

Day	Time	Theme	Session	Abstract ID	Abstract	Authors	Affiliations	Presentation type			
Tuesday 17 June	10:20 - 12:00	Theme 1	Soil indicators and soil functions	319	Systematized portfolio of best instruments for assessment of soil functions and soil ecosystem services with potential to integrate in spatial planning	Teodora Todoric Vekic <sup>1</sup>	<sup>1</sup> Chalmers University of Technology	Oral			
				390	Assessing short- and long-term responses of biological soil Indicators for evaluating ecological rehabilitation strategies	Olivier Hulot <sup>1</sup> , Stéphane Boivin <sup>2</sup> , Marie-Paule Norini <sup>1</sup> , Camille Chauvin <sup>2</sup> , Cécile Villenave <sup>3</sup> , Maria-Fernanda ROMERO-SARMIENTO <sup>4</sup> , Jérôme Nespoulous <sup>2</sup> , Maira Alves Fortunato <sup>4</sup> , Yannis Pittatore <sup>2</sup> , Sacha PUECH <sup>2</sup> , Virginie Dervcke <sup>1</sup> , Jennifer Harris <sup>1</sup>	<sup>1</sup> BRGM, <sup>2</sup> Valorhiz, <sup>3</sup> ELISOL Environnement, <sup>4</sup> IFP Energies Nouvelles	Oral			
				401	Assessing Pesticide Contamination to Enhance Soil Ecosystem Services: Monitoring and Risk Assessment Approaches	Nazaré Couto <sup>1</sup> , Raquel Carvalho <sup>1</sup> , João Brinco <sup>1</sup> , Eduardo Mateus <sup>1</sup> , Linda Maring <sup>2</sup> , Pavlos Tyrovolas <sup>3</sup> , Alexandra Ribeiro <sup>1</sup>	<sup>1</sup> CENSE – Center for Environmental and Sustainability Research & CHANGE - Global Change and Sustainability Institute, NOVA School of Science and Technology, NOVA University Lisbon, <sup>2</sup> Deltas, <sup>3</sup> CERTH – Center for Research and Technology, Hellas	Oral			
				553	Improving soil health by judicious use of innovative biofertilizer.	Tsira Beruashvili <sup>1</sup>	<sup>1</sup> LEPL - Tbilisi State University Caucasus Institute of Mineral Resources	Spotlight			
				229	Reactivity and (eco)toxicity of pavement bitumen incorporated in soils after de-sealing	Arnaud Herbreteau <sup>1</sup>	<sup>1</sup> Université de Lorraine	Spotlight			
				434	Sorption and Mobility of PFAS and Nitrification Inhibitors in Conservation Agriculture	Camilla Jakobsen <sup>1</sup> , Sandra Daugaard <sup>1</sup> , Bjarne Strobel <sup>1</sup>	<sup>1</sup> University of Copenhagen	Spotlight			
		Theme 1	Together towards a transition in Circular Land and Soil Management?	200	Transition towards Circular Land and Soil Management; Building networks, bringing together interests and coping with friction in regulation	Margot De Cleen <sup>1</sup> , Joyce Zuijdam <sup>2</sup>	<sup>1</sup> Ministry of Infrastructure and Water Management, Rijkswaterstaat, <sup>2</sup> Ministry of Infrastructure and Water Management, Rijkswaterstaat Oost	Interactive			
				187	Advances in situ chemical oxidation remediation technology through surfactant based in situ soil flushing pre-treatment to enhance recovery: full scale application	Guido Piepoli <sup>1</sup>	<sup>1</sup> ASTC REMEDIATION	Oral			
	Topic 2.1	Hydrocarbons chemical oxidation		285	Cost-effective and efficient in-situ groundwater remediation with TrapOx®: an innovative ISCO technology from the laboratory to full-scale application	Sarah Suehnholz <sup>1</sup> , Julian Bosch <sup>1</sup> , Anett Georgi <sup>2</sup>	<sup>1</sup> Intrapore GmbH, <sup>2</sup> Helmholtz Zentrum fuer Umweltforschung	Oral			
				157	Application of an All-In-One ISCO Technology for the treatment of Monochlorobenzene, BTEX and Chloroform in groundwater at a Former Pharmaceutical Facility in Italy	Alberto Leonbruni <sup>1</sup>	<sup>1</sup> Evonik	Oral			
				315	Advancing the Remediation of Hydrocarbon-Contaminated Soils: A Comparative Study of SEAR, ISCO, and S-ISCO	Aurora Santos <sup>1</sup> , David Lorenzo <sup>1</sup> , Arturo Romero <sup>1</sup> , Raul García-Cervilla <sup>2</sup>	<sup>1</sup> Universidad Complutense de Madrid, <sup>2</sup> Universidad de Castilla la Mancha	Oral			
				226	Development of a modular nature-based solution + ad hoc advanced oxidation processes for polycyclic aromatic hydrocarbons and microplastic removal from road runoff	Airhoa Gaudes <sup>1</sup> , Guillermo Ortiz <sup>1</sup> , Francesca Audino <sup>1</sup> , Sonia Sanchis <sup>1</sup>	<sup>1</sup> LEITAT Technological Center, c/ de la Innovació, 2. 08225 Terrassa, SPAIN	Oral			
				160	The use of constructed floating wetland for remediation of PFAS-impacted stormwaters	Hugo Carvalhal Silva <sup>1</sup> , John Awad <sup>2</sup> , Divina Navarro <sup>2</sup> , Albert Juhasz <sup>1</sup>	<sup>1</sup> University of South Australia, <sup>2</sup> Commonwealth scientific and industrial research organisation	Oral			
Topic 2.1	PFAS - Nature-based Solutions			430	Remediation of PFAS contaminated soil using the novel combination of biochar sorbent stabilization and phytoaccumulation: First insights	Ingrid Rijk <sup>1</sup> , Dan Berggren Kleja <sup>2</sup> , Anja Enell <sup>3</sup> , Anna Kärrman <sup>4</sup> , Maria Larsson <sup>5</sup> , Alf Ekblad <sup>1</sup> , Viktor Sjöberg <sup>1</sup> , Felicia Fredriksson <sup>6</sup> , Maria Florberger <sup>4</sup> , Susanne Karlsson <sup>7</sup> , Matilda Wiberg <sup>8</sup> , Sigrun Dahlén <sup>9</sup> , Christina Prevazi <sup>1</sup> , Katinka Krahn <sup>8</sup> , Erlend Sørmo <sup>9</sup>	<sup>1</sup> Örebro University, Sweden, <sup>2</sup> Swedish University of Agricultural Sciences / Swedish Geotechnical Institute, Sweden, <sup>3</sup> Swedish Geotechnical Institute, Sweden, <sup>4</sup> Geosyntec Consultants AB, Sweden, <sup>5</sup> Structor Miljö Ost, Sweden, <sup>6</sup> Structor Miljöteknik AB, Sweden, <sup>7</sup> Swedish University of Agricultural Sciences, Sweden, <sup>8</sup> Lindum, Norway, <sup>9</sup> Norwegian Geotechnical Institute, Norway	Oral			
				271	Investigating the microbial biodegradation of polyfluoroalkyl substances (PFAS) by molecular docking and molecular dynamic simulations	Mahsa Baniasadi <sup>1</sup> , Frederick Coulon <sup>1</sup> , Tao Lyu <sup>2</sup>	<sup>1</sup> Cranfield University, <sup>2</sup> Cranfield University	Oral			
				309	Integrating resin regeneration and destruction to enhance the sustainability of PFAS treatment	Steven Becker <sup>1</sup> , Brian Pinkard <sup>2</sup>	<sup>1</sup> SciDev Ltd., <sup>2</sup> Aquagga Inc.	Oral			
				381	TreeWell Systems®: An engineered phytoremediation technique for the treatment of groundwater contaminated with PFAS and other organic contaminants	Karina Suy <sup>1</sup> , Dirk Paulus <sup>2</sup> , Herwig De Wilde <sup>2</sup> , Christopher Gale <sup>3</sup> , Paul Thomas <sup>3</sup> , Jim Wragg <sup>4</sup>	<sup>1</sup> Mourik n.v., <sup>2</sup> TAUW Belgium, <sup>3</sup> Applied Natural Sciences, <sup>4</sup> Geosyntec	Oral			
				468	Challenging the boundaries of in situ bioremediation: treatment of a large 1,2-dichloropropane plume with concentrations up to 3 g/L	Hans Baillieul <sup>1</sup> , Simon Dufrasne <sup>2</sup> , Deborah Johnston <sup>2</sup> , Joris Franken <sup>3</sup> , Werner Staes <sup>3</sup>	<sup>1</sup> Sodecon, <sup>2</sup> TotalEnergies, <sup>3</sup> Sweco	Oral			
				371	Targeted groundwater recirculation with oxidative biodegradation for benzothiazole and biocide contamination remediation	Axelle Van Campen <sup>1</sup> , Karen Van Geert <sup>1</sup> , Saskia Van Doorslaere <sup>1</sup> , Jeroen Verhach <sup>1</sup> , Karina Suy <sup>2</sup> , Wouter Spanoghe <sup>2</sup> , Diane Dries <sup>2</sup> , Saskia Van den Heede <sup>3</sup>	<sup>1</sup> Arcadis Belgium, <sup>2</sup> Mourik Belgium, <sup>3</sup> Bayer Antwerp Belgium	Oral			
				360	Comprehensive assessment of a pilot cork-wood pellet biofilter to treat real groundwater polluted by nitrates and antibiotics.	Marc Víñas <sup>1</sup> , Belén Fernández <sup>2</sup> , Víctor Matamoros <sup>3</sup> , Joan Pascó <sup>4</sup> , Marlène Mendoza <sup>5</sup> , Miriam Guiverau <sup>2</sup> , Yolanda Lucas <sup>3</sup> , Rosa Troballo <sup>3</sup> , Juan Carlos Rea <sup>6</sup> , Elena Zurigia <sup>6</sup> , Rubén García-Tirado <sup>6</sup> , J García <sup>6</sup> , Jofre Herrero <sup>7</sup> , David Sánchez <sup>7</sup> , Carmen Biel <sup>8</sup>	<sup>1</sup> Institute of Agrifood Research and Technology (IRTA), <sup>2</sup> Institute of Agrifood Research and Technology, <sup>3</sup> IDAES-CSIC Dept. of Environmental Chemistry, <sup>4</sup> Institute of Agrifood Research and Technology (IRTA), <sup>5</sup> PROTECMED S.L., <sup>6</sup> FACSA S.A, <sup>7</sup> Eurecat - Technological Centre of Catalonia	Oral			
Topic 2.3	Integrated Solutions and Nature-based Strategies			424	Sustainable advanced oxidation of pharmaceutical compounds using peroxymonosulfate activated by iron-based bimetals	Giovanni Scaggiante <sup>1</sup> , Daniela Zingaretti <sup>1</sup> , Renato Baciocchi <sup>1</sup>	<sup>1</sup> University of Rome Tor Vergata	Oral			
				540	Constructed wetland for treatment of HCH-contaminated water – experience from a three-year field study	Jan Němcéck <sup>1</sup> , Martina Štrojsová <sup>1</sup> , Pavla Švermová <sup>1</sup> , Miroslav Černík <sup>1</sup>	<sup>1</sup> Technical University of Liberec	Spotlight			
				546	Isolation of an NMP (N-methyl-2-pyrrolidone) degrading bacteria and its usage in a fluidized-bed bioreactor	Balázs Fehér <sup>1</sup> , Ingrid Zsilinszky <sup>1</sup> , Laura Ábrahám <sup>1</sup> , Péter Bernátl <sup>1</sup> , Attila Komoczi <sup>1</sup> , István Kiss <sup>1</sup>	<sup>1</sup> aDepartment of Applied Microbiology, Division for Biotechnology, Bay Zoltán Nonprofit Ltd. for Applied Research	Spotlight			
				435	Electron donor availability and biodegradability dictates co-metabolic organic micropollutant biodegradation	Nora Sutton <sup>1</sup> , Rita Branco <sup>2</sup> , Roel Meulepas <sup>2</sup> , Pieter van Veelen <sup>2</sup> , Huub Rijnaarts <sup>1</sup>	<sup>1</sup> Wageningen University-Environmental Technology, <sup>2</sup> Wetsus, European Centre of Excellence for Sustainable Water Technology	Spotlight			
				316	Catchment Wide PFAS Hydrogeological Study, Risk and Remediation Assessment	Jake Hurst <sup>1</sup> , Laura Garland <sup>1</sup> , Katy Baker <sup>1</sup> , Fiona Waldren <sup>1</sup> , Carol Davies <sup>1</sup> , Marcus Adams <sup>1</sup> , Clare Lucas <sup>1</sup> , Lauren Ballarini <sup>1</sup>	<sup>1</sup> Arcadis UK	Oral			
				334	Management of PFAS-contaminated Sites from an Administrative Point of View – Challenges, Dilemmas and Solutions	Louise Rosenberg <sup>1</sup> , Ane Lablanca <sup>1</sup> , Maria Hag <sup>1</sup> , Ditte Schröder <sup>1</sup> , Lærke Ildvedsen <sup>1</sup> , Rikke Howitz <sup>1</sup> , Nina Tuxen <sup>1</sup>	<sup>1</sup> The Capital Region of Denmark	Oral			

Day	Time	Theme	Session	Abstract ID	Abstract	Authors	Affiliations	Presentation type
				272	Example of identifying sources of PFAS that are causing contamination in a drinking water supply, and how to prepare for mitigation measures technically and administratively?	Nanette Schouw <sup>1</sup> , Susanne Petersen <sup>1</sup> , Bente Hyldegaard <sup>1</sup> , Christian Höimann <sup>1</sup>	<sup>1</sup> Region Zealand	Oral
				144	PFAS and other compounds at old tanneries -new strategy when tracking contamination	Anne Tipsmark Ottosen <sup>1</sup>	<sup>1</sup> The Region of Southern Denmark	Oral
