4
Cathrine Skaar Hoel, Amanda Poste, Tom Andersen, Katrine Borgå Seasonal patterns in mercury dynamics at the base of two contrasting boreal lake food webs	103
Christine Hutterer, Michael Schuster Selective trace enrichment of valuable metals from industrial wastewaters by polymer-assisted ultrafiltration	355
Maria G. Lagerstrøm, Fredrik Lindgren, Albin Holmqvist, Mia Dahlström, Erik Ytreberg Release rates of Cu and Zn from antifouling paints using a novel XRF method	96
Elena Nebera, Svetlana Demidova, Nikita Bardyugov, Dmitry Makarov, Alexander Komarov Accumulation of toxic elements in tissues of reindeer in the Russian far North	182
Sachin Vilas Nehete, Brit Salbu, Alexie Konoplev, Hans Chrstian Teien Asymmetric flow field-flow fractionation to determine trace metal-colloid associations in Inkyozaka and Suzuuchi pond	404
Juan Santos-Echeandia, Víctor M. León, Victoria Besada, Fernando Schultze, María López-Rodríguez Heavy metals in the sediments of two Spanish coastal systems and their transfer to the food chain	286
Svetlana Pakhomova, Alice Newton, Evgeny Yakushev Modelling of biogeochemical cycles of mercury and nickel in the sea water and upper sediment layer	407
Verónica Verdugo, Cristina Palet, Manuel Valiente TiO₂ Modified Biomass and its Application in Removal of Pb²⁺, Cd²⁺, Cu²⁺ and Cr³⁺/Cr⁶⁺ from Aqueous Solution	320
Dayana Sosa, Isabel Hilber, Roberto Faure, Thomas D. Bucheli, Arturo Escobar, Diane Buerge-Weirich Assessment of heavy metals in soils of Mayabeque, Cuba	267
Verónica Verdugo, Cristina Palet, Manuel Valiente Efficient Sb(III)/Sb(V) Adsorption by SPION Supported on Metalzorb® Sponge®	319
Sebastian Böttger, Dominique Rosenberg, Maike Busker, Walter Jansen, Ursula Fittschen Determination of gas phase mercury using silver-nanoparticle assisted TXRF	327

Monday 19 June

Bioactive substances and biotoxins

Location and time: Helga Engshus, U35, 11:00 - 12:45

Chair: George Cobb (Baylor University, TX, USA) & Dion Dionysiou (University of Cincinnati, IL, USA)

Oral presentations:

Time:		Abstract ID:
11:00	Korina Manolidi, Christophoros Cristophoridis, Triantafyllos Kaloudis, Theodoros M. Triantis, Anastasia Hiskia Neurotoxin BMAA And Its Isomeric Amino Acids In Cyanobacteria And Spirulina Food Supplements	49
11:15	Ulla E. Bollmann , Greta Minelgaite, Michael Schlüsener, Thomas A. Ternes, Jes Vollertsen, Kai Bester Biocide leaching from building material: Semi-field emissions influenced by driving-rain and photodegradation	68
11:30	Elisabeth Faasen , Miquel Lüring Current understanding and challenges on the presence and analysis of the neurotoxin BMAA	283
11:45	Dieter Vollert , Matthias Gassman, Klaus Kümmerer, Oliver Olsson Simulation of the environmental fate of the fungicide Penconazole and its transformation products in a vineyard-terraces catchment	336
12:00	Jan Ludvig Lyche, Paul Muthia, Gunnar Eriksen, James Gathumbi, Evalyn Mwihia Prevalence, knowledge, attitudes and practices associated with aflatoxin contamination of fish feeds in Nyeri, Kenya	369
12:15	Meriç Albay , Latife Köker, Cenk Gürevin, Reyhan Akçaalan Albay, <i>Department of Inland Waters, İstanbul University, Turkey</i> An integrated modelling approach to study the impacts of nutrients on coastal aquatic ecosystems in the context of climate change	379
12:30	M. Pesce, A. Critto, S. Torresan, M. Santini, E. Giubilato, L. Pizzol, P. Mercogliano, A. Zirino, Wei Ouyang, A. Marcomini An integrated modelling approach to study the impacts of nutrients on coastal aquatic ecosystems in the context of climate change	447

Bioactive substances and biotoxins

Posters are located at Georg Sverdrups Hus basement. Authors should be available for discussion and questions 15 minutes after discussion is announced.

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- Ulla E. Bollmann, David Fernández-Calvino, Kristian K. Brandt, Morten S. Storgaard, Hans Sanderson, Kai Bester 69
Biocide leaching from building facades: Pseudo-persistence in soil due to reoccurring emissions
- Vladimir Nikiforov, Ekaterina Chernova, Iana Russkikh, Ekaterina Voyakina, Elena Ezhova, Evgeniia Lange, Zoya Zhakovskaya 349
Cyanotoxins in the Baltic Sea: a difference between the Gulf of Finland and Curonian and Vistula lagoons
- Michal M. Urbanczyk, Ulla E. Bollmann, Nicole Borho, Ute Schoknecht, Kai Bester 299
Influences of pigments on photodegradationrates of biocides in paints

Monday 19 June

Nanomaterials

Location and time: Helga Engshus, Auditorium 1, 13:45 - 15:15

Chair: Antonio Marcomini (University of Venice, Italy)

Oral presentations:

Time:		Abstract ID:
13:45	<u>Andrea Brunelli</u> , Elena Badetti, Gianpietro Basei, Antonio Marcomini Colloidal stability assessment of pristine and functionalized TiO₂ nanoparticles. A combination of analytical techniques and principal component analysis	153
14:00	<u>Maya Engel</u> , Benny Chefetz Interactions of carbon nanotubes with dissolved organic matter and organic pollutants	31
14:15	<u>Patrick S. Bäuerlein</u> , Erik Emke, Peter Tromp, Jan A.M.H Hoffman, Andrea Carboni, Ferry Schooneman, Pim de Voogt, Annemarie P. van Wezel Can nanoparticles be found in the environment?	226
14:30	<u>Christian Gagnon</u> , Patrice Turcotte, Martin Pilote, Francois Gagné, Shirley Anne Smyth Fate of silver nanoparticles in surface waters	306
14:45	<u>Lúcia H.M.L.M. Santos</u> , Anna Freixa, Vicenc Acuna, Josep Sanchís, Sara Rodríguez-Mozaz, Marinella, Farré, Sergi Sabater, Damià Barceló Bioaccumulation and biotransformation of organic contaminants in biofilm: how could these be affected by the presence of nanoparticles?	192
15:00	<u>Claire Coutris</u> , Antoine Minet, Pawel Lycus, Filip Hrnčirik, Åsa Frostegård Can wastewater-borne engineered nanomaterials pose a threat to the microorganisms involved in wastewater treatment?	383

Nanomaterials

Posters are located at Georg Sverdrups Hus basement. Authors should be available for discussion and questions 15 minutes after discussion is announced.

