

## Preliminary Program

### NORDROCS 2018

	<b>Monday, September 3, 2018</b>	
11.00 – 16.00	<b>Short Course 1 – PFAS</b> Dynamic investigations with mobile lab at PFAS-impacted sites – please see separate program	
13.00 – 16.00	<b>Short Course 2 – Geostatistics</b> 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	
	<b>Tuesday, September 4, 2018</b>	
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 Organizing Committee 2018  <b>Professor Poul L. Bjerg, DTU Environment, Denmark</b> <b>Professor Paul Nathanail, University of Nottingham, UK</b>	
11.40 - 12.40	<b>EPA from the 4 Nordic countries</b>  <i>Chair: Ida Holm Olesen, , M.Sc., Head of Section, Region of Southern Denmark</i>	<b>Remediation – of Soil and Groundwater Part I</b>  <i>Chair: Marja Tuomela, Ph.D., Co-op Bionautical and University of Helsinki, Finland</i>  Environmental forensics. Searching for a major unknown PCE source in an industrial area using different tools, Birkerød, Denmark <i>M.Sc., Ph.D. Thomas Hauerberg Larsen, Orbicon, Denmark</i>  Development of an iron-based soil mixing remediation method for energyefficient treatment of chlorinated solvents <i>Ph.D. Per Lindh, Swedish Geotechnical Institut, Sweden</i>  Da Nang – an outstanding thermal remedy 5 years later <i>Sales and Product Manager Niels Ploug, Krüger, Denmark</i>
12.40 – 13.30	Lunch, poster session and exhibition, matchmaking	
13.30 – 14.00	Poster session and exhibition, matchmaking	

14.00 – 15.20	<p><b>Sustainability and Reuse Part I</b></p> <p><i>Chair: Jarno Laitinen, M.Sc., Project Manager, Pirkanmaa ELY-Centre, Finland</i></p> <p><b>Key Note Speaker:</b> Professor Kristina Lindström, University of Helsinki, Finland</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><b>Remediation – of Soil and Groundwater Part II</b></p> <p><i>Chair: Annika Sidelmann Fjordbøge, DTU Environment, Denmark</i></p> <p><b>Key Note Speaker:</b> Professor Martin Romantschuk, University of Helsinki, Finland</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>
15.20 – 16.10	Poster session and exhibition, matchmaking, coffee break	
16.10 - 17.30	<p><b>Sustainability and Reuse Part II</b></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><b>Risk Assessment of Soil and Groundwater</b></p> <p><i>Chair: Head of Dept., Ph.D. Mette Christophersen, Rambøll, Denmark</i></p> <p><b>Key Note Speaker:</b> 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&amp;D Project Manager Poul Larsen, DMR, Denmark</i></p>
19.00 – 19.30	Welcome drink and Polka Tesch – entertainment/music	
19.30 - ??	Conference dinner and dance The Man – dance band	

	<b>Wednesday, September 5, 2018</b>	
8.30 – 09.50	<p><b>Contaminated Sediments – Risk Assessment and Remediation - Part I</b></p> <p><i>Chair: M.Sc. Paul Cappelen, Geotechnical Institute, Norway</i></p> <p><b>Key Note Speaker:</b> Professor Upal Ghosh, University of Maryland Baltimore County, USA</p> <p>The Norwegian Management System of Risk Assessment - contaminated Sediments <i>M.Sc. 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><b>Investigation and monitoring of Soil and Groundwater - Part I</b></p> <p><i>Chair: Associate Professor Mette Broholm, DTU Environment, Technical University of Denmark</i></p> <p><b>Key Note Speaker:</b> 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><b>Contaminated Sediments – Risk Assessment and Remediation - Part II</b></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><b>Investigation and monitoring of Soil and Groundwater - Part II</b></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&amp;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 evt	<p><b>Management</b></p> <p><i>Chair: Environmental Scientist Anna Kruger, City of Vestarås, Sweden</i></p> <p><b>Key Note Speaker:</b> 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 Jarno Laitinen, Centre for Economic Development-, Transport and the Environment, Finland</i></p>	<p><b>Surface Water - Interaction from Soil, Sediment and Groundwater</b></p> <p><i>Chair: Ph.D. Morten Jartun, Norwegian Institute for Water Research, Norway</i></p> <p><b>Key Note Speaker:</b> 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><b>Indoor Air</b></p> <p><i>Chair: R&amp;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><b>PFAS</b></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>
<b>Thursday, September 6, 2018</b>		
09.00 – 13.30	<b>Technical tour 1</b> Visit to practice range for fire fighting – please see separate program	
09.00 – 13.30	<b>Technical tour 2</b> Innovation Garage, Skovlunde – please see separate program	