

**Preliminary Program
NORDROCS 2018**

Monday, September 3

11.00 – 16.00

Short Course 1 – PFAS
Dynamic investigations with mobile lab at PFAS-impacted sites
– please see separate program

13.00 – 16.00

Short Course 2 – Geostatistics
An overview of Geostatistics for contaminated site characterization
– please see separate program

18.00 – 18.30

Transportation/walk

18.30

Welcome reception at Kulturværftet, Helsingør incl. sandwiches and drinks

Entertainment
Sct. Olai Vocal Ensemble

Tuesday, September 4

09.00 – 10.00

Registration and coffee

10.00 – 11.30

Opening Session / Welcome

Ida Holm Olesen, Chairman, ATV Soil and Groundwater
Arne Rokkjær, Coordinator of the NORDROCS 2018 Organizing Committee

Professor Poul L. Bjerg, DTU Environment, Denmark

Professor Paul Nathanail, University of Nottingham, UK

11.40 - 12.40

EPA from the 4 Nordic countries

Chair: Ida Holm Olesen, M.Sc., Head of Section, Region of Southern Denmark

Remediation – of Soil and Groundwater Part I

Chair: Marja Tuomela, Ph.D., Co-op Bionautical and University of Helsinki, Finland

Environmental forensics. Searching for a major unknown PCE source in an industrial area using different tools, Birkerød, Denmark
M.Sc., Ph.D. Thomas Hauerberg Larsen, Orbicon, Denmark

Development of an iron-based soil mixing remediation method for energyefficient treatment of chlorinated solvents
Ph.D. Per Lindh, Swedish Geotechnical Institut, Sweden

Da Nang – an outstanding thermal remedy 5 years later
Sales and Product Manager Niels Ploug, Krüger, Denmark

12.40 – 13.30

Lunch, poster session and exhibition, matchmaking

13.30 – 14.00

Poster session and exhibition, matchmaking

<p>14.00 – 15.20</p>	<p>Sustainability and Reuse - Part I</p> <p><i>Chair: Jarno Laitinen, M.Sc., Project Manager, Pirkanmaa ELY-Centre, Finland</i></p> <p>Key note presentation: A sustainability perspective on reuse and remediation <i>Professor Kristina Lindström, University of Helsinki, Finland</i></p> <p>Reuse of concrete and risk assessments related to the expansion of Oslo Airport Gardermoen <i>Project Manager Ida Kristine Buraas, Golder, Norway</i></p> <p>Efficient soil reuse – imperative for sustainable land management <i>Senior Advisor Jussi Reinikainen, Finnish Environment Institute, Finland</i></p>	<p>Remediation – of Soil and Groundwater Part II</p> <p><i>Chair: Annika Sidelmann Fjordbøge, DTU Environment, Denmark</i></p> <p>Key note presentation: <i>In situ</i> bioremediation of contaminated soil; comparison and combination of different approaches <i>Professor Martin Romantschuk, University of Helsinki, Finland</i></p> <p>Multidisciplinary approach to characterize natural degradation of PCE <i>Ph.D.-student Sofia Aakesson, Lund University, Sweden</i></p> <p>Tools and concepts for quantifying in situ degradation rates at contaminated sites <i>M.Sc., Ph.D. Ida Damgaard, Capital Region of Denmark</i></p>
<p>15.20 – 16.10</p>	<p>Poster session and exhibition, matchmaking, coffee break</p>	
<p>16.10 - 17.30</p>	<p>Sustainability and Reuse - Part II</p> <p><i>Chair: Environmental expert Aura Nousiainen, Pöyry, Finland</i></p> <p>Sustainable remediation assessment: How to include the societal cost in the equation? <i>Managing Director Jan Haemers, Haemers Technologies, Belgium</i></p> <p>Strategic approach to climate protection and soil management to fulfill the Sustainable Development Goals (SDG 11, 12 and 13) <i>Joan Krogh, NIRAS, Denmark</i></p> <p>Remediation of PCB-polluted soil using biochar: the uptake of PCBs in earthworms, plants and passive samplers – a pot experiment <i>Sigurbjörg Hjartardóttir, NGI, Norway</i></p> <p>Sustainable management in large infrastructure projects of acid producing rock and soil containing high, naturally occurring levels of heavy metals <i>Lars-André Erstad, Rambøll Sweco, Norway</i></p>	<p>Risk Assessment of Soil and Groundwater</p> <p><i>Chair: Head of Dept., Ph.D. Mette Christophersen, Rambøll, Denmark</i></p> <p>Key note presentation: Associate professor Mette M. Broholm, DTU Environment, Technical University of Denmark</p> <p>Direct radiotracer rate measurements of groundwater contaminants in intact cores –method and first results on cis-DCE dechlorination <i>Senior Researcher, Ph.D. Rasmus Jakobsen, GEUS, Denmark</i></p> <p>Bacterial population dynamics in a groundwater plume from a heating oil spill quantified via 16 S rRNA gene amplicon sequencing <i>R&D Project Manager Poul Larsen, DMR, Denmark</i></p>
<p>19.00 – 19.30 19.30 - ??</p>	<p>Welcome drink and Polka Tesch – entertainment/music Conference dinner and dance. The Man – dance band</p>	