Posters:

	Abstract ID:
Elena Semenzin, Elena Badetti, Alessandro bonetto, Andrea Brunelli, Elisa Giubilato, Marco Picone, Annamaria Volpi Ghirardini, Antonio Marcomini Supporting the development of sustainable nano-based formulations for the restoration of modern and contemporary works of art	165
Esin G. Canli, Mustafa Canli Effects of copper oxide nanoparticles on some blood parameters in female Wistar rats	17
Burkhard Knopf, Boris Meisterjahn, Nicola Schroeder, Heinz Ruedel, Jan Koschorreck Development of a method for the analysis of nanoparticles in homogenized biota tissue from the German Environmental Specimen Bank	391
Sungsoo Na, Chancho Park, Hyunjoon Park Development of DAN based Sensor for Nanotoxic Materials	66
D. Saravanan G. Satheesh Kumar, V. Kandavelu Dye degradation by using photocatalytic nano particles	2

Monday 19 June

Challenges in Environmental Chemistry

Location and time: Helga Engshus, Auditorium 3, 13:45 - 15:15

Chair: Silvia Lacorte (Institute of Environmental Assessment and Water Research, Spain) & Rosa Maria Marcé (University Rovira i Virgili, Tarragona, Spain)

Oral presentations:

Time:		Abstract ID:
13:45	Juliane Hollender, Jennifer Schollée, Aurea Chiaia-Hernandez, Emma Schymanski, Heinz Singer Non-target screening with high resolution mass spectrometry: Ready for real-world applications? (Keynote)	128
14:15	Emma L. Schymanski, Andrew McEachran, Reza Aalizadeh, Nikolaos S. Thomaidis, Jaroslav Slobodnik, Jon R. Sobus, Juliane Hollender, Antony J. Williams International Suspect Screening: NORMAN Suspect Exchange meets the US EPA CompTox Chemistry Dashboard	28
14:30	Mathias Katthoff, Heinz Rüdell, Mark Bücking, Anton Friesen, Jan Koschorrek Anticoagulant Rodenticides in fish: Spatial and Temporal Distribution in German Freshwater Aquatic Systems	119
14:45	Monica Fongen, Andreas Treu, Claire Coutris, Erik J. Joner Differential scanning calorimetry coupled with FT-IR. A sensitive method for measuring microplastics in sewage sludge, biogas digestate, food waste compost, and road dust?	376
15:00	Marjeta Cesen, Ester Heath Disk-based solid phase extraction of large volume samples for the determination of estrogens and diclofenac listed in the WFD Watch list	129

Challenges in Environmental Chemistry

Posters are located at Georg Sverdrups Hus basement. Authors should be available for discussion and questions 15 minutes after discussion is announced.

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Marjeta Cesen, Maria Laimou-Geraniou, Tina Kosjek, Urska Blaznik, Dimitra Lambropolou, Ester Heath, David Heath Migration of Bisphenol Compounds from Honey Packaging	326
Henrik Kylin, Hindrik Bouwman Pentachloroanisole is not a functional proxy for pentachlorophenol in the environment	140
Abha Parajulee, Ying Duan Lei, Ajitha Kananthalingam, David S. McLagan, Carl P. J. Mitchell, Frank Wania The transport of polycyclic aromatic hydrocarbons during rainfall and snowmelt in contrasting landscapes	249
Detlef Schenke, Gabriela Bischoff, Alexandra Esther Analysis of pesticides in road-killed amphibians	57
Emma Schymanski, Martin Krauss, Casmi Cat. 2/3 Participants, Steffen Neumann (Semi)-Automated Small Molecule Identification in Non-target Environmental Analysis: State-of-the-art from the CASMI 2016 Contest	29

Monday 19 June

Regulation of Chemicals

Location and time: Helga Engshus, U35, 14:00 - 15:15

Chair: Ramon Guardans (Scientific Advisor to the National Reference Centre on Persistent Organic Pollutants, Spain) & Rolf Vogt (University of Oslo, Norway)

Oral presentations:

Time:		Abstract ID:
14:00	<u>Ramon Guardans</u> POPs in the past and in the future. A few notes on the Effectiveness Evaluation of the Stockholm Convention in 2017.	36
14:15	<u>Hans Peter H. Arp</u> , Trevor N. Brown, Sarah E. Hale Ranking REACH registered neutral, ionizable and ionic organic chemicals based on their aquatic persistency and mobility	109
14:30	<u>Philippa Cureton</u> , Doug Spry, Sean Backus, Christine Garron, Robert Letcher, Pamela Martin, Daryl McGoldrick, Darcy Longpré Development of Canadian Environmental Quality Guidelines for Perfluorooctane Sulfonate to Protect Environmental and Human Health	271
14:45	<u>Michael Neumann</u> , Daniel Sättler, Lena Vierke, Ivo Schliebner A proposal for criteria and an assessment procedure to identify Persistent, Mobile and Toxic (PM or PMT) substances registered under REACH	311
15:00	<u>Heinz Ruedel</u> , Annette Fliedner, Nina Lohmann, Georgia Buchmeier, Jan Koschorreck Biota monitoring under the Water Framework Directive: Influence of fish species and tissue choice on levels of priority substances	63

Regulation of Chemicals

Posters are located at Georg Sverdrups Hus basement. Authors should be available for discussion and questions 15 minutes after discussion is announced.