				437	Applying Indexing for Evaluation of Existing Pump-and-Treat Plants with Regards to Operational Resources and Multiple Contaminants	Krzysztof Kowalski <sup>1</sup>	<sup>1</sup> Capital Region of Denmark	Spotlight
				405	From screening to selection of methods for the remediation program for a mega plume	Britt Boye Thrane <sup>1</sup> , Morten Birch Larsen <sup>1</sup> , Dorte Harrekilde <sup>1</sup> , Cecilie Fisker Ottosen <sup>1</sup> , Grégory Lemaire <sup>2</sup> , Poul L. Bjerg <sup>2</sup> , Mette M. Broholm <sup>2</sup> , Jørn K. Pedersen <sup>1</sup> , Lone Dissing <sup>2</sup>	<sup>1</sup> Ramboll, <sup>2</sup> DTU Sustain, <sup>3</sup> Region of Southern Jutland	Spotlight
				355	Nature-based solutions for contaminated soils: multi-scale spectral mapping, risk assessment, and phytomanagement innovations in the EDAPHOS project.	Yoann Boisson <sup>1</sup> , Lisa Ciadamidaro <sup>2</sup> , Manhattan Lebrun <sup>1</sup> , Julien Parelle <sup>2</sup> , Fabienne Tatin-Froux <sup>2</sup> , Solofonaina Andriamihajason <sup>1</sup> , Eftymia Alexopoulos <sup>1</sup> , Kostantinos Iordanoglou <sup>1</sup> , Guillaume Bertrand <sup>2</sup> , Walter Zegada-Lizárrazu <sup>3</sup> , Engracia Madejon <sup>4</sup> , Paula Madejon <sup>4</sup> , Peter Welters <sup>7</sup> , Sophie Fabre <sup>8</sup> , Hugo Dorbes <sup>8</sup> , Julia Sepulveda <sup>9</sup> , Nicolas Manier <sup>10</sup> , Nicolas Pucheu <sup>10</sup> , Aleksandra Zofńska <sup>11</sup> , Michel Chalon <sup>2</sup>	<sup>1</sup> UBFC, <sup>2</sup> UFC, <sup>3</sup> UBFC / ONERA, <sup>4</sup> CRES, <sup>5</sup> UNIBO, <sup>6</sup> CSIC, <sup>7</sup> PHYTOWELT, <sup>8</sup> ONERA, <sup>9</sup> MIC, <sup>10</sup> INERIS, <sup>11</sup> GIG	Spotlight
				210	Spatial planning and design as a means to support healthy urban soils	Linda Maring <sup>1</sup> , Fransje Hooimeijer <sup>2</sup> , Laura Nouges <sup>1</sup> , Laura Thomas <sup>2</sup> , Natalia Rudik <sup>1</sup> , Saskia Keesstra <sup>3</sup> , Cécile Leguern <sup>4</sup> , Teodora Todoric Vekic <sup>5</sup>	<sup>1</sup> Deltas, <sup>2</sup> TU Delft, <sup>3</sup> Wageningen Environmental Research, <sup>4</sup> BRGM, <sup>5</sup> Chalmers University	Interactive
				353	Transforming post-mining landscapes: nature-based solutions for soil restoration and ecosystem services assessment in coal regions	José Luis Gallego <sup>1</sup> , Ana M. Diaz-Díaz <sup>1</sup> , Aránzazu Estrada <sup>1</sup> , Lorena Salgado <sup>1</sup> , Lidia Moriano <sup>1</sup> , Rubén Alba <sup>1</sup> , Mauro Sanna <sup>1</sup> , Eduardo Cires <sup>1</sup> , Laura García de la Fuente <sup>1</sup> , Arturo Colina <sup>1</sup> , Eduardo Rodríguez-Valdés <sup>1</sup>	<sup>1</sup> University of Oviedo	Oral
				251	Silverton Mill – Return to Nature	Jo McKay <sup>1</sup>	<sup>1</sup> Ramboll	Oral
				169	Contaminated sediment disposal site of Karosta Canal in Latvia: An environmental assessment of three management alternatives to support decision-making	Nicolas Estoppey <sup>1</sup> , Marion Børresen <sup>1</sup> , François Clayer <sup>2</sup> , Marianne Stave Sekkenes <sup>2</sup> , Sissel Brit Rønneklev <sup>2</sup> , Thea Lind Christiansen <sup>1</sup> , Arne Pettersen <sup>1</sup> , Martins Prūšins <sup>3</sup> , Ivo Kolins <sup>3</sup> , Espen Eek <sup>1</sup>	<sup>1</sup> Norwegian Geotechnical Institute (NGI), <sup>2</sup> Norwegian Institute for Water Research (NIVA), <sup>3</sup> Liepaja Special Economic Zone Authority (LSEZ)	Oral
				274	Safe and responsible drilling to the second aquifer in Utrecht Implementation of four test drillings for deep subsurface research	Christian Soeter <sup>1</sup> , Martijn Ypma <sup>2</sup> , Alex Ooijevaar <sup>3</sup>	<sup>1</sup> Arcadis, <sup>2</sup> Wiertsema & Partners, <sup>3</sup> Gemeente Utrecht	Oral
				423	A modelling tool to assess management alternatives of contaminated sediment basin including potential impacts and co-benefits of floating solar panels	François Clayer <sup>1</sup> , Marianne Sekkenes <sup>1</sup> , Nicolas Estoppey <sup>1</sup> , Marion Børresen <sup>1</sup> , Sissel Renneklev <sup>1</sup> , Thea Christiansen <sup>1</sup> , Arne Pettersen <sup>1</sup> , Martins Prūšins <sup>3</sup> , Ivo Kolins <sup>3</sup> , Espen Eek <sup>1</sup>	<sup>1</sup> Norwegian Institute for Water Research (NIVA), <sup>2</sup> Norwegian geotechnical institute (NGI), <sup>3</sup> Liepaja Special Economic Zone Authority (LSEZ)	Spotlight
				321	Determining the long-term behavior of deconstruction concrete impacted by hydrocarbons in a circular economy context	Aboubacar Demba DIARRA <sup>1</sup> , Samuel COUSSY <sup>1</sup> , Corse COUDRAY-DECOCK <sup>1</sup> , Hubert LEPROND <sup>1</sup> , Catherine BAUMGARTNER <sup>1</sup> , Catherine LORGEOUX <sup>3</sup> , Noëlle ENJELVIN <sup>4</sup> , Pierre FAURE-CATTELOIN <sup>5</sup>	<sup>1</sup> EDF R&D, F-77818 Moret sur Loing, France, <sup>2</sup> French Geological Survey (BRGM), F-45100 Orléans, France, <sup>3</sup> Université de Lorraine, CNRS, GeoRessources, F-54000 Nancy, France, <sup>4</sup> Université de Lorraine, INRAE, LSE, GISFI, F-54000 Nancy, France, <sup>5</sup> Université de Lorraine, CNRS, LIEC, F-54000 Nancy, France	Spotlight
				476	Nature-based solutions as catalysts for soil-inclusive planning: Developing long-term regional strategies for European SPADES pilots	Natalia Rudik <sup>1</sup>	<sup>1</sup> Deltas	Spotlight
				310	In-Situ Reagent Injection Fundamentals: From Overburden to Competent Bedrock and Liquids to Slurries	Michael Mazzarese <sup>1</sup> , Giorgio Ceriani <sup>2</sup> , William Pepe <sup>3</sup>	<sup>1</sup> AST Environmental, Inc., <sup>2</sup> Ejlskov, <sup>3</sup> Stantec	Interactive
				217	Aerobic metabolic TCE degradation – process characterization, bioaugmentation and field application	Andreas Tiehm <sup>1</sup> , Steffen Hertle <sup>1</sup> , Lara Stelmaszyk <sup>1</sup> , Azariel Ruiz-Valencia <sup>2</sup> , Simon Kleinknecht <sup>3</sup> , Matthias Loschko <sup>4</sup> , Marta Popova <sup>5</sup> , Xiaojun Zhang <sup>6</sup> , He-Ping Zhao <sup>6</sup> , Timothy Vogel <sup>7</sup>	<sup>1</sup> DVGW Technologiezentrum Wasser, <sup>2</sup> Université Claude Bernard Lyon, <sup>3</sup> University of Stuttgart, <sup>4</sup> BoSS Consult GmbH, <sup>5</sup> SPAQUE sa, <sup>6</sup> Shanghai Jiao Tong University, <sup>7</sup> Zhejiang University	Oral
				441	In-situ remediation of an active DNAPL legacy site posing a serious threat to local groundwater by use of sustainable, safe and predictable approach	Gabriele Giorgio Cerani <sup>1</sup> , Mike Mazzarese <sup>2</sup>	<sup>1</sup> Ejlskov A/S, <sup>2</sup> AST Environmental Inc.	Oral
				282	Biogeochemically Enhanced In Situ Treatment of Chlorinated Organics and Metals	Daniel Leigh <sup>1</sup> , Michael Mueller <sup>1</sup>	<sup>1</sup> Evonik	Oral
				488	It's more than just Dehalococcoides, reductive dechlorination takes a village	Kela Ashworth <sup>1</sup> , Sandra Dworatzek <sup>1</sup> , Philip Dennis <sup>1</sup>	<sup>1</sup> SiREM	Oral
				276	Case Study: The Application of Combined FRAC IN/Electric Current Enhanced Remediation on a Low Permeability Site	Ondřej Lhoták <sup>1</sup> , Vladislav Knytl <sup>1</sup> , Jaroslav Nosek <sup>2</sup> , Jan Němeček <sup>2</sup> , Petra Námlanová <sup>1</sup> , Jan Kučka <sup>1</sup>	<sup>1</sup> DEKONTA, a.s., <sup>2</sup> Technical University of Liberec	Oral
				140	Electrochemical Oxidation for PFAS Destruction: Lessons Learned from Field Demonstrations Inform the Treatment Train Model	Gavin Scherer <sup>1</sup> , Rebecca Mora <sup>1</sup> , Rachael Casson <sup>1</sup> , Hanna Temme <sup>1</sup>	<sup>1</sup> AECOM	Oral
				150	Enhanced PFAS removal from groundwater using iron-coated peat and electrochemical remediation techniques	Jean Noel Uwayezu <sup>1</sup> , Andrea Luca Tasca <sup>1</sup> , Ivan Carabante <sup>1</sup> , Jurate Kumpiene <sup>1</sup>	<sup>1</sup> Waste Science and Technology; Luleå University of Technology	Oral
				241	Electrochemical-Based Coagulation and Oxidation for PFAS Treatment	Dora Chiang <sup>1</sup> , Jack Huang <sup>2</sup>	<sup>1</sup> Jacobs, <sup>2</sup> University of Georgia	Oral
				320	The accurate determination of Perfluorooctane sulfonic acid (PFOS) removal efficiency by integrated-sonochemical system	Debabrata Panda <sup>1</sup> , Maxime Cochenne <sup>1</sup> , Stéfan Colombano <sup>1</sup> , Benjamin Laufer <sup>2</sup> , Pascal Tiers <sup>2</sup> , Alexandre Baudouard <sup>2</sup> , Sébastien Bristeau <sup>1</sup> , Anne Toogla <sup>1</sup> , Julie Lions <sup>1</sup> , Nicolas Devau <sup>1</sup> , Eric Van Hullebusch <sup>3</sup>	<sup>1</sup> BRGM, <sup>2</sup> SinapTec, <sup>3</sup> IPGP	Oral
				225	PFAS Mapping and Treatment of Leachate from Odense landfill	Sylvie Braekveit <sup>1</sup> , Anita Rye Ottosen <sup>2</sup> , Per Henrik Nielsen <sup>2</sup> , Caroline Elisabeth Flyger <sup>1</sup> , Dorte Harrekilde <sup>1</sup>	<sup>1</sup> Ramboll, <sup>2</sup> Vandcenter Syd, <sup>3</sup> Ramboll	Oral
				521	Sustainable remediation of gasworks site in Masterton, New Zealand	Ben Keet <sup>1</sup>	<sup>1</sup> Geo & Hydro - K8 Limited	Oral
				268	Evaluating Energy Efficiency and Carbon Footprint in Soil Treatment Technologies: the case of In Situ Thermal Desorption	/ Guerniou <sup>1</sup>	<sup>1</sup> Haemers Technologies	Oral
				119	Progress of Green and Low-Carbon Remediation of Contaminated Sites in China	Jingfei Deng <sup>1</sup> , Meng Xiao <sup>2</sup> , Hongzhen Zhang <sup>1</sup> , Jingqi Dong <sup>1</sup> , Piet Seuntjens <sup>3</sup> , Cedo Maksimovic <sup>4</sup> , Yongming Luo <sup>5</sup>	<sup>1</sup> Chinese Academy of Environmental Planning, <sup>2</sup> Beijing Normal University, <sup>3</sup> Flemish Institute for Technological Research (VITO), <sup>4</sup> Imperial College London, <sup>5</sup> Institute of Soil Science, Chinese Academy of Sciences	Oral
				128	Quantifying biodiversity impact to achieve sustainable remediations	Hanna Almqvist <sup>1</sup> , Elsa Fogelström <sup>1</sup> , Scott Cole <sup>1</sup> , Karin Eliaeson <sup>2</sup>	<sup>1</sup> WSP, <sup>2</sup> Swedish Geological Survey	Oral

Day	Time	Theme	Session	Abstract ID	Abstract	Authors	Affiliations	Presentation type
14:50 - 16:20	Theme 1	Groundwater management in sponge cities	440	Feasibility study of a tool to measure the social, economic and environmental benefits of remediation of brownfield land supporting sustainable urban regeneration	Yolande Macklin <sup>1</sup> , Darren Beriro <sup>2</sup> , Angela Haslam <sup>3</sup> , David Griggs <sup>3</sup>	<sup>1</sup> Jacobs, <sup>2</sup> British Geological Survey (BGS), <sup>3</sup> Environment Agency, UK	Oral	
			446	Groundwater management in sponge cities	Thomas Ertel <sup>1</sup> , Kristina Schenk <sup>2</sup>	<sup>1</sup> et environment and technology, <sup>2</sup> State Capital City Stuttgart	Interactive	
	Theme 1	Integrated approaches and collaborative innovation	211	Mapping the spatial implications of soil policy in the physical landscape: a case study of Het Groene Hart	Laura Thomas <sup>1</sup>	<sup>1</sup> TU Delft	Oral	