Wednesday, September 5

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8.30 – 09.50	<p>Contaminated Sediments – Risk Assessment and Remediation - Part I</p> <p><i>Chair: M.Sc. Paul Cappelen, Geotechnical Institute, Norway</i></p> <p>Key note presentation: Professor Upal Ghosh, University of Maryland Baltimore County, USA</p> <p>The Norwegian Management System of Risk Assessment - contaminated Sediments <i>M.Sc., Senior Adviser Hilde B. Keilen, Norwegian Environmental Agency, Norway</i></p> <p>Dispersal pathways of contaminants from organic-rich sediments – a field study of fibrous sediments in northern Sweden <i>Dr. Sarah Josefsson, SGU, Sweden</i></p>	<p>Investigation and monitoring of Soil and Groundwater - Part I</p> <p><i>Chair: Associate Professor Mette Broholm, DTU Environment, Technical University of Denmark</i></p> <p>Key note presentation: Professor John Frederick Devlin, University of Kansas, USA</p> <p>Multiple fluorescent dyes as a tool for understanding fate and transport for large scale plumes <i>Project Director Nicklas Larsson, NIRAS, Sweden</i></p> <p>The Need for High Resolution Data in Fractured Bedrock Characterization. A Review of FLUTE Methods for Measuring Discrete and Continuous Contaminant Distribution and Transmissivity Profiles <i>Hydrogeologist Derek Angel, FLUTE, USA</i></p>
9.50 – 10.20	Coffee break	
10.20 - 11.40	<p>Contaminated Sediments – Risk Assessment and Remediation - Part II</p> <p><i>Chair: M.Sc., Environmental Consultant Peter Harms-Ringdahl, EnviFix, Sweden</i></p> <p>TREASURE: Novel and innovative methods used to characterize two of Sweden’s contaminated fiberbank sediment sites <i>Professor Ian Snowball, Uppsala University, Sweden</i></p> <p>Remediation of Oskarshamn hamn: challenges and lessons learned from contractor point of view <i>Regional Manager Bart van Renterghem, Envisan, Belgium</i></p> <p>Quantification of microplastics in sediments from benthic and coastal environments <i>M.Sc. Heidi Knutsen, NGI, Norway</i></p> <p>Nontarget analysis of sediment samples from Copenhagen, Denmark <i>Ph.D.-student Josephine Lübeck, University of Copenhagen, Denmark</i></p>	<p>Investigation and monitoring of Soil and Groundwater - Part II</p> <p><i>Chair: Associate Professor Patrick van Hees, Eurofins, Sweden</i></p> <p>High Resolution Site Characterization and 3D Geological Modelling – Tools for Interpretation of Plume Migration in a Complex Geology <i>M.Sc. Bo Tegner Bay, COWI, Denmark</i></p> <p>Development of an innovative methodology for monitoring of in situ remediation of chlorinated solvents – the MIRACHL-project <i>Ph.D. Haakan Rosqvist, Lund University and Tyréns, Sweden</i></p> <p>Use of geostatistical modelling in investigation of soil contamination - working toward a better definition of remedial mass and volume <i>R&D Manager, Ph.D. Per Loll, DMR, Denmark</i></p> <p>Do we as practitioners have a general challenge with leaking wells causing cross-contamination to deeper aquifers ? Swedish and Danish results and paths forward <i>Project Manager Maria Heisterberg Hansen, NIRAS, Denmark, and Environmental Consultant Filip Nilsson, NIRAS, Sweden</i></p>
11.40 - 12.40	Lunch, poster session and exhibition	
12.40 – 13.10	Poster session and exhibition	