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	Abstract ID:
A. D. Bannink, G. J. Stroomberg, H. J. A. Römgers The European Water Framework Directive does not set standards for surface water used as source for drinking water	146
Adele Bressy, Catherine Carré, José-Frédéric Deroubaix, Bernard de Gouvello, Mathilde Soyer, Régis Moilleron Domestic micropollutants, a diffuse industrial pollution - Part 2: Source reduction by changing personal consumption practices	191
Steven Droge, Joris Haftka, Joop Hermens A tiered approach to assess bioaccumulation of surfactants Regulation of Chemicals	397
Huan Liu, Hanyang Man, Fanyuan Deng, Yue Wang, Hongyang Cui, Xiaofan Yang, Qiang Zhang, Kebin He An updated emission inventory of vehicular VOCs/IVOCs in China	206
Boris Meisterjahn, Michael Hüben, Helena Tomm, Dieter Hennecke Experimental and conceptual approaches for testing the transformation of volatile chemicals on the basis of standard test guidelines	255
Lehtilä Reko Collecting and using information on substances	433
Ivo Schliebner, Daniel Sättler, Urs Berger, Norbert Ost, Ralph Kühne, Gerrit Schüürmann, Thorsten Reemtsma, Michael Neumann Using REACH registration data for the identification of persistent, mobile and toxic (PMT) substances	352
Christiane Zarfl, Jürgen Berlekamp, Klement Tockner Another perspective on the water-energy nexus: Is hydropower development spatially related to mining activities?	305

Tuesday 20 June

Plenary session:

Location: Georg Sverdrups hus, Auditorium 1

Time:

- 09:00 **Introduction and Administrative notes**
- 09:15 **Plenary Lecture:**
Lars-Otto Reiersen (Arctic Monitoring and Assessment Programme - AMAP, Secretary General, Oslo)
Arctic Pollution Issues
- 10:30 - 12:30 **Thematic Sessions - see detailed schedule**
- 13:30 - 16:00 **Thematic Sessions - see detailed schedule**
- 16:45 - 18:45 **Thematic Sessions - see detailed schedule**
- 18:30 **Associated events:**
Panel Discussion: Microplastics - what is the problem?
Location: The Science Library in Vilhelm Bernes' hus

Tuesday 20 June

Soil and Sediments

Location and time: Helga Engshus, Auditorium 1, 10:30 - 12:30

Chair: Thomas Bücheli (Aroscope, CH) & Daniel Wächter (Swiss Soil Monitoring Network-NABO)

Oral presentations:

Time:		Abstract ID:
10:30	<u>Wolfgang Wilcke</u> Polycyclic aromatic compounds (PAHs, OPAHs, azaarenes) in soil: Occurrence – Transformations – Availability (Keynote)	439
11:00	<u>Martyna Saba</u> , Jerzy Falandysz Mercury in a forest soil cores and tiny mushrooms from the regions in southwestern China	41
11:15	<u>Ivan Dragicevic</u> , Susanne Eich-Greatorex, Trine A. Sogn, Roar Linjordet, Tore Krogstad Mobility and release of heavy metals after biogas digestate application to three different soils	331
11:30	<u>Juan C. Durán-Álvarez</u> , Blanca Prado On the environmental fate of two endocrine disrupting chemicals in agricultural soils using wastewater for irrigation	199
11:45	Pierre-Adrien Rivier, <u>Claire Coutris</u> , Ivo Havranek, Erik Joner Degradation of Triclosan and Galaxolide in soil is unaffected by rhizosphere processes, but roots drastically reduce bioaccumulation in earthworms	366
12:00	<u>Dieter Hennecke</u> , Angela Bauer, Erik Wischerhoff, Friedhelm Gores How to investigate the fate of synthetic polymeric flocculants in a complex agricultural matrix – results of an experimental simulation study	127
12:15	<u>Lin Xu</u> , Liqin Zhi, Yaqi Cai Distribution, migration and elimination of methylsiloxanes in soil from an electronic waste (e-waste) dismantling area in China	102

Tuesday 20 June

Soil and Sediments

Location and time: Helga Engs hus, Auditorium 1, 13:30 - 16:00

Chair: Thomas Bücheli (Aroscope, CH) & Daniel Wächter (Swiss Soil Monitoring Network-NABO)

Oral presentations: (I):

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Tuesday 20 June

Soil and Sediments

Location and time: Helga Engshus, Auditorium1, 13:30 - 16:00

Chair: Thomas Bücheli (Aroscope, CH) & Daniel Wächter (Swiss Soil Monitoring Network-NABO)

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Sustainable Environmental Chemistry

Location and time: Helga Engshus, Auditorium 2, 10:30 - 12:15

Chair: Klaus Kümmerer (Leuphana University, Germany) & Santiago Luis (University Jaume I, Spain)

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University Education in Environmental Chemistry

Location and time: Helga Engshus, U35, 10:30 - 12:30

Chair: Gerhard Lammel (Max Planck Institute for Chemistry, Germany) & Ivana Ivancev-Tumbas (University of Novi Sad, Serbia)

Oral presentations:

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Tuesday 20 June

Mass spectrometry in food and environmental research

Location and time: Helga Engshuis, Auditorium 2, 13:30 - 15:45

Chair: Adrian Covaci (University of Antwerp, Belgium), Ester Heath (Institute Jozef Stefan, Slovenia) & Michaela Dina Stanescu (Polytechnic University of Bucharest, Romania)

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Tuesday 20 June

Mass spectrometry in food and environmental research

Location and time: Helga Engshus, Auditorium 2, 16:45 - 18:45

Chair: Adrian Covacy (University of Antwerp, Belgium), Ester Heath (Institute Jozef Stefan, Slovenia) & Michaela Dina Stanescu (Polytechnic University of Bucharest, Romania)

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Mass spectrometry in food and environmental research

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Tuesday 20 June

Radioecology

Location and time: Helga Engshus, Auditorium 3, 13:30 - 16:00

Chair: Brit Salbu (Norwegian University of Life Sciences, Norway) & Valery Kashparov (Ukrainian Institute of Agricultural Radiology, Ukraine)

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Radioecology

Location and time: Helga Engshus, U35, 16:45 - 18:45

Chair: Brit Salbu (Norwegian University of Life Sciences, Norway) & Valery Kashparov (Ukrainian Institute of Agricultural Radiology, Ukraine)

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18:15	<u>Knut Erik Tollefsen</u> , Tania Gomes, Li Xie, Karina Petersen, Knut Asbjørn Solhaug, Bjørn Johnsen, Kristine Bjerke Gutzkow, Justin Brown, Dag Brede, Ole Christian Lind, Brit Salbu, You Song Adverse Outcome pathways (AOP)-assisted hazard and risk assessment of ionising and ultraviolet radiation in aquatic organisms	380

Radioecology

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Tuesday 20 June

Arctic Pollution

Location and time: Helga Engshus, U35, 13:30 - 16:00

Chair: Lars-Otto Reiersen (Arctic Monitoring and Assessment Programme, Oslo, Norway) & Katrine Borgå (University of Oslo, Norway)

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Arctic Pollution

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Julie Sofie Strømberg, Roland Kallenborn, Helen Thorsen Rønning, Terje Vasskog Levels of selected pharmaceuticals (PPCPs) in seawater and biota near the sewage outlet of a North Norwegian Hospital (Tromsø, Norway).	246
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Tuesday 20 June

