



SCIENCE FOR THE ENVIRONMENT 2015

3rd International conference in Aarhus, Denmark
1-2 October 2015

**ENVIRONMENTAL MONITORING AND ASSESSMENT:
CHALLENGES AND OPPORTUNITIES**



AARHUS
UNIVERSITY

DCE - DANISH CENTRE FOR ENVIRONMENT AND ENERGY



3rd Science for the Environment Conference Aarhus Denmark 1-2 October 2015

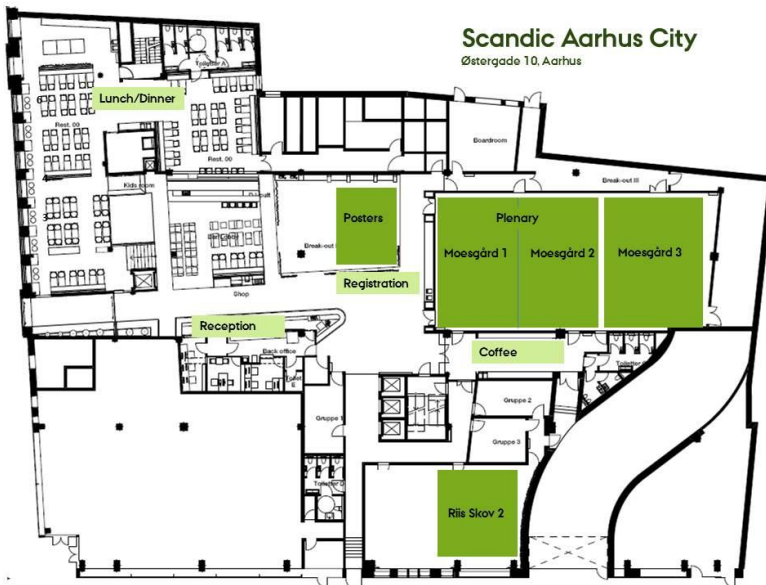
WELCOME

Welcome to the 3rd Science for the Environment conference.

VENUE:

Scandic Aarhus City
Østergade 10
8000 Aarhus
Denmark

FLOOR PLAN:





3rd Science for the Environment Conference Aarhus Denmark 1-2 October 2015

PROGRAMME

WEDNESDAY 30 SEPTEMBER

19.00-21.00 Welcome reception and early registration ARoS Artmuseum

THURSDAY 1 OCTOBER

08.00-09.00 Registration at Scandic Aarhus City

09.00-11.00 **Opening session & keynote speakers (Moesgaard 1 +2)**

Chair: Anja Skjoldborg Hansen

Kurt Nielsen, Aarhus University, Denmark

Jock Martin, European Environment Agency

Katherine Richardson, University of Copenhagen, Denmark

Grant Miller, Zooniverse

Daniel Conley, Lund University, Sweden

11.00-11.30 **Coffee**

11.30-13.00 **Keynote speakers ctd (Moesgaard 1 +2)**

Michael Rode, UFZ, Germany

Nigel Gilles Yoccoz, UiT, Arctic University of Norway

Arko Lucieer, University of Tasmania, Australia

13.00-14.00 **Lunch**



3rd Science for the Environment Conference Aarhus Denmark 1-2 October 2015

<p>14.00-15.30</p>	<p>Moesgaard 1</p> <p>Emerging contaminants Chair: Pia Lassen</p>	<p>Moesgaard 2</p> <p>Marine monitoring Chair: Christian Mohn</p>	<p>Moesgaard 3</p> <p>Wildlife management Chair: Thomas Eske Holm</p>	<p>Riis Skov 2</p> <p>Monitoring and regulation of impacts of agriculture Chair: Dominique Laborde</p>
	<p>Bester et al. Monitoring of pharmaceuticals, biocides, endocrine disruptors in wastewater processes</p> <p>Pereira et al. Long-term trends in PBDEs in UK gannet and sparrowhawk eggs</p> <p>Vorkamp & Rigét Compounds of emerging concern: Retrospective time trends and screening studies in the AMAP Core Programme</p> <p>Kaj & Brorström-Lundén Do fish need hair conditioner? Results from a Nordic screening project.</p> <p>Boutrup et al. Joint Nordic Screening of Emerging Pollutants – efficient tool for developing monitoring and regulation</p>	<p>Ergül et al. Assessment of the spring 2015 plankton blooms in Izmit bay (the Marmara sea)</p> <p>Caill-Milly et al. Survey effort allocation using advanced design: clam population as case study</p> <p>Stæhr et al. Improvements in water quality of a Danish estuary following nutrient reductions</p> <p>Fossing & Hansen Joint Monitoring of the North Sea – mission impossible?</p> <p>Riemann et al. Responses to oligotrophication in Danish coastal ecosystems</p>	<p>Asferg The Danish Game Bag Record and its role in wildlife management</p> <p>Kahlert et al. Functional responses of human hunters to their prey - why harvest statistics may not always reflect changes in prey population abundance</p> <p>Madsen Stop flying blind – the need for better data coordination to support the sustainable management of migratory waterbirds in Europe</p> <p>Shore et al. Monitoring barn owl exposure to rodenticides: a new regulatory tool</p> <p>Andersen et al. DNA-based monitoring discloses wolves in Denmark</p>	<p>Emmett et al. A combined monitoring and modelling approach to maximise the impacts of agri-environment payments at a national scale.</p> <p>Rasmussen et al. High lights from 25 years with the Danish Agricultural Monitoring Program.</p> <p>Rolighed et al. Targeted regulation of agricultural N load to Danish marine waters</p> <p>Blicher-Mathiesen et al. Implementation of Danish Action Plans to reduce nutrient losses to the aquatic environment</p> <p>Kronvang, et al. An emission-based approach for regulation of nitrogen loss from agriculture</p>
<p>15.30-16.00</p>	<p>Coffee break</p>			



3rd Science for the Environment Conference Aarhus Denmark 1-2 October 2015

<p>16.00-17.30</p>	<p>Environmental exposure and human health effects Chair: Pia Lassen</p>	<p>Marine monitoring ctd Chair: Jens Würigler Hansen</p>	<p>Biodiversity monitoring and nature indices Chair: Terry Parr</p>	<p>High resolution water monitoring Chair: Kristian Meissner</p>
	<p>Karademir et al. Contaminated Sites with Risk-Based Approach: Turkish and Romanian Practice</p>	<p>Kraus Monitoring for Ballast Water Management - from pros and cons to yes or no?</p>	<p>Nybø et al. The Norwegian nature index - a communication tool on biodiversity</p>	<p>Poulsen & Ovesen The use of acoustic Doppler instruments for high frequency stream data sampling in Denmark</p>
	<p>Jacob et al. Health Risk Assessment Related to Waterborne Pathogens from the River to the Tap</p>	<p>Årje et al. Ranking relative importance of marine monitoring parameters with Bayesian networks</p>	<p>Framstad et al. The Norwegian Nature Index - providing an overview on the state of biodiversity</p>	<p>Boye Hansen et al. Satellite based monitoring of Chlorophyll a in lakes.</p>
	<p>Busch Hansen et al. Long-term exposure to air pollution and diabetes risk in Danish Nurse Cohort study</p>	<p>Feo et al. Pollutants diffusion numerical modelling in Augusta harbour seawater system (Aircuse, Italy)</p>	<p>Fredshavn Assessment of Biological Status in EU Habitat Types</p>	<p>Winfield et al. High resolution integrated lake monitoring: from physics to fish</p>
	<p>Brandt et al. High-resolution modelling of health impacts and related external cost from air pollution over 25 years using the integrated model system EVA</p>	<p>Mohn et al. Predicting drivers and distributions of deep-sea ecosystems: A cold-water coral case study</p>	<p>Zelený Evaluation of ecological integrity on regional scale with the use of participatory approaches</p>	<p>Larrose et al. Combination of passive samplers to monitor the chemical status of 6 French rivers</p>
	<p>Skjøth et al. Sources of high concentrations of Cladosporium spores in the air of Copenhagen</p>	<p>Feo et al. Seawater quality monitoring in Augusta harbour (Siracuse, Italy) through the use of an AUV eco-mapper</p>	<p>Damgaard Integrating monitoring data across different data types, locations, and habitat types</p>	<p>Søndergaard Application of DGT passive samplers and key monitoring species for measuring bioavailable metal loading in mining-polluted Greenlandic fiords.</p>

