REMTECH Europe

GENERAL PROGRAM
19-23 September 2022

27 High level sessions
11 Training courses
1 Sustainathon – 24h

https://remtechexpo.com/index.php/it/descrizione/remtech-europe

REMTECH EXPO

TIME ZONES	Mon 19 Sept ONLINE	Tue 20 Sept ONLINE	Tue 20 Sept ONLINE	Wed 21 Sept IN PRESENCE - hybrid
CEST 09:00-11:00 CST 15:00-17:00 IST 12:30-14:30 EDT 03:00-05:00 BRT 04:00-06:00	European Commission **Zero Pollution for Soil Outlook: high level synthesis report and Watchlist on emerging contaminants** 1	CL:AIRE LEADING SUSTAINABLE LAND REUSE SuRF SUSTAINABLE REMEDIATION FORUM UK **Introduction to Sustainable Remediation - Principles and Practices** 3		**In situ soil treatment** 10
CEST 11:30-13:30 CST 17:30-19:30 IST 15:00-17:00 EDT 05:30-07:30 BRT 06:30-08:30				**Oil and hydrocarbons remediation** 11
CEST 14:30-16:30 CST 20:30-22:30 IST 18:00-20:00 EDT 08:30-10:30 BRT 09:30-11:30	US Army Corps of Engineers ® **Phytoremediation training**	ASTM INTERNATIONAL Helping our world work better 14:30 Molecular Biological Tools 4 15:30 Environmental, Social, and Governance Disclosure 5 16:30 Natural Source Zone Depletion 6 17:30 Mitigation of Wildfire Impact, Risk to Water Utilities 7 18:30 Toxicity Test for Freshwater 8 20:00 ASTM Phase I 9	SUSTAINATHON Sustainability the road to global value **Sustainathon** **(24 hours from 14:00 CEST to 14:00 CEST)** 17	**PFAS treatment in soil** 12
CEST 17:00-19:00 CST 23:00-01:00 IST 20:30-22:30 EDT 11:00-13:00 BRT 12:00-14:00	2			**PFAS treatment in groundwater** 13

TIME ZONES	Wed 21 Sept ONLINE	Thu 22 Sept ONLINE	Thu 22 Sept IN PRESENCE - hybrid	Fri 23 Sept IN PRESENCE - hybrid	
CEST 09:00-11:00 CST 15:00-17:00 IST 12:30-14:30 EDT 03:00-05:00 BRT 04:00-06:00	SUSTAINATHON Sustainability the road to global value Sustainathon (24 hours from 14:00 CEST to 14:00 CEST) 17	Wastewater innovative treatment and constructed wetlands 16	Sustainable management of contaminated sites 15	Challenges and research in remediation 25	
CEST 11:30-13:30 CST 17:30-19:30 IST 15:00-17:00 EDT 05:30-07:30 BRT 06:30-08:30		Heavy metals and critical raw materials 18	Soil gas and vapor intrusion 19	Emerging contaminants of concern 26	
CEST 14:30-16:30 CST 20:30-22:30 IST 18:00-20:00 EDT 08:30-10:30 BRT 09:30-11:30	SERDP DOD • EPA • DOE ESTCP Munitions Response training course	Phytoremediation and nature based solutions 20	DNAPL and chlorinated compounds: optimizing the process 21	Environmental damage and sediment management 27	AESAS training ONLINE AESAS 29
CEST 17:00-19:00 CST 23:00-01:00 IST 20:30-22:30 EDT 11:00-13:00 BRT 12:00-14:00	14	INTERSTATE COUNCIL ITRC TECHNOLOGY REGULATORY 17:00 Soil Background and Risk Assessment 22 20:00 Description, Characterization and Treatment of PFAS 24	HRSC, High Resolution Site Characterization 23	Waste and circular economy in the remediation sector 28	

REMTECH Europe

MONDAY 19 September

SESSION 1

Zero Pollution for Soil Outlook: high level synthesis report and Watchlist on emerging contaminants