Passive Sampling

Location and time: Helga Engshus, Auditorium 1, 16:45 - 18:45

Chair: Ian Allan (Norwegian Institute for Water Research, Norway) & Pawel Rostkowski (Norwegian Institute for Air Research, Norway)

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17:15	Jonas Mechelke , Etiënne L. M. Vermeirssen, Juliane Hollender Tracing hyporheic zone-driven attenuation of polar organic pollutants using passive sampling	239
17:30	Marina G. Pintado-Herrera , Ian J. Allan, Pablo A. Lara-Martín One-year monitoring of legacy and emerging contaminants in a coastal setting (Cadiz Bay, Spain) using a combined approach: passive samplers and sentinel organisms	342
17:45	Nuno Ratola , Javier Castro-Jiménez, Sara Ramos, José Avelino Silva, Arminda Alves, Pedro Jiménez-Geurrero Semivolatile organic contaminants (SVOCs) in the SE of Spain: passive air sampling and a modelling approach including climate change projections	343
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Passive Sampling

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Jana Meierdierks, Christiane Zarfl, Peter Grathwohl Determination of Cross Compartment Concentration Gradients of Polycyclic Aromatic Hydrocarbons using PE Passive Samplers	293
Alena Otoupalikova, Zdenek Simek, Branislav Vrana In situ calibration of passive samplers for the monitoring of steroid hormones in wastewater	150
Jose Avelino Ratola, Marzieh Moenfaard, Sara Ramos, Eduardo Silva, Vera Homem, Lúcia Santos, Arminda Alves, Nuno Ratola Seasonal and spatial trends of polycyclic aromatic hydrocarbons (PAHs) and synthetic musks in Portugal using pine needles	345
Sigurd Øxnevad, Morten T. Schaanning, Anders Ruus In situ sediment flux measurements of metals by using DGT-probes	132

Tuesday 20 June

Humic Substances in the Environment

Location and time: Helga Engshus, Auditorium 3, 16:45 - 18:45

Chair: Gudrun Abbt-Braun (Karlsruhe Institute of Technology, Germany); Rolf Vogt (University of Oslo, Norway), & Yannis Deligiannakis (University of Ioannina, Greece)

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17:30	<u>Nadia Treisch</u> , Manuela van Pinxteren, Hartmut Herrmann Chemical characterization of organic matter in marine environment – Analysis of nitrogen containing organic compounds	172
17:45	Edisson Subdiaga, <u>Silvia Orsetti</u> , Mourad Harir, Philippe Schmitt-Kopplin, Stephan B. Haderlein Use of mediated electrochemical analysis and high-field FTICR mass spectrometry to explain humic acid fractionation upon sorption to redox inert sorbents	79
18:00	Elena Bodarenko, Heinz-Jürgen Steinhoff, Kalman Hideg, <u>Michael Matthies</u> Kinetics of Covalent Bond Formation of Sulfonamide with Soil Humic Acid: ESR Investigations with Nitroxide Spin Label	219
18:15	<u>Angelique Goffin</u> , Sabrina Guerin, Vincent Rocher, Gilles Varrault Excitation-emission matrix Fluorescence spectroscopy to assess quality and quantity of dissolved organic matter in the Seine River from the upstream to the downstream of the Paris agglomeration during a hydrological year	333
18:30	<u>G. Varrault</u> , C. Soares-Pereira, A. Bressy Effect of effluent dissolved organic matter on trace metals sorption by mineral particles in aquatic systems under strong urban pressure	316

Humic Substances in the Environment

Posters are located at Georg Sverdrups Hus basement. Authors should be available for discussion and questions 15 minutes after discussion is announced.

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Tobias Spranger, Dominik van Pinxteren, Oliver Lechtenfeld, Thorsten Reemtsma, Hartmut Herrmann Elucidating the composition of humic-like substances in atmospheric aerosol particles via 2D liquid chromatographic fractionation and ultra-high resolution mass spectrometry	273
Caitlin M. Taylor, Matthew J. Berry, William King, Davide Mattia, Y. M. John Chew, Jannis Wenk Basic batch reactor ozonation experiments and modelling of non-porous ozone resistant membranes for water treatment	260
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Wednesday 21 June

Plenary session:

Location: Georg Sverdrups hus, Auditorium 1

Time:

09:00	Introduction and Administrative notes
09:15	Plenary Lecture: Rupert Simon (European Chemicals Agency, Helsinki, Finland): Reach(ing) Sustainable development
10:30 - 12:45	Thematic Sessions - see detailed schedule
13:30 - 16:00	Thematic Sessions - see detailed schedule
16:30 - 17:30	Thematic Sessions - see detailed schedule

Wednesday 21 June

Poly- and Perfluoroalkylated Substances

Location and time: Helga Engshus, Auditorium 1, 10:30 - 12:45

Chair: Jon Benskin (University of Stockholm, Sweden) & Christopher P. Higgins (Colorado School of Mines, CO, USA)

Oral presentations:

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11:00	Roger A. Klein, <u>Nigel Holmes</u> Fluorochemicals - What is the Fuss All About?	164
11:15	<u>Alix Robel</u> , Kristin Marshall, Margaret Dickinson, David Lunderberg, Craig Butt, Graham Peaslee, Heather M. Stapleton, Jennifer A Fielda Scratching the Surface of PFASs: An attempt at closing the mass balance using four techniques in select Papers & Textiles	5
11:30	Sara Valsecchi, Micahela Mazzoni, Marianna Rusconi, <u>Stefano Polesello</u> , Thomas Ternes, Kevin Jewell, Bernhard Teiser, Jörg Drewes, Uwe Hübner, Johann Müller Determination of precursors of perfluoroalkyl acids in surface and wastewaters: application to some case studies	193
11:45	<u>Ulrika Eriksson</u> , Anna Kärrman, Leo W.Y. Yeung Per- and polyfluorinated alkyl substances (PFASs) and total organofluorine (TOF) in sludge and water from Swedish waste water treatment plants (WWTP)	402
12:00	<u>Åse Høisæter</u> , Sarah Hale, Gøril Aasen Slinde, Paul Sverdrup Cappelen, Hans Peter Arp, Gijs D. Breedveld Stabilization or mobilisation of PFAS at firefighting sites in Norway - feasibility for remediation	427
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12:30	Yuan Wang, <u>Yali Shi</u> , Robin Vestergren, Zhen Zhou, Yong Liang, Yaqi Cai Non-invasive human biomonitoring techniques for long- and short-chain per- and polyfluoroalkyl substances	73
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Wednesday 21 June