17.30-19.00 **Poster session (Hotel Foyer)**

19.00 **Pre-dinner drinks (Hotel Foyer)**

20.00 **Conference Dinner (Hotel Restaurant)**



3rd Science for the Environment Conference Aarhus Denmark 1-2 October 2015

FRIDAY 2 OCTOBER

9.00-
10.30:

Moesgaard 1

Monitoring and assessment of air pollution

Chair: Steen Solvang Jensen

Ellermann et al.

Integration of measurements and modelling in the Danish air quality monitoring program

Nøjgaard et al.

Wood combustion related air pollution in urban and rural background

Nunes et al.

Screening of BTEX in the metropolitan area of Porto

Dobricic et al.

Ice melting in the Arctic and hemispheric warming trends in the winter

Vorkamp et al.

Passive sampling techniques for a screening of polychlorinated biphenyls (PCBs) in indoor air

Moesgaard 2

Forest monitoring

Chair: Jesper Freds-havn

Boulanger et al.

Monitoring forest species diversity: feedbacks from a 15-year experience

Smart et al.

Quantifying the impact of interacting global change drivers on temperate forests; extreme climate and atmospheric pollutant deposition in England.

Westra et al.

Development of a semi-automated process to analyse data from the Flemish forest inventory and support periodical reporting of results

Bruce et al.

Metabarcoding reveals biodiversity trends in forest ecosystems

Trivellini & Lindon

A multiple approach for a Rapid Biodiversity Assessment: Integration of participatory, field and analytical techniques in The MAU forest, Kenya

Moesgaard 3

Special session: Monitoring of marine munition dumpsites

Chair: Jacek Beldowski

Beldowski et al

Towards the monitoring of dumped munitions threat – MODUM project overview

Paka

Precisely coordinated multiple sampling in close vicinity of underwater objects

Vlahos et al.

Detection of TNT and RDX from UXOs in marine environments with passive sampling

Sanderson et al.

Environmental toxicity of CWA residues in the Baltic Sea

Riis Skov 2

Water and resources

Chair: Hanne Bach

Grover

Saving Blue Gold- Methods and solutions

Krogshave Laursen & Gibbes

Models to inform design of water quality monitoring systems: A novel approach for water supply reservoirs

Rääpysjärvi et al.

Macrophytes in boreal streams: Characterizing and predicting occurrence and abundance to assess human impact

Kiliç et al.

Evaluation of Polycyclic aromatic hydrocarbon (PAH) levels seasonally in mussel samples in Haliç (Goldern Horn), Turkey

Thomsen et al.

Sustainability assessment of Biore-source Management Systems (BMS) - a Danish case study