Mon 19 SEPTEMBER 09:00 – 13.00 CEST **(ONLINE)**

European Commission

SESSION 2

Phytoremediation training

Mon 19 SEPTEMBER 14.30 – 19.00 CEST **(ONLINE)**

US Army Corps of Engineers ®

TUESDAY 20 September

SESSION 3

Introduction to Sustainable Remediation - Principles and Practices

Tue 20 SEPTEMBER 09.00 – 13.00 CEST **(ONLINE)**

CL:AIRE LEADING SUSTAINABLE LAND REUSE

SuRF SUSTAINABLE REMEDIATION FORUM UK

SESSION 4

Molecular Biological Tools

Tue 20 SEPTEMBER 14.30 – 15.30 CEST **(ONLINE)**

ASTM INTERNATIONAL Helping our world work better

SESSION 5

Environmental, Social, and Governance Disclosure

Tue 20 SEPTEMBER 15.30 – 16.30 CEST **(ONLINE)**

ASTM INTERNATIONAL Helping our world work better

SESSION 6

Natural Source Zone Depletion

Tue 20 SEPTEMBER 16.30 – 17.30 CEST **(ONLINE)**

ASTM INTERNATIONAL Helping our world work better

SESSION 7

Mitigation of Wildfire Impact, Risk to Water Utilities

Tue 20 SEPTEMBER 17.30 – 18.30 CEST **(ONLINE)**

ASTM INTERNATIONAL Helping our world work better

SESSION 8

Toxicity Test for Freshwater

Tue 20 SEPTEMBER 18.30 – 19.30 CEST **(ONLINE)**

ASTM INTERNATIONAL Helping our world work better

SESSION 9

ASTM Phase I

Tue 20 SEPTEMBER 20.00 – 22.00 CEST **(ONLINE)**

ASTM INTERNATIONAL Helping our world work better

REMTECH Europe

SESSION 17

Sustainathon

Tue 20 SEPTEMBER 14.00 CEST – Wed 21 SEPTEMBER 14.00 CEST **(ONLINE)**

WEDNESDAY 21 September

SESSION 10

In situ soil treatment

Wed 21 SEPTEMBER 09.00 – 11.00 CEST **(IN PRESENCE – hybrid)**

SESSION 11

Oil and hydrocarbons remediation

Wed 21 SEPTEMBER 11.30 – 13.30 CEST **(IN PRESENCE – hybrid)**

SESSION 12

PFAS treatment in soil

Wed 21 SEPTEMBER 14.30 – 16.30 CEST **(IN PRESENCE – hybrid)**

SESSION 13

PFAS treatment in groundwater

Wed 21 SEPTEMBER 17.00 – 19.30 CEST **(IN PRESENCE – hybrid)**

SESSION 14

Munitions Response training course

Wed 21 SEPTEMBER 14.30 – 19.00 CEST **(ONLINE)**

SERDP DOD ▪ EPA ▪ DOE

ESTCP

THURSDAY 22 September

SESSION 15

Sustainable management of contaminated sites