Poly- and Perfluoroalkylated Substances

Location and time: Helga Engshus, Auditorium 1, 13:30 - 16:00

Chair: Jon Benskin (University of Stockholm, Sweden) & Christopher P. Higgins (Colorado School of Mines, CO, USA)

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Time:		Abstract ID:
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14:00	<u>Dorte Herzke</u> , Torgeir Nygårs, Elcbjørg Heimstad PFAS in urban terrestrial environments; the case study Oslo city	113
14:15	Mari E. Løseth, <u>Marie J. D. Persson</u> , Oddmund Kleven, Petter Walbakken, Igor Eulaers, Read Awad, Jonathan Benskin, Veerle L. B. Jaspers, Torgeir Nygård Concentrations of per- and polyfluoroalkyl substances in moulted feathers of Eurasian Eagle-owls (Bubo bubo) in Norway	48
14:30	Hao Chen, Zhen Zhao, Yiming Yao, <u>Hongwen Sun</u> Concentrations and distribution of perfluoroalkyl and polyfluoroalkyl substances (PFASs) in multi-environmental matrices around two fluorochemical manufacturing parks in Fuxin, China	451
14:45	Vera Franke, Nadine Belkouteb, Philip McCleaf, Stephan J. Köhler, <u>Lutz Ahrens</u> Evaluation of the removal efficiency of per- and polyfluoroalkyl substances in a full scale drinking water treatment plant	77
15:00	Xin Xiao, Bridget A. Ulrich, Baoliang Chen, <u>Christopher P. Higgins</u> Sorption of Poly- and Perfluoroalkyl substances (PFASs) relevant to Aqueous Film Forming Foam (AFFF)-impacted Groundwater by Biochars and Activated Carbon	58
15:15	Krista A. Barzen-Hanson, Christopher P. Higgins, <u>Jennifer A. Field</u> Why It Matters: Frequency, Occurrence, Transport, and Implications of the 40 Classes of Recently-Discovered Per- and Polyfluoroalkyl Substances in Aqueous Film-Forming Foam Impacted Groundwater	8
15:30	<u>Ekhine Bizkarguenaga</u> , Itsaso Zabaleta, Deborah B.O. Nunoo, Lara Schultes, Juliana Leonel, Ailette Prieto, Olatz Zuloaga, Jonathan P. Benskin Biodegradation and uptake of the pesticide sufuramid in a soil/ carrot mesocosm	309
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Wednesday 21 June

Poly- and Perfluoroalkylated Substances

Location and time: Helga Engshus, Auditorium 1, 16:30 - 17:30

Chair: Jon Benskin (University of Stockholm, Sweden) & Christopher P. Higgins (Colorado School of Mines, CO, USA)

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Time:		Abstract ID:
16:30	Eleni Papadopoulou, Somrutai Poothong, Jacco Koekkoek, Luisa Lucattini, Juan Antonio Padilla-Sánchez, Margaretha Haugen, Dorte Herzke, Stig Valdersnes, Amund Maage, Ian T. Cousins, Pim Eg Leonards, <u>Line Småstuen Haug</u> Estimating human exposure to perfluoroalkyl acids via solid food and drinks: implementation and comparison of different dietary assessment methods	350
16:45	<u>Vladimir Nikiforov</u> Environmental stability of new PFAS through MS-fragmentation and quantum chemistry methods – on the way to degradable PFAS	423
17:00	<u>Linda Hanssen</u> , Dorte Herzke, Vladimir Nikiforov Sulfobenzoic anhydride – new derivatizing reagent for high sensitivity LC-MS-MS analysis of Fluorotelomer alcohols	371
17:15	<u>Lena Vierke</u> , Claudia Staude, Éva Fetter, Stephan Brendel, Annegret Biegel-Enler Regulation needs support from research: Short-chain PFASs under REACH	112

Poly- and Perfluoroalkylated Substances

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Ivan Dragicevic, Oskar Sandblom, Susanne Eich-Greatorex, Trine A. Sogn, Roland Kallenborn, Jonathan P. Benskin Per- and polyfluoroalkyl substances in soil, grain and leachate following field application of biogas digestates	332
Florian Dubocq, Thanh Wang, Anna Kärroman Analysis of firefighting foams on the Swedish market using a non-target analysis approach	158
Thomas Gramblicka, Miroslava Jerabkova, Darina Lankova, Andrea Svarcova, Jana Hajslova, Jana Pulkrabova Development of a multi-analytical method for the simultaneous determination of selected organophosphorus flame retardants (OPFRs) and perfluoroalkyl substances (PFASs) in indoor dust	322
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Aline Koch, Anna Kärroman, Lutz Ahrens, Micael Jonsson, Leo W.Y. Yeung, Thanh Wang Homologue and precursor distribution of per- and polyfluorinated substances (PFASs) in contaminated streams in Sweden	47
Jani Koponen, Hannu Kiviranta Simple and high throughput method for simultaneous determination of perfluoroalkyl acids, parabens and cotinine from a low volume human serum sample	159
Alix Robel, Jennifer Fielda, Dorin Bogdanb, Bill Diguiseppic, Graham Peasleed Using Individual LC-MS/MS Analysis of Newly Discovered PFASs to Inform Sampling Storage and Stability	6
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Poly- and Perfluoroalkylated Substances

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Wednesday 21 June

Water Treatment

Location and time: Helga Engshus, Auditorium 2, 10:30 - 12:30

Chair: Ioannis Katsogiannis (University of Thessaloniki, Greece) & Mathias Ernst (Technical University Hamburg-Harburg, Germany)

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11:00	<u>Margarethe Langer</u> , Anne Gröhlich, Sruthi Kalyanasundaram, Manasis Mitrakas, Anastasios Zouboulis, Yioannis Katsoyianni, Mathias Ernst Removal of Cr(VI) by Fe(II) reductive precipitation from ground waters containing natural organic matter	442
11:15	Stefanie Schulze, Urs Berger, Daniel Zahn, Thomas Knepper, Rosa Montes, José Benito Quintana, <u>Thorsten Reemtsma</u> Persistent, mobile and largely unknown. The potential threat to our drinking water resources by persistent, mobile organic compounds	156
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11:45	Thomas Wagner, <u>John R. Parsons</u> , Alette Langenhoff, Huub Rijnaarts, Pim De Voogt Simultaneous biodegradation of water treatment additives: Transformation and byproduct formation, impact of biocide shockdosing and salinity	19
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Water Treatment