10.30-
11.00

Coffee



3rd Science for the Environment Conference Aarhus Denmark 1-2 October 2015

11.00-12.30	<p>Moesgaard 1</p> <p>Monitoring and assessment of air pollution ctd Chair: Thomas Ellermann</p>	<p>Moesgaard 2</p> <p>Application of Unmanned Air Vehicles (UAV) and satellites Chair: Jens Olaf Pepke Pedersen</p>	<p>Moesgaard 3</p> <p>Monitoring of marine munition dumpsites ctd Chair: Jacek Beldowski</p>
	<p>Roy & Mukherjee Fractal based technique for identifying multiple layers in sodar echograms depicting foggy conditions</p> <p>Castell et al. Personalizing air pollution exposure estimates using low-cost sensors and data fusion techniques</p> <p>Solvang Jensen et al. Air Quality at Your Street</p> <p>Martins et al. Air quality modeling and satellite-based emission inventories</p> <p>Im et al. Evaluation of the high resolution DEHM/UBM model system over Denmark and assessment of trends in air pollution levels over 25 years</p>	<p>Mortensen et al. BioMap - Mapping of Biomass using UAV</p> <p>Sørensen et al. Counting wild flower heads using UAV</p> <p>Alsharrah Evaluation of spatial and spectral resolutions of satellite imagery for mapping perennial arid vegetation: considerations for monitoring and assessments</p>	<p>Jakacki Estimation of polluted area in case of potential leakage of the chemical munitions</p> <p>Kotwicki Benthic communities in chemical munitions dumping site areas (Baltic Sea) with special focus on nematodes</p> <p>Long Monitoring remediation in the eyes of uncertainty and risk</p> <p>Vanninen et al. Analysis of chemical warfare agent related chemicals in in vivo exposed mussels</p>
12.30-13.15	Lunch		



3rd Science for the Environment Conference Aarhus Denmark 1-2 October 2015

<p>13.15-14.45</p>	<p>Moesgaard 1 Soil biodiversity and microbiology Chair: Anne Winding</p>	<p>Moesgaard 2 Metabarcoding and eDNA in biodiversity monitoring Chair: Jesper Fredshavn</p>	<p>Moesgaard 3 Citizen Science Chair: Thomas Eske Holm</p>
	<p>Johansen et al. In situ biostimulation and bioaugmentation to remove phenoxy-acids in subsoil</p> <p>Hendriksen et al. Activity of extracellular enzymes of soils as a monitoring tool</p> <p>Santos et al. Geographic location and land-use types drive soil protist diversity</p> <p>Winding et al. Ecological significance of soil microbial functional diversity across Europe</p> <p>Hendriksen et al. Monitoring aerial spread of microorganisms from farms</p>	<p>Bruce et al. Metagenomic shotgun sequencing of diverse arthropod assemblages</p> <p>Elbrecht & Leese The future of stream monitoring: DNA Metabarcoding!</p> <p>Pawlowski et al. Environmental monitoring through next-generation sequencing metabarcoding: assessing the impact of fish farming on benthic macro- and meiofauna communities</p> <p>Meissner et al. Are recent advances in automated benthic macroinvertebrate taxa identification a viable option to manual keying?</p> <p>Wesley Andersen et al. Evaluating DNA-barcode based monitoring of biodiversity using next-gen sequencing</p>	<p>Castell et al. Real-world performance of low-cost sensors for monitoring air quality in urban environments.</p> <p>Kragh et al. Understanding participants in citizen science: relationships between motivation, well-being and project outcomes</p> <p>Silander & Kettunen Developing mobile on-site monitoring services for citizens and professionals.</p> <p>Brofeldt et al. Community monitoring of illegal logging in Prey Lang, Cambodia.</p> <p>Kettunen & Silander Voluntary Monitoring has Changed</p>
<p>14.50-15.20</p>	<p>Closing plenary (Moesgaard 3) Chair: Hanne Bach</p>		
	<p>Mark Desholm, Birdlife Denmark Hanne Bach, DCE -Danish Centre for Environment and Energy</p>		
<p>15.20-16.00</p>	<p>Coffee</p>		