			165	Data-driven approach to implement an integrated water and sediment management strategy in Flanders	Wim Clymans <sup>1</sup> , Katrien Van de Wiele <sup>2</sup> , Karolien Vermeiren <sup>1</sup> , Goedele Kaeysens <sup>2</sup> , Els Ryken <sup>1</sup> , Marleen Van Damme <sup>4</sup> , Froukje Kuijk <sup>2</sup> , Steven Broekx <sup>4</sup>	<sup>1</sup> VITO, <sup>2</sup> OVAM, <sup>3</sup> VMM, <sup>4</sup> DOV	Oral	
			196	New spatial strategies for redevelopment of brownfields	Geert Roovers <sup>1</sup> , Jesse Wijnen <sup>2</sup> , Rick Dijkstra <sup>2</sup>	<sup>1</sup> Saxion, <sup>2</sup> Saxion University of Applied Science	Oral	
			235	Addressing Agricultural Challenges: Innovative Approaches for Nitrogen and Phosphorus Removal	Kim Gommans <sup>1</sup> , Stefan Jansen <sup>1</sup> , Joachim Rozemeijer <sup>1</sup> , Vince Kaandorp <sup>1</sup> , Niel Mulder <sup>1</sup>	<sup>1</sup> Deltares	Oral	
			176	Introducing the German BMF funding measure on "Sustainable Groundwater Management" (LURCH)	Sarah Fieger <sup>1</sup> , Thomas Track <sup>1</sup>	<sup>1</sup> DECHEMA e.V.	Spotlight	
			357	Pollution in Soil and Sediments Caused by Livestock breeding and Higher-place Ponds Aquaculture on Coastal Zone Land: A Case Study in Wenchang, China	Sanping Zhao <sup>1</sup> , Yongbing Zhu <sup>1</sup> , Haiyang Zhang <sup>2</sup> , Bin Dong <sup>1</sup> , Xiaodong Liu <sup>2</sup>	<sup>1</sup> State Key Laboratory of NBC Protection for Civilian, <sup>2</sup> Anhui Province Key Laboratory of Polar Environment and Global Change, School of Earth and Space Sciences, University of Science and Technology of China	Spotlight	
			388	Innovative Applications of Waste-Derived Biochars: Case Studies in Water Treatment and Agriculture	Anna Bogush <sup>1</sup> , Ondrej Masek <sup>2</sup> , Jhony Quispe <sup>1</sup> , Wolfram Buss <sup>2</sup> , Konstantin Ignatyev <sup>3</sup> , Luiza Campos <sup>4</sup>	<sup>1</sup> Centre for Agroecology, Water and Resilience, Coventry University, UK, <sup>2</sup> School of GeoSciences, University of Edinburgh, UK, <sup>3</sup> Diamond Light Source, UK, <sup>4</sup> Department of Civil, Environmental and Geomatic Engineering, University College London, London, UK	Spotlight	
			351	Fenton's reagent as a versatile driver for in situ chemical oxidation, biological oxidation and boosted soil vapor extraction for BTEX and light TPH compounds	Lionel Counet <sup>1</sup> , Jeroen Vandenbrouwe <sup>1</sup>	<sup>1</sup> Injectis NV	Oral	
Topic 2.1	Combined technologies	Combined technologies	496	Combining microbiological, chemical, and abiotic processes for simultaneous treatment of cVOCs and heavy metals	Alan Seech <sup>1</sup> , Daniel Leigh <sup>1</sup> , Michael Mueller <sup>2</sup>	<sup>1</sup> Evonik Corporation, <sup>2</sup> Evonik Operations GmbH	Oral	
			162	Biological barrier to contain a groundwater plume with a complex contaminant mixture	Dirk Paulus <sup>1</sup> , Sven Feytens <sup>1</sup> , Martin Slooijer <sup>2</sup>	<sup>1</sup> TAUW Belgium, <sup>2</sup> Greensoil	Oral	
			154	Evaluating Degradation Pathways: Constructed Wetlands for Groundwater Remediation and Biodiversity Enhancement	Charline Kaplan <sup>1</sup> , Olga Vounaki <sup>1</sup> , Mattias Verbeeck <sup>1</sup> , Rony Annaert <sup>1</sup>	<sup>1</sup> Environmental Resources Management	Oral	
			313	Use of Adsorbent-Based Remediation Technologies to Limit Surface Water Impacts from Contaminated Groundwater	Michael Mazzarese <sup>1</sup>	<sup>1</sup> AST Environmental, Inc.	Oral	
			340	Enhanced reductive dechlorination of an aquifer polluted with chloroethenes with in-situ electrochemically produced hydrogen	David Fernández-Verdejo <sup>1</sup> , Natàlia Blázquez-Pallí <sup>2</sup> , Marçal Bosch <sup>2</sup> , Albert Guisasola <sup>3</sup> , Ernest Marco-Ureña <sup>4</sup> , Paqui Blánquez <sup>1</sup>	<sup>1</sup> BioremUAB, Department of Chemical, Biological and Environmental Engineering, School of Engineering, Universitat Autònoma de Barcelona, <sup>2</sup> Litoclean, S.L., <sup>3</sup> GENOCOV, Departament d'Enginyeria Química, Biológica i Ambiental, Escola d'Enginyeria, Universitat Autònoma de Barcelona	Oral	
	Topic 2.1	Electro treatments	498	Electro-nano - bioremediation Technology for In-situ Degradation of CHC from Low Permeable Aquifer	Petr Kvapil <sup>1</sup> , Vaclav Sredl <sup>1</sup> , Jaroslav Nosek <sup>2</sup> , Pierre Matz <sup>2</sup> , Andreas Thiem <sup>1</sup> , Javier Garrido <sup>3</sup> , Steffen Hertle <sup>4</sup>	<sup>1</sup> Photon Water, <sup>2</sup> Technical University Liberec, <sup>3</sup> Solvay, <sup>4</sup> TZW	Oral	
			421	Electrochemical activation of oxidants with diamond electrodes for efficient removal of anticancer drugs in aqueous effluents	Giovanni Scaggiante <sup>1</sup> , Ana Hayat <sup>2</sup> , José Leandro da Silva Duarte <sup>2</sup> , Carmen María Domínguez <sup>2</sup> , Daniela Zingaretti <sup>1</sup> , Renato Baciocchi <sup>1</sup> , Aurora Santos <sup>1</sup> , Salvador Cotillas <sup>2</sup>	<sup>1</sup> University of Rome Tor Vergata, <sup>2</sup> Complutense University of Madrid	Oral	
			387	Short-time electrodeialysis treatment of heavy-metal contaminated soils from Walloon Region	Matthieu HENRY <sup>1</sup> , Laurie LOMMEL <sup>1</sup> , Philippe DESCAMPS <sup>1</sup> , Gilles COLINET <sup>2</sup>	<sup>1</sup> Centre Terre et Pierre (CTP), <sup>2</sup> U.Liège - Gembloux Agro Bio Tech	Oral	
			166	Synergistic Effects of Electrokinetic Remediation and Iron Amendment on In-Situ Arsenic Immobilization in Contaminated Soils	MODUPE AKINDOLIE <sup>1</sup> , Ivan Carabante <sup>1</sup> , Jurate Kumpiene <sup>1</sup>	<sup>1</sup> Waste Science and Technology, Lulea University of Technology, Lulea, Sweden	Oral	
			380	Progress in Sustainable Land Management Worldwide	Nicola Harries <sup>1</sup>	<sup>1</sup> CL:AIRE, International Sustainable Remediation Alliance Secretariat	Interactive	
Topic 2.3	Redevelopment of Industrial and Legacy Sites	Redevelopment of Industrial and Legacy Sites	202	Critical mineral recovery to support the energy transition	Sarah Hale <sup>1</sup> , Jeffery Gillow <sup>2</sup> , Emilie Dal <sup>1</sup>	<sup>1</sup> Arcadis (UK) Limited , <sup>2</sup> Arcadis U.S., Inc.	Oral	
			173	An Evolving Closure Strategy at a Large Scale Phosphorous Impacted Sediment Lagoon: How to Implement and Lessons Learnt	Joanne Dinhham <sup>1</sup> , Paul Hesketh <sup>1</sup> , Oliver Phipps <sup>1</sup> , Chris Rice <sup>1</sup>	<sup>1</sup> Environmental Resources Management, UK	Oral	
			262	Innovative Underground Skimming Technology for Efficient LNAPL Recovery: A Case Study from Northern France	/ Pieters <sup>1</sup>	<sup>1</sup> Haemers Technologies	Oral	
			125	Industrial Emission Directive (IED) Baseline Reports in EU - Best practices and challenges	IRAKLIS PANAGIOTAKIS <sup>1</sup> , ELENI STROMPOULA <sup>1</sup> , NIKOS MISYRIS <sup>1</sup> , DIMITRIS DERMATAS <sup>2</sup>	<sup>1</sup> ENYDRON - Environmental Protection Services, <sup>2</sup> National Technical University of Athens	Oral	
			448	Sulfate-reducing bacteria pave the way for redevelopment of former industrial site	Hans Baillieu <sup>1</sup> , Wouter Moors <sup>1</sup> , Fleur Verfaillie <sup>2</sup> , Geert Boucneau <sup>2</sup>	<sup>1</sup> Sodecon, <sup>2</sup> Universoil	Oral	
			444	Sustainable Groundwater Purification through Biodegradation Using the Submerged Fixed Bed Reactor (SMFR)	Lukas Scholz <sup>1</sup> , Albert Smits <sup>2</sup>	<sup>1</sup> NTP Umwelt, <sup>2</sup> NTP	Oral	
Wednesday 18 June	Topic 2.1	Bioremediation - Hydrocarbons	480	Innovative Case Studies in Bioremediation: Anaerobic Bioaugmentation for Petroleum Hydrocarbons	Sandra Dworatzek <sup>1</sup> , Jeff Roberts <sup>1</sup> , Corey Scales <sup>1</sup> , Jennifer Webb <sup>1</sup> , Courtney Toth <sup>2</sup> , Elizabeth Edwards <sup>2</sup>	<sup>1</sup> SIREM, <sup>2</sup> University of Toronto	Oral	
			481	Evaluation of the biodegradation of mineral oil hydrocarbons as part of an in-situ biosparging measure at an active industrial site in Spain	Alfredo Pérez-de-Mora <sup>1</sup> , David Gramunt Colet <sup>1</sup> , Enrico Coggiola <sup>2</sup> , Pablo Sánchez Cueto <sup>3</sup> , Marcos Parras Molto <sup>3</sup> , Kevin Kuntze <sup>4</sup>	<sup>1</sup> TAUW GmbH, <sup>2</sup> TAUW Iberia, <sup>3</sup> LEITAT Technological Center, <sup>4</sup> Isodetect GmbH	Oral	
			343	Fungal Stimulation Biopiles: A Sustainable Innovation for the Bioremediation of Hydrocarbon-Contaminated Soils	Maria Cecilia Medaera <sup>1</sup>	<sup>1</sup> Mico	Oral	
			255	Exploring bioavailability reductions as a paradigm shift in soil bioremediation	Jose-Julio Ortega-Calvo <sup>1</sup> , Rosa Posada-Baquero <sup>1</sup> , Carmen Fernandez-Lopez <sup>2</sup> , Jose-Luis Garcia <sup>1</sup>	<sup>1</sup> Instituto de Recursos Naturales y Agrobiología de Sevilla, CSIC, <sup>2</sup> Centro Universitario de la Defensa, CUD-UPCT	Oral	
			130	Integrated chelator-based removal of toxic metals and aerobic digestion of sewage sludge - a pilot scale study	Barbara Fojkar <sup>1</sup> , Domen Lestan <sup>1</sup>	<sup>1</sup> University of Ljubljana, Biotechnical faculty	Oral	
	Topic 2.1	Heavy metals	10:20 - 12:00					

Day	Time	Theme	Session	Abstract ID	Abstract	Authors	Affiliations	Presentation type
				532	A novel perspective on heavy metal decontamination using waste-derived zeolite sludge composites	Mohammad Gheibi <sup>1</sup> , Martin Palušák <sup>1</sup> , Daniele Silvestri <sup>1</sup> , Miroslav Černík <sup>1</sup> , Stanislaw Witold Waclawek <sup>1</sup>	<sup>1</sup> Institute for Nanomaterials, Advanced Technologies and Innovation, Technical University of Liberec, Studentská 1402/2, 461 17, Liberec 1, Czech Republic	Oral
				147	Stabilization and Solidification of metal-contaminated soil using Bioash, Ground Granulated Blast Furnace Slag (GGBFS), and Cement: Optimizing binder ratios and evaluating performance	Sepideh Gholizadeh Khasevani <sup>1</sup> , Ivan Carabante <sup>1</sup> , Lale Andreas <sup>1</sup> , Jurate Kumpiene <sup>1</sup>	<sup>1</sup> Luleå University of Technology	Oral
				336	Permeable Reactive Barrier with Waste Zero-Valent Iron for Metal-Contaminated Groundwater: Field Assessment in a High-Mineralization Aquifer	Ondrej Lhotsky <sup>1</sup> , Vladislav Knytl <sup>1</sup> , Michael Komarek <sup>2</sup> , Sarka Lewandowská <sup>2</sup> , Zuzana Vanková <sup>2</sup> , Tomas Cajtham <sup>3</sup> , Barbora Pacáková <sup>4</sup>	<sup>1</sup> DEKONTA, a.s., <sup>2</sup> Czech University of Life Sciences Prague, <sup>3</sup> Institute of Microbiology of the Czech Academy of Sciences, <sup>4</sup> , Norwegian University of Science and Technology-NTNU	Oral
				300	Micro- and molecular biological studies on the remediation of water resources affected by mining activities in southern African regions	Lara Stelmasyk <sup>1</sup> , Stephan Hüttmann <sup>2</sup> , Harry Yikangas <sup>3</sup> , Stefan Norra <sup>4</sup> , Flavia Digaocomo <sup>5</sup> , Rosa Seng <sup>6</sup> , Florian Eichinger <sup>6</sup> , Florian Blum <sup>6</sup> , Casebely Sililo <sup>7</sup> , Vazembua Tijozo <sup>7</sup> , Andreas Tiehm <sup>1</sup>	<sup>1</sup> DVGW Technologiezentrum Wasser, <sup>2</sup> Sensatec GmbH, <sup>3</sup> Sensatec Africa LTD, <sup>4</sup> University of Potsdam, <sup>5</sup> Karlsruhe Institute of Technology, <sup>6</sup> Hydrostop GmbH, <sup>7</sup> Sinomine Tsumeb Smelter	Spotlight