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Adele Bressy, Sifax Zedek, Remi Mazerolles, Emilie Caupos, Romain Mailler, Pascale Neveu, Vincent Rocher, Regis Moilleron An overview of the parabens, triclosan and triclocarban contamination in the continuum greywater – surface water	118
P. Calza, M. Sarro, E. Laurenti, M.C. Paganini, P. Mallon Semiconductor oxide and enzymes hybrid systems as high efficient catalysts for recalcitrant pollutants abatement	154
Nathalie Cottin, Philippe Fanget, Peter Gallinelli, Frédéric Gillet, Emmanuel Naffrechoux Actual PCBs concentration in north Atlantic and Arctic air (NANUQ 2015-2016)	82
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Erik Emke, Dennis Vughs, Annemieke Kolkman, Pim De Voogt The forensic side of sewage based epidemiology: amphetamine synthesis waste and the impact on a small sewage treatment plant	300
Adrian Frank Herbort, Katrin Schuhen Removal of Inert Organic Chemical Stressors (IOCS) from Wastewater by Adding Innovative Hybrid materials called Wasser 3.0 – StressFix²	32

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Posters are located at Georg Sverdrups Hus basement. Authors should be available for discussion and questions 15 minutes after discussion is announced.

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Leire Mijangos, Oihana Ros, Leire Kortazar, Haizea Ziarrusta, Alejandro Valencia, Asier Delagado, Luis Angel Fernández, Ailette Prieto, Nestor Etxebarria Spatial and seasonal distribution of 41 emerging contaminants in three estuaries of the Basque Country	440
Regis Moilleron, Alexandre Berge, Steven Deshayes, Sifax Zedek, Veronique Eudes, Adele Bressy Domestic micropollutants, a diffuse industrial pollution – Part 1: from greywater to receiving water	190
Karsten Nödler, Marco Scheurer, Oliver Happel, Finnian Freeling, Frank Thomas Lange, Heinz-Jürgen Brauch Trifluoroacetate in the water cycle – overlooked sources, pathways, and consequences for drinking water supply	60
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Olayeni Victor Olutayo, Suma George Mulamattathil, Carlos Bezuidenhout, Moses Mbewe, Collins Njie Ateba Current Evaluation on Isolation of Environmental Bacteria from Surface and Drinking Water in Ibadan, Nigeria, and Characterization Using Their Antibiotic Resistance Profiles	431
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Marco Sarro Paola Calza, Vasilis Sakkas, María-José López-Munoz, Claudio Medana Assessment of the photocatalytic transformation of sweeteners in different water matrices	157

Water Treatment

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Wednesday 21 June

Chemicals of Emerging Concern

Location and time: Helga Engshus, Auditorium 3, 10:30 - 12:45

Chair: Walter Giger (Giger Research, Switzerland) & Philippe Garrigues (University of Bordeaux, France)

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10:45	<u>Bénilde Bonnefille</u> , Mellis Alali, Hélène Fenet, Elena Gomez, Frédérique Courant Identification of biomarkers of exposure and effect in Mediterranean mussels (<i>Mytilus galloprovincialis</i>) following exposure to diclofenac	85
11:00	Aasim M. Ali, <u>Roland Kallenborn</u> , Helene Thorsen Rønning, Wallied M. Alalarif, Sultan S. Al Lihaibi Pharmaceuticals and personal care products in (PPCPs) in contaminated Red Sea seawater samples	212
11:15	<u>Abha Parajulee</u> , Ying Duan Lei, Ajitha Kananathalingam, Carl P. J. Mitchell, Frank Wania Investigating the varying sources and transport of benzotriazole UV stabilizers in contrasting landscapes	248
11:30	<u>Heinrich Hünereff</u> , Markus Scheurell, Raza M. Shah Pollutants of emerging concern in Asian Megacities such as Karachi	321
11:45	<u>Fatima El-Athman</u> , Anke Putschew, Lorenz Adrian, Martin Jekel Abiotic reductive deiodination of contrast media and the influence of corridors	348
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Wednesday 21 June

Humic Substances in the Environment

Location and time: Helga Engshus, U35, 10:30 - 12:45

Chair: Gudrun Abbt-Braun (Karlsruhe Institute of Technology, Germany); Rolf Vogt (University of Oslo), Norway & Yannis Deligiannakis (University of Ioannina, Greece)

Oral presentations:

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11:00	<u>Linda Önnby</u> , Nicholas Walpen, Elisabeth Salhi, Garret McKay, Fernando Rosario-Ortiz, Michael Sander, Urs Von Gunten Assessing oxidant-reactive moieties of dissolved organic material from interactions with ozone or chlorine	363
11:15	<u>Babak Rajaeian</u> , Anna Heitz, Cynthia A. Joll, Sébastien Allard The Effect of Natural Organic Matter on Bromide Removal from Drinking Water Using Silver-impregnated Activated Carbon	10
11:30	Jan Benecke, Fabian Baur, Mortiz Haas, <u>Mathias Ernst</u> Gypsum Scaling Behaviour and Characterization during Reverse Osmosis in the Presence of Natural Organic Matter	434
11:45	<u>Margarethe Langer</u> , Anna Gröhlich, Sruthi Kalyanasundaram, Manasis Mitrakas, Anastasios Zoubouli, Ioannis Katsoyiannis, Mathias Ernst Evaluating the Boundaries of Chromium Removal by Fe(II) reductive precipitation from Ground Waters in the presence of Natural Organic Matter	175
12:00	<u>Ivan Kazyatnyk</u> , Lars Lövgren, Mats Tysklind, Peter Haglund Choosing of barrier materials for humic reach groundwater treatment	23
12:15	Angelica Bianco, Mickaël Vaïtilingomi, Laurent Deguillaume, Nadine Chaurmeliac, <u>Maxime Bridoux</u> Characterization of cloud water dissolved organic matter using FT-ICR-MS	144
12:30	<u>Beate Stahl</u> , Sydney Jannetta, Nicollette Laroco, Dondra Biler, Amanda Scott, Katrin Schuhen Detection and Characterization of Organic Stressors in Wastewater by HPLC SEC with DOC Detection	421

Wednesday 21 June

Environmental Modelling

Location and time: Helga Engshus, Auditorium 2, 13:30 - 16:00

Chair: Patrik Andersson (University of Umeå, Sweden) & Knut Breivik (Norwegian Institute for Air Research (NILU), Norway)

Oral presentations:

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14:00	<u>Thorsten Hüffer, Anne-Kathrin Weniger, Thilo Hofmann</u> Characterization of sorption properties of aged polystyrene microplastics particles using poly parameter linear free energy relationships	33
14:15	<u>Paola Gramatica, Alessandro Sangion, Ester Papa</u> Potential environmental hazard of emerging pollutants: QSAR models in the new version of the QSARINS software.	95
14:30	<u>Li Li, Jianxin Hu, Frank Wania</u> Investigating Variability in HBCDD Diastereomer Profile in the Environment	183
14:45	M. Pesce, A. Critto, S. Torresan, M. Santini, E. Giubilato, L. Pizzol, P. Mercogliano, A. Zirino, Wei Ouyang, <u>A. Marcomini</u> An integrated modelling approach to study the impacts of nutrients on coastal aquatic ecosystems in the context of climate change	447
15:00	<u>Caroline Ek, Sara Danielsson, Elisabeth Nyberg, Anders Bignert</u> Consistency in TL normalised concentrations among monitoring species	362
15:15	<u>Elizaveta Protsenko, Evgeniy Yakushev, Shamil Yakubov</u> Modeling a seasonal variability of biogeochemical components at the sediment-water boundary in Baltic Sea	377
15:30	<u>Evgeniy Yakushev, Elizaveta Protsenko, Philip Wallhead</u> Modeling influence of a fishfarm at the water column and sediment biogeochemistry with a 2-Dimensional Benthic-Pelagic model	382
15:45	Mehdi Gharasoo, Martin Thullner, Martin Elsner ReKnSim: A numerical platform for parameter estimation of kinetically complex environmental system	347
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Karolina Jagiello, Jyotsna Bhat-Ambure, Anita Sosnowska, Tomasz Puzyn The quality of QSAR/QSPR models developed for ionic liquids vs. methods applied to calculate molecular descriptors	168
Ester Papa, Alessandro Sangion, Jon Arnot, Trevor N. Brown, Leon Van Der Wal, Paola Gramatica Prediction of in vivo biotransformation in fish and human for the refinement of bioaccumulation	93
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Ziye Zheng, Gregory Peters, Hans Peter H. Arp, Patrik L. Andersson Alternative assessment of decaBDE and its alternatives using in-silico tools	296

Wednesday 21 June

Persistent Organic Pollutants and Waste Cycling

Location and time: Helga Engshus, Auditorium 3, 13:30 - 15:45

Chair: Diane Purchase (Middlesex University, London) & Heinz Rüdell (Fraunhofer Institute for Molecular Biology and Applied Ecology, Germany)

Oral presentations:

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14:00	<u>Therese Haugdahl Nøst</u> , Torkjel Manning Sandanger, Evert Nieboer, Jon Øyvind Odland, Knut Breivik Delayed emissions of POPs from transboundary waste streams may cause spatially and temporally divergent monitoring trends	181
14:15	<u>Annekatriin Dreyer</u> , Frank Neugebauer, Nina Lohmann, Jan Konschorreck Dechlorane Plus (DP) and brominated flame retardants (BFR) in leave samples of coniferous and deciduous trees of the German Environment Specimen bank	125
14:30	<u>Pawel Rostkowski</u> , Martin Schlabach, Hans Gundersen, Dorte Herzke, Anders ruus, Torgeir Nygård Monitoring of bisphenol A and its analogues in environmental samples from Norway	388
14:45	<u>Henri Kylin</u> , Hindrik Bouwman Pentachloroanisole is not a functional proxy for pentachlorophenol in the environment	141
15:00	<u>Elisabeth Nyberg</u> , Anders Bignert, Sara Danielsson, Anna-Lena Egebäck, Caroline Ek, Ulla Eriksson Monitoring of PCBs in Swedish aquatic biota and human milk, 1969-2014	101
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15:30	Golnoush Abbasi, <u>Li Li</u> , Knut Breivik Global and historical emission inventory of BDE-209	262
15:45	Health Break, Exhibition and Posters	

Persistent Organic Pollutants and Waste Cycling

Posters are located at Georg Sverdrups Hus basement. Authors should be available for discussion and questions 15 minutes after discussion is announced.

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Carola Graf, Knut Breivik, Kevin C. Jones, Andrew J. Sweetman Investigating Long-term Trends in PCB Concentrations in Ambient Air: The TOMPs Network and the UK-Norway Transect	422
Ester Heath, Tina Kosjeki, David Heath PCBs, dDioxin-like PCBs, Dioxins, and Furans in Fish commonly available on the Slovene market	368
Aina Jansen, Anuschka Polder, Jan Aaseth, Eystein Skjerve, Jan L. Lyche Increased concentrations of persistent organic pollutants after bariatric/metabolic surgery; are the concentrations exceeding guideline levels?	367
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Thibault Masset, Christine Piot, Nathalie Cottin, Philippe Fanget, Emmanuel Nafrechoux Natural PCB decontamination of lakes: first estimates and direct measurements of volatilization flux in Lake Bourget (France)	276
Marzieh Moenfaard, Sara Ramos, José Avelino Silva, Marius Matache, Nuno Ratola Preliminary study to compare and relate pine needles uptake of semi-volatile organic compounds (SVOCs)	344
Maja Nipen, Pernilla Bohlin Nizzetto, Anders Røsrud Borgen, Anne Karine Halse, Martin Schlabach, Roland Kallenborn Short and medium chain chlorinated paraffins – Investigating occurrence and sources of blank contamination in field and laboratory, and assessing instrumental performance on a quadrupole time-of-flight mass spectrometry instrument	335
Erik Magnus Ræder, Angela Banaduc, Doru Banaduc, Alexandru Burcea, Jan Lydvig Lyche, Vidar Berg Persistant Organic Pollutants in Fish Tissue – Case Study Mureş Watershed	446
Heinz Ruedel, Golnoush Abbasi, Oluseun E. Popoola, Diane Purchase Can metals be used as tracers for organic contaminants in potentially e-waste-polluted environmental media?	75
Andrea Svarcova, Thomas Gramblicka, Radim J. Sram, Jana Hajslova, Jana Pulkrabova Complex assessment of dietary exposure to organic contaminants of daily human diet	405
Katrin Vorkamp, Knud Falk, Søren Møller, Frank F. Rigét, Peter B. Sørensen Polychlorinated naphthalenes add to the burden of organochlorines in peregrine falcons	294

Persistent Organic Pollutants and Waste Cycling

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Tomas Weidlich, Jaroslav Jurenka

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Facile destruction of polychlorinated biphenyls, dioxins and dibenzofurans extracted from waste-to-energy fly ash

Wednesday 21 June

Advancements in Modern Analytical Chemistry

Location and time: Helga Engshus, U35, 13:30 - 16:00

Chair: Fritz Frimmel (Karlsruhe Institute of Technology, Germany) & Georg Becher (University of Oslo, Norway)