13.10 – 14.30	<p>Management</p> <p><i>Chair: Environmental Scientist Anna Kruger, City of Vestarås, Sweden</i></p> <p>Key note presentation: Bodil Liedberg Jönsson, Strategic Development Manager, Municipality of Oskarshamn, Sweden</p> <p>Stakeholder engagement in strategic research agendas related to soil and land use management <i>Ph.D. Yvonne Ohlsson, Swedish Geotechnical Institute, Sweden</i></p> <p>The Finnish Clean Soil Program. A national state-funded program to investigate and remediate sustainably the significant risks to human health and the environment due to land contamination <i>M.Sc., Project Manager Jarmo Laitinen, Centre for Economic Development-, Transport and the Environment, Finland</i></p>	<p>Surface Water - Interaction from Soil, Sediment and Groundwater</p> <p><i>Chair: Ph.D. Morten Jartun, Norwegian Institute for Water Research, Norway</i></p> <p>Key note presentation: Professor Katrine Borgå, University of Oslo, Norway</p> <p>Bodø Airport – The story of PFAS' way from soil, through storm water to biota <i>Head of Section Marianne Kvennås, NGI, Norway</i></p> <p>Using temperature to assess interaction between contaminated groundwater and surface water <i>Ph.D., Hydrogeologist Gro Lilbaek, NIRAS, Denmark</i></p>
14.30 – 15.10	Poster session and exhibition, coffee break	
15.10 – 16.30	<p>Indoor Air</p> <p><i>Chair: R&D Manager Per Loll, DMR, Denmark</i></p> <p>Risk of vapor intrusion to the indoor climate from groundwater contamination <i>Marketing Director Anne Gammeltoft Hindrichsen, Orbicon, Denmark</i></p> <p>Vapor Intrusion Gas Source Investigation by use of Stable Isotopes and Radiocarbon Dating <i>Environmental Engineer Katrine Moes Kristensen, NIRAS, Denmark</i></p> <p>Revisiting dry-cleaning sites -30 years of improving environmental investigations from the perspective of a public authority <i>Environmental Engineer, Ph.D. Sanne Skov Nielsen, Region of Southern Denmark</i></p> <p>Modelling of air flow in capillary break layers. A new approach to determine governing mechanisms in balanced ventilation systems preventing vapor intrusion of volatile pollutants <i>Project Manager Jakob Washington Skovsgaard, Ramboll, Denmark</i></p>	<p>PFAS</p> <p><i>Chair: Environmental Advisor Silje Røysland, Multiconsult, Norway</i></p> <p>Immobilization of PFAS contaminated sandy soil from a Norwegian firefighting training facility <i>Director of Landfill and Contaminated Soil Hilmar T. Sævarsson, Lindum</i></p> <p>PFAS Handbook: What, how and where to look, what are the risks and can we be sure? <i>Senior Consultant Jacqueline Falkenberg, NIRAS, Denmark</i></p> <p>Mobility of PFAS: Do lysimeter results reflect concentrations monitored in a groundwater plume? <i>Regional Manager, M.Sc. Mikael Takala, Vahanen Environment Oy, Finland</i></p> <p>What is the total budget of PFAS in contaminated soil and how does total oxidizable precursor (TOP) assay help comprehend the picture? <i>Associate Professor Patrick van Hees, Eurofins, Sweden</i></p>
Thursday, September 6		
09.00 – 13.30	<p>Technical tour 1 Visit to practice range for fire fighting – please see separate program</p>	
09.00 – 13.30	<p>Technical tour 2 Innovation Garage, Skovlunde – please see separate program</p>	