				419	Engineering biology for metaldehyde biodegradation in drinking water using <i>Sphingobium</i> spp and <i>Acinetobacter</i> spp.	Yasmin Meeda <sup>1</sup> , Miles Folkes <sup>1</sup> , Frederic Coulon <sup>1</sup> , Francis Hassard <sup>1</sup>	<sup>1</sup> Cranfield University	Spotlight
				469	LIFE NARMEA: Nature based remediation techniques for heavy metals in sediment – results of a constructed wetland in the Winterbeek site	Axelle Mineur <sup>1</sup> , Jan De Vos <sup>1</sup> , Froukje Kuijk <sup>2</sup> , Karel Viaene <sup>3</sup>	<sup>1</sup> ABO consultancy, <sup>2</sup> OVAM, <sup>3</sup> ARCHE	Spotlight
		Topic 2.1 PFAS - Physico-chemical treatment II		143	Monitoring the effects of a colloidal activated carbon barrier for stabilisation of PFAS: Insight into the development of AFFF contamination now and in the future	Robert Earon <sup>1</sup> , Dan Berggren Kleja <sup>1</sup> , Michael Pettersson <sup>1</sup> , Sara Sahlin <sup>1</sup> , Malin Montelius <sup>1</sup> , Fritjof Fagerlund <sup>1</sup> , Henning Persson <sup>1</sup> , Klas Amerdal <sup>2</sup>	<sup>1</sup> Swedish Geotechnical Institute, <sup>2</sup> Uppsala University, Department of Earth Sciences, <sup>3</sup> Geological Survey of Sweden	Oral
				132	Case study: In situ remediation of a PFAS source area under a factory	Jack Shore <sup>1</sup> , Kris Maerten <sup>1</sup>	<sup>1</sup> REGENESIS	Oral
				127	Study of PFAS degradation by e-beam in water and adsorbed on activated carbon matrix	Aude Smeets <sup>1</sup> , Aurore Schneiders <sup>1</sup> , Rudi Labarbe <sup>1</sup> , Georges Scholl <sup>2</sup> , Ariadna Vargas Rivadeneira <sup>1</sup> , Jeremy Brison <sup>1</sup> , Gauthier Eppe <sup>1</sup> , Stéphane Lucas <sup>1</sup>	<sup>1</sup> Ion Beam Application (IBA), <sup>2</sup> University of Liège	Oral
				347	Biosurfactant-induced PFAS leaching from aqueous film-forming foam (AFFF) impacted Dutch soil	Johan van Leeuwen <sup>1</sup> , Alraune Zech <sup>1</sup> , Sophie Hibben <sup>2</sup> , Bas van der grift <sup>3</sup>	<sup>1</sup> universiteit Utrecht, <sup>2</sup> Acacia water, <sup>3</sup> KWR water	Oral
				172	Optimizing the remediation of Per- and polyFluoroAlkyl Substances (PFAS) contaminated soil by Surface Active Foam Fractionation (SAFF)	Andrea Luca Tasca <sup>1</sup> , Jean Noel Uwayezu <sup>1</sup> , Ivan Carabante <sup>1</sup> , Jurate Kumpiene <sup>1</sup>	<sup>1</sup> Luleå University of Technology, Sweden	Oral
		Topic 2.2 Advancement in Risk Assessment		135	PFAS Soil and Groundwater Threshold Limits in Europe – What should we do when PFAS are not regulated?	Francesca Motta <sup>1</sup> , William Leys <sup>1</sup>	<sup>1</sup> AECOM	Oral
				222	Quantitative risk assessment of representative perfluoroalkyl acids under multiple land uses	Yudong Feng <sup>1</sup>	<sup>1</sup> Institute of soil science, Chinese academy of sciences	Oral
				471	How PFAS end up in high concentrations in home produced chicken eggs at ambient background levels in soils	Tessa Pancras <sup>1</sup> , Laura Vredenborg <sup>1</sup>	<sup>1</sup> Arcadis Nederland B.V.	Oral
				486	Ecological Risk Assessment for the reuse of impacted dredged sediments as construction materials for the new breakwater in the Port of Genoa	Daniele Susanni <sup>1</sup> , Sara Ceccon <sup>1</sup> , Francesca Arienti <sup>1</sup> , Costanza Sironi <sup>1</sup> , Sara Rossi <sup>2</sup>	<sup>1</sup> Ramboll Italy, <sup>2</sup> PerGenovaBreakwater	Oral
				163	Assessment of dimethylchlor and metabolites as a long-term source of groundwater contamination	Annika S. Fjordbøe <sup>1</sup> , Klaus Mosthaf <sup>1</sup> , Poul L. Bjerg <sup>1</sup>	<sup>1</sup> Department of Environmental and Resource Engineering, Technical University of Denmark	Spotlight
				328	Application of the dermal bioavailability of PAH soil contamination to inform detailed quantitative human health risk assessment	Darren Beriro <sup>1</sup> , Paul Nathanail <sup>1</sup> , Russell Thomas <sup>2</sup> , Christopher Taylor <sup>3</sup>	<sup>1</sup> British Geological Survey, <sup>2</sup> WSP, <sup>3</sup> National Grid	Spotlight
		Topic 2.3 Monitoring during in situ remedy implementation		375	A New Analytical Solution for Groundwater Pollution Risk Assessment: Integrating Mass Fluxes and Degradation By-products	Antoine Poncelet <sup>1</sup> , Philippe Orban <sup>1</sup> , Serge Brouyère <sup>1</sup>	<sup>1</sup> Université de Liège, Urban & Environmental Engineering Research Unit, Group of Hydrogeology and Environmental Geology	Spotlight
				111	Monitoring design during in situ remedy implementation	Johanna Moreskog <sup>1</sup> , Josephine Molin <sup>2</sup> , Brant Smith <sup>2</sup>	<sup>1</sup> Ramboll Sweden AB, <sup>2</sup> Evonik Corporation	Interactive
		Theme 3	Digital tools for risk & site management	352	Aiming for Precision: Optimizing Fungal Bioremediation Using Digital Twin	Xin Zhang <sup>1</sup> , Margit Heiske <sup>2</sup> , Anastasia Pacary <sup>2</sup> , Pablo Ugaldé <sup>2</sup> , Ilaria Chicca <sup>2</sup> , Rémi Peuvraud <sup>2</sup> , Caroline Zaoui <sup>1</sup>	<sup>1</sup> NOVOBIOM, <sup>2</sup> IMEAN	Oral
				294	Digital hydrogeophysics for targeted and effective groundwater remediation solutions	Paolo Ciampi <sup>1</sup> , Damiano Feriaud <sup>1</sup> , Giulia Fellini <sup>1</sup> , Alessandro Valle <sup>1</sup> , Carlo Esposito <sup>1</sup> , Ernst Bartsch <sup>2</sup> , Eduard Alesin <sup>2</sup> , Laura Lorini <sup>1</sup> , Marco Petrangeli Papini <sup>1</sup>	<sup>1</sup> Sapienza University of Rome, <sup>2</sup> IEG Technologie GmbH	Oral
				149	Controlling risks during industrial construction works through sustainable and data-driven groundwater management using real-time monitoring of groundwater flows	Marjan Joris <sup>1</sup> , Steven Van den Bussche <sup>2</sup> , Karen Van Geert <sup>2</sup> , Timothy De Kleyn <sup>1</sup>	<sup>1</sup> IFLUX, <sup>2</sup> Arcadis	Oral
				344	An innovative coal mine gas risk screening tool for North Lanarkshire, Scotland	Darren Beriro <sup>1</sup> , Aliyssa Glen <sup>2</sup> , Julie Thompson <sup>2</sup> , Ron Wiley <sup>3</sup>	<sup>1</sup> British Geological Survey, <sup>2</sup> WSP, <sup>3</sup> North Lanarkshire Council	Oral
				507	Geostatistics for ground sorting during harbour-basin excavation: multi-parameter and multi-threshold management in an uncertain context	Claire Faucheu <sup>1</sup> , Erwan Le Prio <sup>2</sup> , Jean-Yves Hardy <sup>2</sup> , Hélène Binet <sup>1</sup>	<sup>1</sup> Geovariances, <sup>2</sup> Haropa Port	Oral
		Theme 3 Soil data and modelling of soil health		292	Contaminated soil data and predictive modelling of soil health and risks	Hans-Peter ARP <sup>1</sup> , Hans-Christian BRUUN-HANSEN <sup>2</sup> , Yoann BOISSON <sup>3</sup> , Michel CHALOT <sup>3</sup> , Dominique GUYONNET <sup>4</sup> , Timo TARVAINEN <sup>5</sup> , Roar Aasker JENSEN <sup>6</sup> , Bjørn STROBEL <sup>7</sup> , Mahrooz REZAEI <sup>1</sup> , Coen RITSEMA <sup>8</sup> , Radu GIURGIU <sup>9</sup> , Tomas REZNÍK <sup>9</sup>	<sup>1</sup> INTNU, <sup>2</sup> University of Copenhagen, <sup>3</sup> University of Franche-Comté, <sup>4</sup> BRGM, <sup>5</sup> GTK, <sup>6</sup> DHI, <sup>7</sup> Wageningen University, <sup>8</sup> ILVO, <sup>9</sup> Masaryk University	Interactive
13:00 - 14:30			Topic 2.1 Bioremediation	330	Treatability studies and enhanced aerobic in situ biostimulation pilot test of lindane-polluted groundwater at Sabiñango (Spain)	Soder Walz <sup>1</sup> , Salom Bermúdez <sup>2</sup> , Granados Rigol <sup>3</sup> , Fernández Verdejo <sup>2</sup> , Vicent Huguet <sup>2</sup> , Marco Urrea <sup>2</sup> , Blánquez Cano <sup>2</sup>	<sup>1</sup> Department Environmental Biotechnology, Helmholtz Centre for Environmental Research-UFZ, Leipzig, Germany., <sup>2</sup> Departament d'Enginyeria Química, Biológica i Ambiental, Universitat Autònoma de Barcelona (UAB), <sup>3</sup> EMGRISA, Empresa para la Gestión de Residuos Industriales, S. A., S.M.P., M.P. C	Oral
				466	Combined process in the remediation of trichloroethylene-contaminated aquifers: use of waste material to support Biological Reductive Dechlorination, associated with adsorption onto biochar from pinewood scraps.	Micaela Abruzzese <sup>1</sup> , Laura Lorini <sup>1</sup> , Bruna Matturro <sup>2</sup> , Naima Blai <sup>1</sup> , Marco Petrangeli Papini <sup>1</sup>	<sup>1</sup> Sapienza University of Rome, <sup>2</sup> National Water Research Institute IRSA-CNR	Oral
				341	Environmental Conditions Shaping Dechlorinating Microbial Communities: A Case Study on Biostimulation and Bioaugmentation in Chlorinated Solvent-Contaminated Groundwater	Bruna Matturro <sup>1</sup> , Marco Zeppilli <sup>2</sup> , Laura Lorini <sup>2</sup> , Geremia Sassetto <sup>2</sup> , Maria Presutti <sup>2</sup> , Marco Petrangeli Papini <sup>2</sup>	<sup>1</sup> Water Research Institute, IRSA-CNR (Rome, Italy), <sup>2</sup> University Sapienza - Chemistry Department (Rome, Italy)	Oral

Day	Time	Theme	Session	Abstract ID	Abstract	Authors	Affiliations	Presentation type
				394	Electro-Nano-Bioremediation of Chlorinated Hydrocarbons – Insights from a Long-Term Large-Scale Experiment	Simon M. Kleinknecht <sup>1</sup> , Kathrin Leicht <sup>1</sup> , Tobias Junginger <sup>1</sup> , Norbert Klaas <sup>1</sup> , Petr Kvapil <sup>2</sup> , Jaroslav Nosek <sup>3</sup> , Andreas Tiehm <sup>4</sup> , Luca Trevisan <sup>5</sup> , Timothy M. Voge <sup>6</sup>	<sup>1</sup> VEGAS, Institute for Modeling Hydraulic and Environmental Systems, University of Stuttgart, <sup>2</sup> Photon Water Europe, <sup>3</sup> Technical University of Liberec, Institute for Nanomaterials, <sup>4</sup> TZW:DVGW Technologiezentrum Wasser, Department Water Microbiology, <sup>5</sup> BoSS Consult GmbH, <sup>6</sup> Université Claude Bernard Lyon, Laboratoire d'Ecologie Microbienne	Oral
				151	Long-term operation of a bioelectrochemical system for lindane dechlorination	Guanxiong Wang <sup>1</sup> , David Fernández Verdejo <sup>1</sup> , Dani Salom <sup>1</sup> , Paqui Blánquez <sup>2</sup> , Albert Guisasola <sup>1</sup> , Ernest Marco Urrea <sup>1</sup>	<sup>1</sup> Department of Chemical, Biological and Environmental Engineering, School of Engineering, Universitat Autònoma de Barcelona	Oral
		Topic 2.1	How to terminate eternal soil remediations	281	How to terminate eternal soil remediations	Nanne Hoekstra <sup>1</sup> , Tom Bosma <sup>1</sup> , Jacques de Jong <sup>2</sup> , Laura Timmermans <sup>3</sup> , Sem Braaksma <sup>4</sup> , Henk Schouten <sup>5</sup>	<sup>1</sup> Deltares, <sup>2</sup> Municipality of Amsterdam, <sup>3</sup> Municipality of Zwolle, <sup>4</sup> Bodembeheer Nederland	Interactive
		Topic 2.2	PFAS-fate and transport by modelling and experiments	131	Environmental dynamics and fate of PFAS in soil: Interactions with soil organic matter and Iron oxides	Sajad Hazrat <sup>1</sup> , Juan Antelo <sup>2</sup> , Juarte Kumpiene <sup>1</sup> , Ivan Carabante <sup>1</sup>	<sup>1</sup> Luleå University of Technology, <sup>2</sup> University of Santiago de Compostela	Oral