Oral presentations:

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13:30	<u>Ingrid Berger-Brito</u> , Nadine Machour, Christophe Morin, Florence Portet-Koltalo Experimental design for the optimisation of multi-residual analysis of oxygenated metabolites of PAHs (hydroxylated, quinones) in sediments.	9
13:45	<u>Alexey N. Ignatev</u> , Tuula Tuhkanen Application of size-exclusion chromatography for monitoring of wastewater effluent post-treatment	420
14:00	<u>Jérémy Bell</u> , Sabine Wagner, Mustafa Biyikal, Kornelia Gawlitza, Knut Rurack Microfluidic platform and fluorescent sensor particles for the detection of the herbicide 2,4-D in worldwide samples	55
14:15	<u>Cleo L. Davie-Martin</u> , Kimberly Halsey, Stephen J. Giovannoni Volatile organic compound emissions by marine plankton using proton-transfer-reaction time-of-flight mass spectrometry	65
14:30	Sameer S. Lakade, Francesc Borrull, Kenneth G. Furton, Anuzar Kabir, <u>Núria Fontanals</u> , Rosa M. Marché Novel microextraction capsule technique to extract personal care products in environmental water samples	110
14:45	<u>Christine Schönlau</u> , Jeroen Kool, Maria Larsson, Magnus Engwall, Anna Kärrman Using a GC based effect-directed approach for the analysis of AhR active contaminants on plastic litter	329
15:00	<u>Ivan Senta</u> , Ivona Krizman, Marijan Ahel, Nikolina Udiković-Kolić, Senka Terzic Determination of macrolide antibiotics, their intermediates and transformation products in solid environmental matrices	195
15:15	<u>Maria G. Antoniou</u> , Iosef Boraie, Danae Pantelide, Mahalakshmi Abhishek, Christine Edwards, Linda A. Lawton Coupling UVA/TiO₂ photocatalysis with sulfate-radical generating oxidants for the degradation of the cyanotoxins microcystin-LR and nodularin	186
15:30	<u>Adrián Jaén-Gil</u> , Andrea Hom-Diaz, Sara Rodríguez-Mazaz, Teresa Vicent, Paqui Blánquez, Damià Barceló Automated suspect screening methodology for the identification of antibiotic transformation products generated during water treatment with microalgae	204
15:45	<u>Imma Tolosa</u> , Roberto Cassi, David Huertas A new marine sediment certified reference material (CRM) for the determination of persistent organic contaminants: IAEA-459	126

Advancements in Modern Analytical Chemistry

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Laur Manea, Turid Rustad, Juliana Manea, Lavinia Buruleanu, Valentina Coatu, Ioana Dulama Characterization of chemical contaminants in some Romanian meat products obtained by traditional method	202
Imma Tolosa, Yann Mueller, David Huertas A study on the separation of PBDEs from PCBs by using silica SPE columns, a 2-(1-pyrenyl)ethyldimethylsilylated silica, and a amino-cyano silica HPLC columns	124

Wednesday 21 June

Marine Toxicology and Chemistry

Location and time: Helga Engshus, Auditorium 2, 16:30 - 17:30

Chair: Katrine Borgå (University of Oslo, Norway) & Anders Ruus (Norwegian Institute for Water Research, Norway)

Oral presentations:

Time:		Abstract ID:
16:30	<u>Albert Serra-Compte</u> , Ana Luisa Maulvalt, Carolina Camacho, Diana Álvarez-Munoz, Damià Barceló, Sara Radríguezmozaz, António Marques Effects of climate change on bioconcentration, metabolization and elimination of pharmaceuticals and endocrine disrupting compounds in mussels (<i>Mytilus galloprovincialis</i>)	136
16:45	<u>Torben Kirchgeorg</u> , Ingo Weinberg, Berit Brockmeyer Chemical emissions from offshore wind farms: a new source for chemical pollution in the marine environment	173
17:00	<u>Victoria Tornero</u> , Georg Hanke Emerging Contaminants in the marine environment - challenges and new options	281
17:15	<u>Jonny Beyer</u> , Merete Schøyen, Steven Brooks, Ian J. Allan, Anders Ruus, Tânia Gomes, Inger Lise N. Bråte, Jarle Håvardstun, Dag Ø. Hjermann, Norman W. Green Blue mussels (<i>Mytilus edulis</i> spp.) as environmental bioindicator	408

Marine Toxicology and Chemistry

Posters are located at Georg Sverdrups Hus basement. Authors should be available for discussion and questions 15 minutes after discussion is announced.

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- Valentina Domingues**, *REQUIMTE/LAQV, Instituto Superior de Engenharia do Porto, Instituto Politécnico do Porto* 256
Evaluation of aliphatic hydrocarbons in macroalgae from the Portuguese north coast
- Silje Marie Kristiansen**, *Department of Biosciences, University of Oslo (UiO), Norway* 188
Transport of marine pollution via seabirds to tundra communities and their effect on inhabiting Collembola in Svalbard
- Siew Hong Lam**, *NUS Environmental Research Institute, National University of Singapore, Singapore* 26
Complementary roles of in vivo zebrafish assays with in vitro glucocorticoid receptor bioassay and analytical chemistry for aquatic environmental monitoring of glucocorticoid pollutants

Thursday 22 June

Satellite Events and Excursions:

Location: Helga Engs hus

Time:

- 09:00 - 16:00 **NORMAN: Suspect and non-target screening with high resolution mass spectrometry - current status and new developments**
Convenors: Pawel Rostkowski (Norwegian Institute for Air Research (NILU), Norway) & Juliane Hollender (EAWAG, Switzerland)
Location: Helga Engs hus, Auditorium 1
- 09:00 - 16:00 **Strategies and challenges for sanitation technology and sewage treatment in the high north**
Convenors: Petter D. Jenssen & Roland Kallenborn (Norwegian University of Life Sciences (NMBU), Norway)
Location: Helga Engs hus, Auditorium 2
- 09:00 - 16:00 **Scientific writing and publishing**
Convenors: Philippe Garrigues (University of Bordeaux, France) & Michaela Dina Stanescu (Polytechnical University of Bucharest, Serbia)
Location: Helga Engs hus, Auditorium 3
- 09:00 - 16:00 **Excursion: Kjeller Research Park and Norwegian Institute for Air Research (NILU)**
Convenors: Pawel Rostkowski & Martin Schlabach (Norwegian Institute for Air Research (NILU), Norway)