POSTER LIST

Poster #	Authors	Title
1	Aslan et al.	Monitoring Marine Benthic Macrophytes (Seaweed and seagrass) Species in Saros Bay (North Aegean Sea, Turkey) marine protected area.
2	Bhat et al.	Biomonitoring of air pollution using Lichens in Rajouri district of Jammu and Kashmir state of India
3	de Andrade et al.	Wavelet analysis of fluxes and meteorological variables of an Amazonian tropical rainforest
4	Dermou et al.	Identification and quantification of candidate metabolites of tebuconazole
5	El Azhari et al.	Deciphering the complex interactions between pesticides and soil microbiota
6	Estrup Andersen et al.	A SWAT model for Denmark
7	Ferrari et al.	Formaldehyde: Is an air contaminant in rural area?
8	Leivuori et al.	What should scientists know about intercomparison studies?
9	Lionard et al.	A multiresidue method to evaluate emerging micropollutants levels in waters
10	Probonas et al.	Ecological, Social and Economic Values of Ecosystem Services in N2000 sites in Crete
11	Lees et al.	Analysis of sulfur mustard hydrolysis and oxidation products in seawater and sediments by capillary electrophoresis
12	Valença et al.	Heavy metals in sediments – monitoring the quality of the marine environment
13	Yang et al.	Selecting assesment factors in soil for strategic environmental assessment (SEA) in Korea



POSTER LIST CTD.

Poster #	Authors	Title
14	Sanches et al.	Fraction of absorbed photosynthetically active radiation for a semi-deciduous forest and wetland forest in Brazil
15	Boutrup et al.	Joint Nordic Screening of Emerging Pollutants
16	Bøgestrand et al.	Assuring high quality environmental data
17	Martins et al.	Atmospheric Particulate matter on medium cities and their importance for atmospheric chemistry
18	Poulsen et al.	Validation of national model for nitrogen retention in restored wetlands
19	Qijun Jiang et al.	Citizen sensing for improved urban environmental monitoring
20	Rönkkö et al.	Processing of sensor-recorded water turbidity by MMEA Platform
21	Carstensen et al.	A dual isotope approach to assess controlled drainage as a new mitigation measure
22	Mäki et al.	Developing mobile services for in-situ monitoring, data storing and sharing (HALI)
23	Panitz et al.	Sequencing new genomes to improve identification of eDNA - A NGS workflow for biodiversity assessment in soil
24	Poulsen et al.	A new emission-based approach for regulation of N losses from agricultural areas to surface waters
25	Tušil et al.	Monitoring of illicit drugs in Moravia-Silesian region in municipal wastewater treatment plants
26	Lazar	New materials membrane hight functionalized with applicability in water treatment



CITY MAP

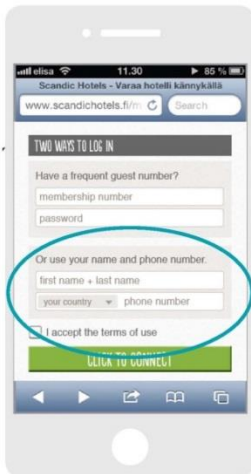


WIFI USER GUIDE

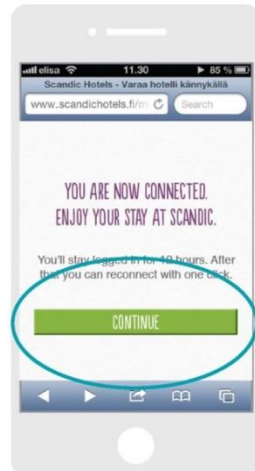
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Step 1



Step 2



Step 3



3rd Science for the Environment Conference Aarhus Denmark 1-2 October 2015

MOBILE EVENT SITE



During the conference, you can get updated information on the programme, venue, speakers and gain easy access to all the abstracts by using our mobile event site. You are not required to download anything or to sign up.

Please go to: <http://m.twoppy.com/SFTE/> using your smartphone or tablet (works on Iphone, Ipad and Android devices.)

Please note that there is no printed version of the abstract book, and we recommend that you make use of our website and the mobile site.

You can access by scanning the QR code:



Note: Any last minute changes to the programme will be announced only via the mobile site.

FEEDBACK

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