				216	Leaching potential of PFAS compounds from soil: Insights from batch and column experiments	Jette Kjøge Olsen <sup>1</sup> , Morten Birch Larsen <sup>1</sup> , Nanna Thomsen <sup>1</sup> , Peter Bundgaard Mortensen <sup>2</sup> , Jens Muff <sup>2</sup> , Anne Tipmark Ottosen <sup>4</sup>	<sup>1</sup> Ramboll Denmark, <sup>2</sup> Eurofins, <sup>3</sup> Aalborg University, <sup>4</sup> The Region of Southern Denmark	Oral
				432	Prediction of the release and transfer of per- and polyfluoroalkyl substances (PFAS) in soils and groundwater: identification of key parameters	Lamyae EL-MRABET <sup>1</sup> , Julien MICHEL-MALFAIT <sup>1</sup> , Sophie DORGE <sup>2</sup> , Gwenaëlle TROUVE <sup>2</sup>	<sup>1</sup> Ineris, <sup>2</sup> Université Haute-Alsace	Oral
				458	Single event PFAS contamination – what stays in soil over time?	Erik Ribelli <sup>1</sup> , Johanna Johansson <sup>1</sup>	<sup>1</sup> Liljemark consulting	Oral
				523	Unsaturated column study of fate and transport of per- and polyfluoroalkyl substances (PFAS) from aqueous film-forming foams (AFFF) in sandy soil under different precipitation regimes	Ase Heisæter <sup>1</sup> , Hans Peter Arp <sup>2</sup> , Gijs Breedveld <sup>3</sup> , Mona Hansen <sup>4</sup>	<sup>1</sup> Norges Geotekniske Institutt AS, <sup>2</sup> NGI, <sup>3</sup> NGI, <sup>4</sup> Avinor	Oral
				193	Determining vertical mass discharge of PFAS in the unsaturated zone - perspectives from a practitioner	Gro Lilbæk <sup>1</sup> , Søren Dyrborg <sup>1</sup> , Anders Christensen <sup>1</sup> , Louise Rosenberg <sup>2</sup> , Nina Tuxen <sup>2</sup> , Chuck Newell <sup>3</sup>	<sup>1</sup> NIRAS DK, <sup>2</sup> Capital Region of Denmark, <sup>3</sup> GSI Environmental	Oral
		Topic 2.3	Investigating and managing PFAS	137	A robust multi-approach data analysis to identify sources and extent of PFAS impacts	Matar Thiombane <sup>1</sup> , Olga Younaki <sup>1</sup> , Matias Verbeeck <sup>1</sup>	<sup>1</sup> ERM	Oral
				156	Investigations and Treatment of PFAS contaminated water at a quarry situated close to a landfill	Per Johansson <sup>1</sup>	<sup>1</sup> WSP Sweden AB	Oral
				463	Environmental investigation of PFAS pollution in surface and groundwater - feedback after 12 months of crisis in Wallonia	Vincent Lebrun <sup>1</sup> , Johan Derouane <sup>1</sup>	<sup>1</sup> Walloon public service - Groundwater division	Oral
				323	Long Term Stability of PFAS Immobilisation in Soil; How Long is Long Enough?	Richard Stewart <sup>1</sup>	<sup>1</sup> RemBind	Oral
				427	PFAS Forensics: Distribution of PFAS in tree rings at an AFFF contaminated site	Charles Pijlis <sup>1</sup> , Amy Veenendaal <sup>1</sup> , Adrie Luykx <sup>2</sup> , Aiko Hensums <sup>3</sup>	<sup>1</sup> TAUW, <sup>2</sup> Province Gelderland, <sup>3</sup> Municipality Doetinchem	Spotlight
				179	Advanced investigation strategies for PFAS contamination: insights from a firefighting training site in Flanders	Wim Vansina <sup>1</sup> , Pieter Buffel <sup>2</sup> , Marjan Joris <sup>3</sup> , Erik Bosmans <sup>3</sup>	<sup>1</sup> Witteveen+Bos Belgium NV, <sup>2</sup> EnLISSA Belgium, <sup>3</sup> iFLUX Belgium	Spotlight
				181	PFAS sorption – comparing methods to determine Kd values for clayey tills and limestone	Esther Schott <sup>1</sup> , Poul Løstrup Bjerg <sup>2</sup> , Søren Dyreborg <sup>3</sup> , Anders G. Christensen <sup>3</sup> , Annika Sidelmann Fjørdege <sup>2</sup>	<sup>1</sup> Technical University of Denmark (DTU) & NIRAS A/S, <sup>2</sup> Technical University of Denmark (DTU), <sup>3</sup> NIRAS A/S	Spotlight
		Theme 3	AI & Machine Learning for remediation	183	Choosing the Right Machine Learning Prediction Strategy for Pump and Treat (P&T) Evaluation: Multivariate Analysis and Regression-Based Methodology	Krzysztof Kowalski <sup>1</sup>	<sup>1</sup> Capital Region of Denmark	Oral
				335	Development of a Machine Learning Model for Assessing PFAS Vulnerability in Danish Groundwater	Bastian Germundsson <sup>1</sup> , Christian Nørby Friis Sørensen <sup>1</sup> , Maiken Lundstad Nielsen <sup>2</sup>	<sup>1</sup> COWI A/S, <sup>2</sup> The Danish EPA	Oral
				383	EWatLink: Towards smart WWTPs, a case study of Bastogne WWTP, Belgium.	Taher Abunama <sup>1</sup>	<sup>1</sup> CEBEDEAU/SPGE	Oral
				504	Use of Artificial Intelligence and Machine Learning for Site Remediation in the United States	Cindy Frickle <sup>1</sup>	<sup>1</sup> United States Environmental Protection Agency	Oral
				171	An Innovative Data Fusion Framework of pXRF and Vis-NIR to Address Sample Interferences and Reduce the Need for Sample Preparation in Soil Analysis	Niall Marsay <sup>1</sup> , Carmen Alamar Gavidia <sup>1</sup> , Stuart Wagland <sup>1</sup> , Pablo Campo- Moreno <sup>1</sup>	<sup>1</sup> Cranfield University	Oral
14:50 - 16:20		Theme 1	Soil phytomanagement and bioremediation	201	Phosphorus release from rewetted agricultural peat soils	Adrian Florea <sup>1</sup> , Goswin Heckrath <sup>2</sup> , Dominik Zak <sup>2</sup> , Maarit Mäenpää <sup>2</sup> , Hans Christian Hansen <sup>1</sup>	<sup>1</sup> University of Copenhagen, <sup>2</sup> Aarhus University	Oral
				194	Cultivating flooded rice ( <i>Oryza sativa</i> ) in rotation with sugarcane to improve soil and environmental quality from agricultural watersheds within South Florida, USA.	Jehangir Bhadha <sup>1</sup> , Abu Rabban <sup>1</sup> , Xue Bai <sup>1</sup> , Noel Manirakiza <sup>1</sup> , Suraj Melkani <sup>1</sup> , Tanjila Jesmin <sup>1</sup> , Matthew VanWeelden <sup>1</sup>	<sup>1</sup> University of Florida	Oral
				443	Valorization of Brownfields Through the Production of Bioactive Molecules	Cécile Nouet <sup>1</sup> , Georges Scholl <sup>1</sup> , Michel Frederick <sup>1</sup> , Bernard Bosman <sup>1</sup> , Monique Carmo <sup>1</sup> , Gauthier Eppe <sup>1</sup> , Gilles Colinet <sup>1</sup> , Marc Hanikenne <sup>1</sup>	<sup>1</sup> Université de Liège	Oral
				192	Phytoremediation, soil quality recovery and revalorization of harvested biomass for clean biofuel production at a TPH polluted site in Spain	Natalia Blázquez-Pallí <sup>1</sup> , Foix Soler-Balaguer <sup>1</sup> , Alba Catalán Merlos <sup>2</sup> , Francesca Audino <sup>2</sup> , Romina Mariel Gargarello <sup>2</sup> , Christopher Kick <sup>3</sup> , Sonia Sanchis <sup>2</sup> , David Garriga <sup>1</sup> , Marcal Bosch <sup>1</sup>	<sup>1</sup> LITOCLAN, <sup>2</sup> LEITAT, <sup>3</sup> Fraunhofer UMSICHT	Oral
				485	Combining Carbon Farming & Innovative Phytomanagement Approaches for Brownfield Valorization: the Walloon Living Hub Use Case within the INNO4CFIs I3 Project	Agathe Mercier-Nalle <sup>1</sup> , Ilaria Chicca <sup>1</sup> , Anastasia Pacary <sup>2</sup> , Florian Liénard <sup>3</sup> , Caroline Zaoui <sup>1</sup>	<sup>1</sup> NOVOBIOM, <sup>2</sup> IMEAN, <sup>3</sup> ISSEP	Spotlight
				554	Exploring <i>Typha domingensis</i> as a candidate species for nickel uptake in the remediation of severely polluted waters	Yuri Castilho <sup>1</sup> , Douglas Viana <sup>1</sup> , Amanda Ferreira <sup>1</sup> , Thomas Trentin <sup>1</sup> , Amanda Varussa <sup>1</sup> , Tiago Ferreira <sup>1</sup>	<sup>1</sup> Department of Soil Science, University of São Paulo	Spotlight
				175	A method for evaluating the effects of gentle remediation options (GRO) on soil health: Demonstration at a DDX-contaminated tree nursery in Sweden	Paul Drenning <sup>1</sup> , Yevheniya Volchko <sup>1</sup> , Anja Enell <sup>2</sup> , Dan Berggren Kleja <sup>3</sup> , Maria Larsson <sup>4</sup> , Jenny Norrman <sup>1</sup>	<sup>1</sup> Chalmers University of Technology, <sup>2</sup> Swedish Geotechnical Institute, <sup>3</sup> Swedish Geotechnical Institute; Swedish University of Agricultural Sciences, <sup>4</sup> Örebro University	Spotlight
		Topic 2.1	PFAS Thermal	333	Characterization of known and unrecognized fluorinated substances on PFAS-contaminated soil after lab-scale thermal experiments	Felicia Fredriksson <sup>1</sup> , Ingrid Ericson Jögesten <sup>1</sup> , Malin Montelius <sup>2</sup> , Leo W.Y. Yeung <sup>1</sup> , Michael Pettersson <sup>2</sup> , Dan Berggren Kleja <sup>2</sup> , Anja Enell <sup>2</sup> , Klas Amerdal <sup>2</sup>	<sup>1</sup> Man-technology-environment research centre (MTM), Örebro university, <sup>2</sup> Swedish Geotechnical Institute (SGI), <sup>3</sup> Geological Survey of Sweden	Oral
				265	A Containerized Thermal Treatment System for the Destruction of PFAS in Contaminated Soils	Haemers <sup>1</sup>	<sup>1</sup> Haemers Technologies	Oral
				509	Pilot scale Thermal soil PFAS remediation	Niels Ploug <sup>1</sup> , Søren Eriksen <sup>1</sup>	<sup>1</sup> Krüger Veolia	Oral

Day	Time	Theme	Session	Abstract ID	Abstract	Authors	Affiliations	Presentation type
				283	Side-by-Side Evaluation of Field-Scale Treatment of PFAS-Impacted Sediments: Smoldering, Thermal Desorption, and Soil Washing followed by SCWO, HALT, and UV/SGM	Sarah Suehnholz <sup>1</sup> , Hannah McIntyre <sup>2</sup> , Elisabeth Hawley <sup>2</sup> , Rula Deeb <sup>2</sup> , Christopher Higgins <sup>1</sup>	<sup>1</sup> Colorado School of Mines, <sup>2</sup> Geosyntec	Oral
				428	Innovative PFAS destruction method: Smoldering of PFAS contaminated soil	Morten Dreyer <sup>1</sup> , Kirsten Rügge <sup>1</sup> , Neal Durant <sup>2</sup> , Warren Ferguson <sup>3</sup> , Brian Harrison <sup>3</sup> , Bjørn P. Maarupgaard <sup>4</sup>	<sup>1</sup> COWI A/S, <sup>2</sup> Geosyntec Consultants, <sup>3</sup> Savron Solutions, <sup>4</sup> Danish Ministry of Defence Estate Agency	Oral
		Topic 2.1	Physico-chemical treatment cl-solvents	376	Integrating In Situ Thermal Treatment and a Passive EISB Biobarrier - A Multi-Faceted Approach to Mitigate CVOC Impacts to Surface Water on an Accelerated Timeline	Christine Redfern <sup>1</sup> , Ravi Srirangam <sup>1</sup> , Gary Angyal <sup>1</sup>	<sup>1</sup> Ramboll	Oral
				372	Treatment of chlorinated organic compounds-emulsions by activated persulfate: pollutants degradation or separation?	Yazza Moreno-DelaFuente <sup>1</sup> , Navarro Navarro <sup>1</sup> , Andrés Sánchez-Yepes <sup>1</sup> , David Lorenzo <sup>1</sup> , Carmen Domínguez <sup>2</sup> , Salvador Cotillas <sup>1</sup> , Aurora Santos <sup>1</sup>	<sup>1</sup> Department of Chemical Engineering and Materials, Faculty of Chemical Sciences, Universidad Complutense de Madrid, Avenida Complutense S/N, 28040 Madrid, España	Oral
				374	Optimizing chlorinated solvent plume remediation in urban environments through hydrogeophysico-chemical approach	Giulia Fellini <sup>1</sup> , Paolo Ciampi <sup>1</sup> , Laura Ledda <sup>2</sup> , Christian Nielsen <sup>2</sup> , Carlo Esposito <sup>1</sup> , Marco Petrangeli Papini <sup>1</sup>	<sup>1</sup> La Sapienza University of Rome, <sup>2</sup> Taw, Italy	Oral
				146	Use of Pickering Emulsions for the Remediation of Soil Polluted with Halogenated Solvents	Shuxin WANG <sup>1</sup> , Antonio RODRIGUEZ DE CASTRO <sup>2</sup> , Azita AHMADI-SENICAULT <sup>2</sup> , Abdelaziz OMAR <sup>2</sup> , Fernando LEAL-CALDERON <sup>4</sup>	<sup>1</sup> Arts et Metiers Institute of Technology, <sup>2</sup> Arts et Metiers Institute of Technology, <sup>3</sup> Bordeaux INP, <sup>4</sup> Institut CBMN	Oral
				123	Winsor III microemulsion for the mobilization of pure phae organic pollutants from saturated porous media	Berardino Barbat <sup>1</sup> , Laura Lorini <sup>1</sup> , Marco Bellagamba <sup>2</sup> , Luca Calisi <sup>2</sup> , Marco Petrangeli Papini <sup>1</sup>	<sup>1</sup> Chemistry Department, Sapienza University of Rome, <sup>2</sup> Chimec S.p.A.	Spotlight
				479	Optimization of Colloidal Biochar Suspensions for Groundwater Remediation: A Laboratory Study on In-Situ Adsorption of Chlorinated Solvents and Petroleum Hydrocarbons	Damiano Feriaud <sup>1</sup> , Sara Cerra <sup>1</sup> , Ilaria Fratoddi <sup>1</sup> , Marco Petrangeli Papini <sup>1</sup>	<sup>1</sup> La Sapienza University of Rome	Spotlight
				314	Chlorinated Solvent Daughter Product Management and Expedited Remediation	Michael Mazzarese <sup>1</sup>	<sup>1</sup> AST Environmental, Inc.	Spotlight
		Topic 2.3	ContaminatedLand.Info – to benchmark biological and remediation systems	456	ContaminatedLand.Info – a tool to benchmark integrated biological / abiotic systems and remediation systems in general for options appraisal	Paul Bardsø <sup>1</sup> , Helen McLennan <sup>1</sup>	<sup>1</sup> 3 environmental technology ltd	Interactive
		Topic 2.3	Handling of heavy metal contamination	348	Arsenic contaminated mega site: What is the smart approach to mitigate short and long-term risks?	John Flyvbjerg <sup>1</sup> , Nina Tuxen <sup>1</sup> , Anne Sivertsen <sup>1</sup> , Kristine Rasmussen <sup>1</sup> , Per Løf <sup>1</sup> , Vinni Rende <sup>1</sup> , Torben Jergensen <sup>1</sup> , Bastian Germundsson <sup>1</sup> , Neal Duran <sup>1</sup> , Rasmus Jacobsen <sup>1</sup>	<sup>1</sup> Capital Region of Denmark, <sup>2</sup> DMR - Dansk Miljørådgivning, <sup>3</sup> NIRAS, <sup>4</sup> COWI, <sup>5</sup> Geosyntec Consultants, <sup>6</sup> Geological Survey of Denmark and Greenland	Oral
				350	Insights from Monitoring Airborne Mercury and Meteorological Conditions During Large-Scale Remediation of a Former PVC Plant	Matan Halman <sup>1</sup> , Raphi Mandelbaum <sup>1</sup> , Hanan Meron <sup>1</sup>	<sup>1</sup> Idd advanced technologies ltd	Oral
				377	Mercury-Contaminated Site -Extraction and Reduction of Contaminant Mass using Thermal Desorption Technical and Metrological Challenges	Pierre-Louis Guillerm <sup>1</sup> , Olivier SIBOURG <sup>1</sup> , Pierre Guibert <sup>1</sup>	<sup>1</sup> RAMBOLL	Oral
				243	Effects of biochar and peat on immobilization of metals and PAH in an urban soil: Results from a five-year field experiment	Charlotte Tiberg <sup>1</sup> , Anja Enell <sup>1</sup> , Maria Larsson <sup>2</sup> , Ayan Au Musse <sup>2</sup> , Linn Möller <sup>2</sup> , Sigrun Dahlin <sup>1</sup> , Sara Hallin <sup>1</sup> , Jaanis Juhanus <sup>1</sup> , Ingrid Rijk <sup>2</sup> , Alf Ekblad <sup>2</sup> , Carin Stöstedt <sup>1</sup> , Dan Berggren Kleja <sup>1</sup>	<sup>1</sup> Swedish Geotechnical Institute, <sup>2</sup> Örebro University, <sup>3</sup> NSR-AB, <sup>4</sup> Swedish University of Agricultural Sciences	Oral
				361	A Decade of Efforts: Combining Natural and Physicochemical Techniques for Mercury and Arsenic Remediation in Two of Europe's Most Contaminated Sites	Jose Luis Gallego <sup>1</sup> , Diego Baragarao <sup>1</sup> , Eduardo Rodriguez-Valdés <sup>1</sup>	<sup>1</sup> University of Oviedo (Spain), <sup>2</sup> Instituto de Ciencia y Tecnología del Carbono (INCAR-CSIC), Oviedo, Spain	Oral
		Theme 3	Digital design and data integration (for site management)	170	Forensics and big data analytics to identify PFAS sources near and far	Theresa GUILLETTE <sup>1</sup> , Allan Horneman <sup>1</sup> , Bethany Parker <sup>1</sup> , Tessa Pancras <sup>1</sup> , Jeff Burdick <sup>1</sup> , Matthew Kelly <sup>1</sup>	<sup>1</sup> Arcadis	Oral
				417	Innovative approaches to identifying potential SVHC and PFAS source locations using large-scale GIS datasets	Lout Kuiper <sup>1</sup> , Shaya Algoe <sup>1</sup>	<sup>1</sup> Sweco Nederland	Oral
				472	Pattern recognition of large scale PFAS forensic signature variations to identify emergent properties of environmental fate and transport : real life examples.	Julie McCurdy <sup>1</sup> , Naoum Tavantzis <sup>1</sup> , Teresa Amentt-Jennings <sup>1</sup> , Nicole Lancaster <sup>1</sup> , Tyler Bryant <sup>1</sup> , Rosa Gwinn <sup>1</sup> , William Leys <sup>1</sup>	<sup>1</sup> AECOM	Oral
				124	Twining TISR®: A 'Hot' Take on Digital Design and Remote Monitoring for Sustainable Remediation	Jonah Munholland <sup>1</sup>	<sup>1</sup> Arcadis	Oral
				168	The Incomplete Imprecise Spatial Data Interpolator for anomaly analysis of the ISLANDR project	Stephane Belbez <sup>1</sup>	<sup>1</sup> BRGM	Oral
Thursday 19 June	10:20 - 12:00	Theme 1	Water treatment and management	298	LIFE REMAR Project. Pioneering Solution for Treated Wastewater Renaturalization using Soil-Aquifer Treatment with Reactive Barriers at Pilot Scale	Sara Bagés Estopà <sup>1</sup> , Tiphaine Chantal Anderbouhr <sup>1</sup> , Joan Campos Ferré <sup>1</sup> , Miranda González Rodríguez <sup>1</sup> , Silvia Díaz Cruz <sup>2</sup> , Jesús Carrera Ramírez <sup>2</sup> , Cristina Valhondo González <sup>2</sup> , Lurdes Martínez Landa <sup>4</sup> , Xavier Sánchez Vila <sup>5</sup> , Linda Luquot <sup>6</sup> , Josep Martínez Vilar <sup>7</sup>	<sup>1</sup> Comaigua, <sup>2</sup> Institute of Environmental Assessment and Water Research (IDAEA-CSIC), Barcelona, <sup>3</sup> Institute of Environmental Assessment and Water Research (IDAEA-CSIC), Barcelona. Associated Unit: Groundwater Hydrology Group (GHS: UPC-CSIC), <sup>4</sup> Department of Civil and Environmental Engineering, Polytechnic University of Catalonia (UPC), Barcelona, Associated Unit: Groundwater Hydrology Group (GHS: UPC-CSIC), <sup>5</sup> Department of Civil and Environmental Engineering, Polytechnic University of Catalonia (UPC), Barcelona, <sup>6</sup> Géosciences Montpellier, University of Montpellier, Centre National de la Recherche Scientifique (CNRS), <sup>7</sup> Mejoras Energéticas	Oral
				232	Study of Moisture Distribution in the Unsaturated Zone of Managed Soil-Aquifer Recharge Systems	- Martinez-Landa <sup>1</sup> , - Valhondo <sup>2</sup> , - Sepúlveda-Ruiz <sup>3</sup> , - Piña <sup>4</sup> , - Ledo <sup>5</sup> , - Carrera <sup>2</sup>	<sup>1</sup> Environmental and Civil Dep. Universitat Politècnica de Catalunya, Barcelona, Spain / Groundwater Hydrology Group (GHS), Assoc. Unit UPC-CSIC, <sup>2</sup> Inst. of Environmental Diagnosis and Water Studies (IDAEA-CSIC), Barcelona, Spain / Groundwater Hydrology Group (GHS), Assoc. Unit UPC-CSIC, <sup>3</sup> Dept. of Biology, Health and Environment, Fac. of Pharmacy and Food Science, Universitat de Barcelona, Barcelona, Spain, <sup>4</sup> Dept. of Land and Ocean Dynamics, Universitat de Barcelona, Barcelona, Spain, <sup>5</sup> Fac. Physical Sciences, Universidad Complutense, Madrid, Spain	Oral
				253	Nature assisted dewatering of dredged sediment and transition into soil. A 600 ton pilot at the Municipality of Rotterdam.	Miguel Angel de Lucas <sup>1</sup> , Mathieu Lassus <sup>2</sup>	<sup>1</sup> Medina Engineering, <sup>2</sup> Municipality of Rotterdam	Oral
				370	DECENTRALIZED SYSTEMS FOR WATER REUSE: ADDRESSING CHALLENGES & ADVANCING CIRCULARITY	Aymar de Lichervelde <sup>1</sup>	<sup>1</sup> REVALIO	Oral

Day	Time	Theme	Session	Abstract ID	Abstract	Authors	Affiliations	Presentation type
Topic 2.1				339	DC electric fields promote biodegradation of waterborne naphthalene in biofilter systems	Jinyao He <sup>1</sup> , Jose Carlos Castilla-Alcantara <sup>2</sup> , Jose Julio Ortega-Calvo <sup>2</sup> , Hauke Harms <sup>1</sup> , Lukas Yvo Wick <sup>1</sup>	<sup>1</sup> Helmholtz Centre for Environmental Research UFZ, <sup>2</sup> Instituto de Recursos Naturales y Agrobiología de Sevilla (IRNAS-CSIC)	Spotlight
				407	Efficiency of nitrogen transformation under various operating conditions in soil aquifer treatment	Paola Sepúlveda-Ruiz <sup>2</sup> , Marta Casado <sup>2</sup> , Lurdes Martínez-Landa <sup>3</sup> , Montserrat Folch <sup>1</sup> , Benjamin Piña <sup>2</sup> , Jesús Carrera <sup>4</sup> , Cristina Valhondo <sup>4</sup>	<sup>2</sup> Biology, Sanitation and Environmental Department, University of Barcelona, Av. Joan XXIII, 08028 Barcelona, Spain, <sup>3</sup> Institute of Environmental Assessment and Water Research, IDAEA-CSIC, Barcelona, Catalonia 08034, Spain, <sup>4</sup> Dept. of Civil and Environmental Engineering, Universitat Politècnica de Catalunya, Barcelona, Spain, <sup>1</sup> Institute of Environmental Assessment and Water Research, IDAEA-CSIC, Barcelona, Catalonia 08034, Spain, Associated Unit: Hydrogeology Group (UPC-CSIC), Spain	Spotlight
				248	Antimicrobial resistance (AMR) bacteria in the aquatic environment: study of carbapenemase-producing <i>E. coli</i> and <i>K. pneumoniae</i> in freshwater, bathing water and hospital continuums in Belgium	Christiane Crettels <sup>1</sup> , x Burlion <sup>1</sup> , x Delrée <sup>1</sup> , x Mouchette <sup>1</sup> , x Thiry <sup>2</sup>	<sup>1</sup> Department of Microbiology, IISep, Scientific Institute of Public Service, Liège, Belgium, <sup>2</sup> Veterinary Bacteriology, Department of Infectious and Parasitic Diseases, Faculty of Veterinary Medicine, Centre for Fundamental and Applied Research for Animals and Health (FARAH), Liège	Spotlight
				406	Sustainable in situ remediation using integrated soil injection and treatment technologies for expedited brownfield redevelopment - a German case study	GORDON BURES <sup>1</sup> , MARK ZITTWITZ <sup>1</sup> , PETER MARTUS <sup>2</sup> , MICHAEL HERBST <sup>2</sup> , MIKE MUELLER <sup>3</sup>	<sup>1</sup> SENSATEC GmbH, <sup>2</sup> AECOM GERMANY GmbH, <sup>3</sup> EVONIK OPERATIONS GmbH	Oral
	Field scale bioremediation chlorinated contaminants			354	Bioremediation and plume mitigation through a bioreactive barrier of a complex multi-layered aquifer contaminated by chlorinated ethenes in Spain	David Garriga <sup>1</sup> , Pedro Yáñez-Puentes <sup>1</sup> , Natália Blázquez-Pallí <sup>1</sup> , Marta González <sup>1</sup> , Marçal Bosch <sup>1</sup>	LITOCLEAN	Oral
				342	Metabolic Interactions In A Mini-Pilot Scale Technology For The Reductive Dechlorination Of Chlorinated Ethenes Through The Coupling Of Biological Processes And Adsorption With Bio-based materials	Bruna Matturro <sup>1</sup> , Simona Rossetti <sup>1</sup> , Luca Niccolini <sup>1</sup> , Laura Lorini <sup>2</sup> , Micaela Abruzzese <sup>2</sup> , Marco Petrangeli Papini <sup>2</sup>	<sup>1</sup> Water Research Institute, IRSA-CNR (Rome, Italy), <sup>2</sup> Sapienza University - Chemistry Department (Rome, Italy)	Oral
				322	Advancing from Bioremediation to Chemical Reduction and Sequestration: Remediation of Chlorinated Volatile Organic Compounds at a Former Industrial Site with a History of PFAS Contamination	Ravi Srirangam <sup>1</sup> , Christine Redfern <sup>1</sup> , Heather Reccelli <sup>1</sup>	Ramboll	Oral
				231	LIFE MySOIL project - Guidelines for implementation of mycoremediation	Jofre Herrero <sup>1</sup> , Carme Bosch <sup>1</sup> , Caroline Zaoui <sup>2</sup> , Ilaria Chicca <sup>2</sup> , Silvia Crognale <sup>2</sup> , Alessandro D'Annibale <sup>2</sup> , Carlos García-Delgado <sup>2</sup> , Rafael Antón-Herrero <sup>4</sup> , Enrique Eymar <sup>4</sup> , Laurent Thamberger <sup>2</sup> , Flora Bagriato <sup>2</sup> , Jorge Diamantino <sup>2</sup> , Cynthia Alcántara <sup>2</sup> , Norbert Nägele <sup>1</sup> , Anko Fischer <sup>2</sup>	<sup>1</sup> Eurecat, Centre Tecnològic de Catalunya, Manresa, Spain, <sup>2</sup> Novobiom, Ottignies-Louvain-la-Neuve, Belgium, <sup>3</sup> University of Tuscia, Tuscia, Italy, <sup>4</sup> Universidad Autónoma de Madrid, Madrid, Spain, <sup>5</sup> Valgo, Petit-Couronne, France, <sup>6</sup> Eri Rewind, San Donato Milanese, Italy, <sup>7</sup> Kepler Ingeniería y Ecogestión SL, Burgos, Spain, <sup>8</sup> Isodetect GmbH, Leipzig, Germany	Spotlight
				501	Successful Remediation of a Chlorinated Solvent Source Area in Clay Till Using Microscale Zero Valent Iron: Results From Ten Years of Performance Monitoring	Neal Duran <sup>1</sup> , Dylan Eberle <sup>1</sup> , Morten Dreyer <sup>2</sup> , Torben Jørgensen <sup>2</sup> , Kirsten Rügge <sup>2</sup> , Nina Tuxen <sup>2</sup>	<sup>1</sup> Geosyntec Consultants, <sup>2</sup> COWI A/S, <sup>3</sup> Capital Region of Denmark	Spotlight
				515	Engineered wetlands used for groundwater treatment at a contaminated megasite	Szabolcs Halmoczki <sup>1</sup> , Ferenc Gondi <sup>1</sup>	BGT Hungaria Kft.	Spotlight
	Topic 2.1	PFAS removal in the LIFE SOuRCE project		142	Groundbreaking approaches for PFAS removal in the LIFE SOuRCE project	Jessica Mejide <sup>1</sup> , Robin Axelson <sup>2</sup> , Joana Baeta <sup>3</sup> , Carme Bosch <sup>1</sup> , Patrik Hollman <sup>1</sup> , Dan Berggren Kleja <sup>4</sup> , Philip McCleaf <sup>5</sup> , Dahn Rosenquist <sup>6</sup> , Oscar Skjorup <sup>6</sup>	<sup>1</sup> EURECAT - Centre Tecnològic de Catalunya, <sup>2</sup> Envitech Solutions AB, <sup>3</sup> ESOLVE, <sup>4</sup> Nova Diamant, <sup>5</sup> Swedish Geotechnical Institute (SGI), <sup>6</sup> Uppsala Vatten, <sup>7</sup> Laqua Treatments, <sup>8</sup> Swedish University of Agricultural Science (SLU)	Interactive
				332	Circular use of excavated clayey silt material on an urban regeneration project: new engineering services and products for contaminated site management	Eduardo Alzola <sup>1</sup> , David Pampliega <sup>1</sup> , Ibon Lekue <sup>1</sup> , Unai Reyes <sup>1</sup> , José Antonio Capon <sup>1</sup> , Nerea Duroudier <sup>1</sup> , Mari Luz Artiguez <sup>1</sup> , Paula Garrido <sup>1</sup>	AFESA Medio Ambiente, S.A.	Oral
Topic 2.3	Innovating solutions and circularity			338	Integration of social and environmental criteria in the remediation of PFAS	Béatrice De Vos <sup>1</sup>	ABO nv	Oral
				159	Applying sustainability initiatives in remediation of a UK petrol filling station to deliver CO2 savings and additional benefits	Emma Evans <sup>1</sup> , Lauren Hunt <sup>1</sup> , Jay Hall <sup>1</sup> , Gavin Leeks <sup>1</sup> , Ruth Chippendale <sup>2</sup>	Arcadis UK, <sup>2</sup> Shell International Petroleum Co Ltd	Oral
				455	Protection of sensitive groundwater extraction well, achieved via use of sustainable in-situ approach (combined techniques)	Gabriele Giorgio Ceriani <sup>1</sup>	Ejlskov A/S	Oral
				500	Balancing Construction Timeline and Technical Approach – Social, Economic and Logistical Challenges Addressing Comingled TCE and PFAS Plumes While Managing Client Expectations	Christine Redfern <sup>1</sup> , Ravi Srirangam <sup>1</sup> , Heather Reccelli <sup>1</sup>	Ramboll	Oral
				256	Indicators for Circular and Sustainable Mass Handling in Infrastructure Projects (INDIMASS)	Lucija Prsa Gazilj <sup>1</sup> , Jenny Norman <sup>1</sup> , Lars Rosén <sup>1</sup>	Chehmers University of Technology	Oral
	Innovating Decision-Making			510	Current needs, opportunities and bottlenecks in methodological support of life cycle modelling	Lenka Wimmerova <sup>1</sup>	Czech University of Life Sciences, Faculty of Environmental Sciences	Oral
				178	A new methodology coupling LCA with matrices for multidimensional sustainability assessment of remediation based on social media	Meng Xiao <sup>1</sup> , Xianglan Li <sup>1</sup> , Hongzhen Zhang <sup>2</sup>	Faculty of Geographical Science, Beijing Normal University, <sup>2</sup> Soil Protection and Landscape Design Center, Chinese Academy of Environmental Planning	Oral
				393	Implications of Class-Based PFAS Policy for Regulating Contaminated Sites	Jane Thrasher <sup>1</sup>	Jacobs	Oral
				307	A multi-criteria decision support model for sustainability assessment of water supply alternatives and application to two case studies	Gitte Lemming Søndergaard <sup>1</sup> , Maria Faragó <sup>1</sup> , Liselotte Clausen <sup>2</sup> , Martin Rygaard <sup>2</sup> , Mathilde Hedegaard Jørgensen <sup>2</sup> , Nina Tuxen <sup>2</sup> , Gunver Heidemann Olsgaard <sup>3</sup> , Marianne Wesnaes <sup>4</sup> , Bo Lindhardt <sup>4</sup>	Ramboll Denmark, <sup>2</sup> HOFOR, <sup>3</sup> Capital Region of Denmark, <sup>4</sup> Novafos	Oral
				238	Roadmaps for co-designing strategies for sustainable regeneration of contaminated and brownfield land	Begoña Arellano Jaimeena <sup>1</sup> , Linda Maring <sup>1</sup> , Marissa de Wijngaard-Frambach <sup>1</sup> , Paul Drennen <sup>2</sup> , Teodora Todoric Vekic <sup>2</sup> , Marianne Valkama <sup>2</sup> , Nazaré Couto <sup>3</sup> , Beatriz María Ortiz de la Torre Juanas <sup>4</sup> , Jesse Wijnen <sup>6</sup>	Deltares, <sup>2</sup> Chalmers University, <sup>3</sup> GTK, <sup>4</sup> NOVA, <sup>5</sup> IDOM, <sup>6</sup> Saxion Applied University	Interactive
13:00 - 14:30	Topic 2.1	Chemico-biological remediation		346	In situ chemical oxidation (ISCO) as an effective solution in time-critical redevelopment projects	Abdelhamid El Katari <sup>1</sup> , Lionel Couet <sup>2</sup> , James Delanooye <sup>2</sup> , Jeroen Vandenbrouwe <sup>2</sup> , Victor Haddad <sup>1</sup>	AB Ecoglobe, <sup>2</sup> Injectis NV	Oral

Day	Time	Theme	Session	Abstract ID	Abstract	Authors	Affiliations	Presentation type
				398	Ferrate(VI) chemical oxidation enhanced with surfactant: a comparison on the effectiveness between soil and marine sediment	Federica De Marines <sup>1</sup> , Marco Capodici <sup>1</sup> , Frederic Coulon <sup>2</sup> , Gaetano Di Bella <sup>3</sup> , Enrico Licita <sup>3</sup> , Manuela Russo Tiesi <sup>1</sup> , Giovanni Vinti <sup>1</sup> , Gaspare Viviani <sup>1</sup> , Daniele Di Trapani <sup>1</sup>	<sup>1</sup> University of Palermo, <sup>2</sup> Cranfield University, <sup>3</sup> University of Enna "KORE"	Oral
				543	Enhanced in-situ nitrate removal with zerovalent iron nanoparticles (nZVI) and acetate: from lab to field tests	Oriol Gibert <sup>1</sup> , José Luis Cortina <sup>1</sup> , Damián Sánchez <sup>2</sup>	<sup>1</sup> Universitat Politècnica de Catalunya (UPC), <sup>2</sup> Cetaqua Andalucía	Oral
				473	Impact of water table fluctuations on the redistribution of light hydrocarbons in heterogeneous soil and remediation efficiency using Non-Newtonian fluid flushing	Lazzat Amangaliyeva <sup>1</sup> , Maxime Cochenec <sup>2</sup> , Eric Van Hullebusch <sup>3</sup> , Sagyn Omirbekov <sup>4</sup> , Stéfan Colombaro <sup>5</sup> , Dorian Davarzani <sup>2</sup>	<sup>1</sup> BRGM (French Geological Survey) / IPGP, Université Paris Cité, <sup>2</sup> BRGM (French Geological Survey), <sup>3</sup> IPGP, Université Paris Cité, <sup>4</sup> National Laboratory Astana, Nazarbayev University	Oral
				465	Enhanced in-situ remediation of light petroleum hydrocarbon-contaminated soils using a novel biopolymer-based emulsion	Bexultan Sabrybay <sup>1</sup> , Dorian Davarzani <sup>2</sup> , Christophe Dicharry <sup>3</sup> , Sagyn Omirbekov <sup>4</sup> , Mélanie Lorthioy <sup>5</sup> , Mohamed Krimissa <sup>5</sup> , Stéfan Colombaro <sup>2</sup>	<sup>1</sup> BRGM/EDF R&D/UNIV PAU & PAYS ADOUR, <sup>2</sup> BRGM (French Geological Survey), <sup>3</sup> CNRS/TOTALENERGIES/UNIV PAU & PAYS ADOUR, <sup>4</sup> Nazarbayev University / National Laboratory Astana, <sup>5</sup> EDF R&D	Oral
		Topic 2.1	PFAS - Soil treatment	399	Foam fractionation for PFAS soil remediation – first lab test achieve promising results	Jan De Vos <sup>1</sup> , John Dijk <sup>2</sup> , Lutz Ahrens <sup>3</sup>	<sup>1</sup> ABO-Group, <sup>2</sup> GreenSoil Group, <sup>3</sup> Swedish University of Agricultural Sciences	Oral
				356	Concawe PFAS Soil Treatment – Laboratory Scale Comparison of Technologies	Sarah Hale <sup>1</sup> , Jake Hurst <sup>1</sup> , Jamie Cutting <sup>2</sup> , Faucq Sandrine <sup>3</sup>	<sup>1</sup> Arcadis UK, <sup>2</sup> CE Geochem, <sup>3</sup> Concawe	Oral
				306	Enhanced soil washing for PFAS remediation using air bubbling and addition of surfactants – A laboratory study	Malin Montelius <sup>1</sup> , Anja Erell <sup>1</sup> , Michael Pettersson <sup>1</sup> , Robert Selegård <sup>1</sup> , Malin Elbrant <sup>1</sup> , Marie-Louise Wif <sup>1</sup> , Dan Berggren Kleja <sup>1</sup>	<sup>1</sup> Swedish Geotechnical Institute	Oral
				474	Treatment of PFAS-contaminated soil using soil washing and foam fractionation.	Dorte Harrekilde <sup>1</sup> , Julie Katrine Jensen <sup>2</sup> , Peter B Mortensen <sup>3</sup> , Robin Axelson <sup>4</sup>	<sup>1</sup> Ramboll, <sup>2</sup> Norreco, <sup>3</sup> Eurofins, <sup>4</sup> Envitech	Oral
				459	Lessons learned at former AFB Soesterberg The unpredictable behavior of PFAS in the subsurface understood	Hans Slenders <sup>1</sup> , Frank Strijbosch <sup>1</sup> , Aiko Hensums <sup>2</sup>	<sup>1</sup> Arcadis, <sup>2</sup> Province of Utrecht	Oral
		Topic 2.2	NINFA - Preventing and mitigation pollution of groundwater bodies	145	NINFA - Taking action to prevent and mitigate pollution of groundwater bodies	Anemiek Marsman <sup>1</sup> , Petra Krystek <sup>1</sup> , Romée Van Dam <sup>1</sup> , Ainhoa Gaudes Saez <sup>2</sup> , Yves Andres <sup>3</sup> , Henrietta Whyte <sup>3</sup> , Ahmed Mahmoud <sup>4</sup> , Marco Pettita <sup>5</sup>	<sup>1</sup> Deltas, <sup>2</sup> Leitat, <sup>3</sup> IMT, <sup>4</sup> WETSUS, <sup>5</sup> Sapienza	Interactive
		Topic 2.3	Innovative investigation techniques	158	Experimental monitoring of foam propagation in porous media using Spectral Induced Polarization (SIP).	Abbas Shoker <sup>1</sup> , Jacques Deparis <sup>1</sup> , Julia Holzhauer <sup>1</sup> , Alexis Maineult <sup>2</sup> , Azila Ahmadi-Sénichault <sup>3</sup> , Philippe Leroy <sup>4</sup> , Stefan Colombaro <sup>5</sup> , Dorian Davarzani <sup>6</sup> , Pauline Kessour <sup>7</sup>	<sup>1</sup> BRGM, <sup>2</sup> CNRS - Laboratoire de Géologie de l'Ecole Normale Supérieure, <sup>3</sup> Institut de Mécanique et Ingénierie de Bordeaux (IM2M), Arts et Métiers Institute of Technology	Oral
				303	IsoFLUX as a new tool for precise quantification of pesticide degradation in contaminated aquifers	Heinrich Eisenmann <sup>1</sup> , Marjan Bosmans <sup>2</sup> , Erik Bosmans <sup>3</sup> , Kevin Kuntze <sup>1</sup>	<sup>1</sup> Isodetect GmbH, <sup>2</sup> IFLUX sampling	Oral
				487	Innovative FLUTE Liner technology for determination of cVOC contaminant conditions in fractured bedrock and its applicability for sustainable bio-remedial methods	Patrik Nilsson <sup>1</sup>	<sup>1</sup> Rosmarus Enviro	Oral
				489	Characterizing Groundwater Flux and Flow Direction with Active-DTS: Initial Modeling Results	Luca Varisano <sup>1</sup> , Natalie Simon <sup>1</sup> , Serge Brouyère <sup>1</sup>	<sup>1</sup> Université de Liège, Urban & Environmental Engineering Research Unit, Group of Hydrogeology and Environmental Geology	Oral
				457	Assessment of natural attenuation and its stimulability at a former large-scale industrial site based on the combination of innovative in situ monitoring methods	Annika Beckmann <sup>1</sup> , Joachim Richter <sup>1</sup> , Phil Dennis <sup>2</sup> , Jeff Roberts <sup>2</sup> , Kevin Kuntze <sup>3</sup> , Anko Fischer <sup>3</sup>	<sup>1</sup> HPC AG, <sup>2</sup> SIREM, <sup>3</sup> Isodetect GmbH	Oral
		Theme 4	Health risk communication	400	Health risk communication. Why should we think about it as soon as we discover any kind of environmental contamination? Who say what, when and why?	Paula Hammer <sup>1</sup> , Nina Tuxen <sup>2</sup> , Kathleen De Brouwere <sup>3</sup>	<sup>1</sup> Dept. of Occupational and Environmental Medicine, Poison Information Center, Bispebjerg University Hospital, Copenhagen, Denmark, <sup>2</sup> Capital Region of Denmark, <sup>3</sup> Department of Environment and Health, Flemish Institute for Technological Research (VITO), Mol, Belgium	Interactive
		Theme 4	Policy, Guidance, and Community Engagement	512	Challenges of holistic policy formulation and implementation to pollution management	Jussi Reinikainen <sup>1</sup> , Jaana Sorvari <sup>1</sup>	<sup>1</sup> Finnish Environment Institute	Oral
				410	Finding common ground: a review towards harmonized soil threshold values in Europe	Stijn Van Hees <sup>1</sup> , Nathalie Briels <sup>1</sup> , Xenia Trier <sup>2</sup> , Hans-Peter Arp <sup>3</sup> , Dietmar Müller-Grabher <sup>4</sup>	<sup>1</sup> ARCHE Consulting, <sup>2</sup> University of Copenhagen, Department of Plant and Environmental Sciences, Section for Environmental Chemistry and Physics, <sup>3</sup> Norwegian Geotechnical Institute (NGI), <sup>4</sup> Umweltbundesamt (GmbH) (Austrian Federal Environment Agency)	Oral
				301	Shaping Tomorrow's Soil Health: A Focus on Prioritizing Contaminants of Emerging Concern (CECs) in soil and groundwater Investigations	Antoine Zanuel <sup>1</sup> , Thomas Lambrechts <sup>2</sup> , Karen Van Geert <sup>1</sup> , Louis Druon <sup>1</sup> , Laura Lefèvre <sup>1</sup> , Clément Laurent <sup>1</sup>	<sup>1</sup> Arcadis Belgium, <sup>2</sup> Service public de Wallonie	Oral
				431	A framework for community engagement and the management of air quality and odours during regeneration of industrial land	Matthew Pannett <sup>1</sup>	<sup>1</sup> Ramboll UK Limited	Spotlight
				302	Community water management in Bolivia with nature-based solutions using biochar and microalgae: A case study	Anjali Jayakumar <sup>1</sup> , Sergio Serrano-Blanco <sup>1</sup> , Henry Mann <sup>1</sup> , Carlos Javier Revilla Herrero <sup>2</sup> , Nicola Evans <sup>3</sup> , Katherine Iñáñez M <sup>2</sup> , Sharon Velasquez-Orta <sup>1</sup>	<sup>1</sup> Newcastle University, School of Engineering, Merz Court, Newcastle Upon Tyne, UK, <sup>2</sup> Instituto de investigación y acción para el desarrollo integral, IIADI, La Paz, Bolivia, <sup>3</sup> Catholic Agency for Overseas Development (CAFOD), UK	Spotlight
				499	Austria's historically contaminated sites – current state and making remediation fit for future	Thomas Wirthensohn <sup>1</sup> , Timo Dörrie <sup>2</sup>	<sup>1</sup> Kommunalkredit Public Consulting GmbH, <sup>2</sup> Environment Agency Austria	Spotlight
14:50 - 16:20	Topic 2.1	Thermal treatments		524	ISTD Remediation pilot testing for technology validation. How to deal with surprises and improve full-scale design	Matteo Donati <sup>1</sup> , Gorm Herø <sup>2</sup> , Christian Gambelli <sup>3</sup> , Alessandro Corcagnani <sup>1</sup> , Robert Glass <sup>2</sup>	<sup>1</sup> Ecologia Environmental Solutions srl, <sup>2</sup> TRS Group Inc., <sup>3</sup> Greenthesis spa	Oral
				267	On Site thermal treatment of mercury and pesticide impacted soils from former chlor-alkali plant	/ Rhône <sup>1</sup>	<sup>1</sup> Haemers Technologies	Oral
				263	Harnessing Solar Energy for Sustainable In Situ Thermal Desorption of Contaminants with Parabolic Trough Concentrators	/ Jordens <sup>1</sup>	<sup>1</sup> Haemers Technologies	Oral
				118	Large Scale In-situ Thermal Remediation Inside a Manufacturing Factory in Belgium: Challenges and Lessons Learnt	James Baldock <sup>1</sup> , Joanne Dinham <sup>1</sup> , Rony Annaert <sup>1</sup> , Matthias Verbeeck <sup>1</sup>	<sup>1</sup> ERM	Oral
				557	CO <sub>2</sub> footprint within thermal soil remediation - a comparison between 18 sites	Niels Ploug <sup>1</sup>	<sup>1</sup> Krüger A/S	Oral
	Topic 2.3	From Bioremediation to biogeochemical solutions		240	Full-scale application of In Situ Bioremediation with Hardwood Mulch Bioborings as a Sustainable, Nature-Based Approach for Reductive Dechlorination	Edoardo Masut <sup>1</sup> , Luca Ferioli <sup>1</sup> , Kevin Morris <sup>1</sup> , Anna Legnani <sup>1</sup> , Caterina Righetto <sup>1</sup>	<sup>1</sup> ERM Environmental Resources Management	Oral

Day	Time	Theme	Session	Abstract ID	Abstract	Authors	Affiliations	Presentation type
				556	Full Scale Application of ERD following ISCO/S-ISCO® for Treatment of NAPL Pharmaceutical Waste Mixture	Leah MacKinnon <sup>1</sup> , Felipe Solano <sup>1</sup> , Neal Durant <sup>1</sup> , Torben Jørgensen <sup>2</sup> , Bastian Gerdmundsson <sup>2</sup> , Jette Sørensen <sup>3</sup> , Klaus Mortensen <sup>3</sup> , Jørgen Christensen <sup>3</sup>	<sup>1</sup> Geosyntec Consultants, <sup>2</sup> COWI, <sup>3</sup> Southern Region of Denmark	Oral
				214	Pulsed Regime Biosparging for Groundwater Remediation: Insights from HYPREP's Hydrocarbon Contamination Mitigation Efforts	/ Somaatah <sup>1</sup>	<sup>1</sup> HYPREP	Oral
				365	Evolving from Biological Permeable Reactive Barriers (PRBs) to Biogeochemical Reactive Zones for Mitigation of Chlorinated Solvent Plume Discharges into Surface Water	Ravi Srirangam <sup>1</sup> , Christine Redfern <sup>1</sup> , Gary Angyal <sup>1</sup>	<sup>1</sup> Ramboll	Oral
				136	Increasing LNAPL density and viscosity are indicators of Natural Source Zone Depletion	Jonathan Smith <sup>1</sup> , Emiliano Hinojosa <sup>2</sup> , Alan Hill <sup>1</sup>	<sup>1</sup> Shell Research Ltd, <sup>2</sup> Equilon Enterprises LLC	Oral
		Topic 2.3	Mass and flux determination	503	Source estimation and countermeasure cost analysis for Large-Scale PFOS and PFOA Contaminated Groundwater and River Areas in Japan	Tetsuo Yasutaka <sup>1</sup> , Tsukasa Fujita <sup>1</sup>	<sup>1</sup> National Institute of Advanced Industrial Science and Technology (AIST)	Oral
				318	Mass and volume estimation directly out of real-time high-resolution profiling based on On-site Mass Spectrometry focused on individual contaminant species	Eugen Martac <sup>1</sup>	<sup>1</sup> Fugro Germany Land	Oral
				317	Data and Flux-Driven Approach for Targeted Remediation of Chlorinated Solvent Contaminations Challenges in Investigating Chlorinated Solvent Contamination	Michael Borremans <sup>1</sup> , Pieter Buffel <sup>2</sup> , Jeroen VANDENBRUWANE <sup>3</sup> , Goedele Verreydt <sup>4</sup>	<sup>1</sup> Tractebel Engineering, <sup>2</sup> EnlSSA, <sup>3</sup> Injectis, <sup>4</sup> iFLUX	Oral
				331	Pesticide residues in agricultural subsurface soils and the long-term effect on surface and ground water.	Anna Nielsen <sup>1</sup> , Anne Esbjørn <sup>2</sup> , Iben Nilsson <sup>3</sup> , Charlotte Vesterlund <sup>4</sup> , Tove Svendsen <sup>5</sup> , Lars Pedersen <sup>6</sup> , Katerina Tsitonaki <sup>6</sup> , Annika Fjordbøge <sup>7</sup> , Pou Berg <sup>7</sup>	<sup>1</sup> WSP/DTU, <sup>2</sup> VandCenter Syd, <sup>3</sup> DIN Forsyning, <sup>4</sup> TREFOR Forsyning, <sup>5</sup> Region of Southern Denmark, <sup>6</sup> WSP Denmark, <sup>7</sup> Technical University of Denmark	Oral
		Theme 4	Integrating Soil Health in Decision-Making: Insights from the SOILvEr Webinar Series	539	Integrating Soil Health in Decision-Making: Insights from the SOILvEr Webinar Series	Margot DE CLEEN <sup>1</sup> , Ana ALZOLA <sup>2</sup> , Esther GOIDTS <sup>3</sup> , Cécile GRAND <sup>4</sup> , Marta POPOVA <sup>5</sup>	<sup>1</sup> Ministry of Infrastructure and Water Management, Rijkswaterstaat, the Netherlands, <sup>2</sup> Public environmental management company (IHObE), Basque country, <sup>3</sup> Public Service of Wallonia (SPW), Agriculture Natural resources & Environment, Belgium, <sup>4</sup> French Agency for Ecological Transition (ADEME), France, <sup>5</sup> Public Agency for Environmental Quality (SPAQUE), Belgium	Interactive
		Theme 4	OVAM EmConSoil Initiative: Emerging Contaminant Management	384	Interactive Insights into the OVAM EmConSoil Initiative: Advancing Emerging Contaminant Management in Soils	Johan Ceenaeme <sup>1</sup> , Laetitia Six <sup>1</sup> , Griet Van Gestel <sup>1</sup> , Kris Van Looy <sup>1</sup> , Karel Van Nieuwenhove <sup>2</sup> , Pieter Schrooten <sup>2</sup>	<sup>1</sup> OVAM, <sup>2</sup> ERM, <sup>3</sup> Comet & Renard	Interactive
		Theme 4	Sustainability and Circularity	174	Mapping the wider values of contaminated land remediation and redevelopment for economic valuation and analysis	Paul Drenning <sup>1</sup> , Lucija Prsa Gazilj <sup>1</sup> , Lars Rosén <sup>1</sup> , Jenny Norrman <sup>1</sup>	<sup>1</sup> Chalmers University of Technology	Oral
				208	Successful legacy site revitalization, Governance, risk mitigation and circular solutions	Ricardo Labarca <sup>1</sup> , Stephanie Rotella <sup>1</sup> , Germán Monge-Ganuzas <sup>2</sup> , Juan Francisco Mujica-Alarcón <sup>2</sup>	<sup>1</sup> Las Salinas - COPEC Group, <sup>2</sup> IDOM Environment	Oral
				439	Why I love qualitative sustainability assessment...	Paul Bardos <sup>1</sup>	<sup>1</sup> r3 environmental technology ltd	Oral
				121	Identification of sustainable management practices (SMPs) for remediation projects at fuel manufacturing sites	Angharad Owen <sup>1</sup> , Alan Thomas <sup>1</sup> , Rob Sweeney <sup>2</sup>	<sup>1</sup> Environmental Resources Management (ERM), <sup>2</sup> Contaminated Land: Applications in Real Environments (CL:AIRE)	Oral
				492	Exploring Carbon Economics of Soil Remediation: Balancing Environmental Impacts and Economic Feasibility	Jarno Laitinen <sup>1</sup>	<sup>1</sup> Ramboll	Spotlight
				519	Thermal soil remediation and sustainability: popular beliefs, truths and nonsense. A comparison of CO2eq emissions on thermal remediation case studies in Europe	Pieter De Waele <sup>1</sup>	<sup>1</sup> McMillan-McGee Europe	Spotlight
				110	Integrated Resiliency and Sustainability Assessment Framework: Application to Site Remediation	Krishna Reddy <sup>1</sup>	<sup>1</sup> University of Illinois Chicago	Spotlight