Thu 22 SEPTEMBER 09.00 – 11.00 CEST **(IN PRESENCE – hybrid)**

SESSION 16

Wastewater innovative treatment and constructed wetlands

Thu 22 SEPTEMBER 09.00 – 11.00 CEST **(ONLINE)**

SESSION 18

Heavy metals and critical raw materials

Thu 22 SEPTEMBER 11.30 – 13.30 CEST **(ONLINE)**

SESSION 19

Soil gas and vapor intrusion

Thu 22 SEPTEMBER 11.30 – 13.30 CEST **(IN PRESENCE – hybrid)**

REMTECH Europe

SESSION 20

Phytoremediation and nature based solutions

Thu 22 SEPTEMBER 14.30 – 16.30 CEST **(ONLINE)**

SESSION 21

DNAPL and chlorinated compounds: optimizing the process

Thu 22 SEPTEMBER 14.30 – 16.30 CEST **(IN PRESENCE – hybrid)**

SESSION 22

Soil Background and Risk Assessment

Thu 22 SEPTEMBER 17.00 – 19.00 CEST **(ONLINE)**

SESSION 23

HRSC, High Resolution Site Characterization

Thu 22 SEPTEMBER 17.00 – 19.00 CEST **(IN PRESENCE – hybrid)**

SESSION 24

Description, Characterization and Treatment of PFAS

Thu 22 SEPTEMBER 20.00 – 22.00 CEST **(ONLINE)**

FRIDAY 23 September

SESSION 25

Challenges and research in remediation

Fri 23 SEPTEMBER 09.00 – 11.00 CEST **(IN PRESENCE – hybrid)**

SESSION 26

Emerging contaminants of concern

Fri 23 SEPTEMBER 11:30 – 13.30 CEST **(IN PRESENCE – hybrid)**

SESSION 27

Environmental damage and sediment management

Fri 25 SEPTEMBER 14.30 – 16.30 CEST **(IN PRESENCE – hybrid)**

SESSION 29

AESAS training

Fri 25 SEPTEMBER 14.30 – 16.30 CEST **(ONLINE)**

SESSION 28

Waste and circular economy in the remediation sector

Fri 25 SEPTEMBER 17.00 – 19.00 CEST **(IN PRESENCE – hybrid)**

Credit for the cover image: **VALGO**

REMTECH Europe

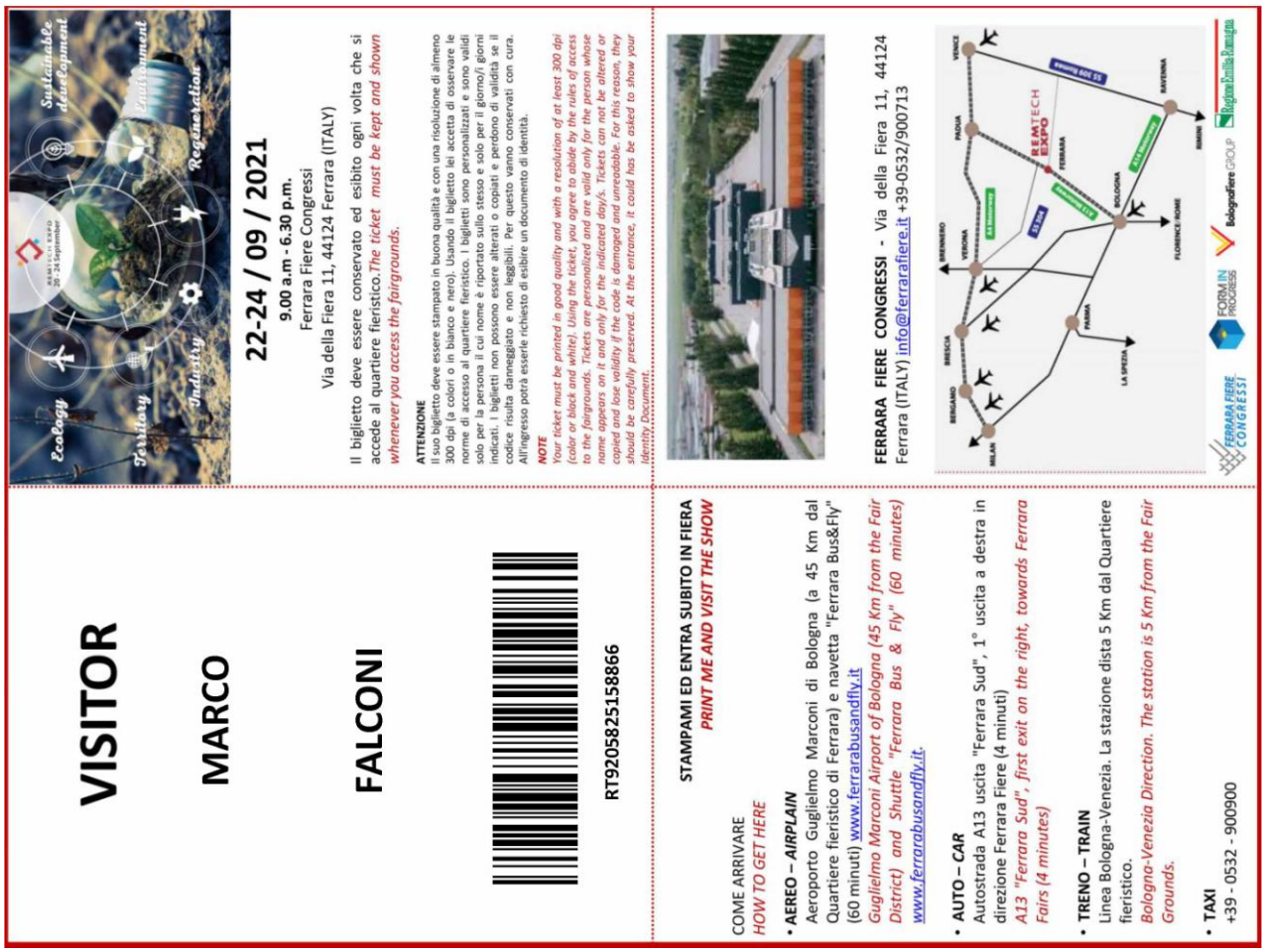
HOW TO PARTICIPATE TO ONLINE AND HYBRID SESSIONS?

Participation as attendant is free upon registration for everybody. You may register yourself in your favorite sessions, submitting your details in the Google forms provided not later than **9 September** before the starting of Remtech Europe. Our secretariat will send you the link and the password to connect.
For the Certificate of Attendance, it is necessary one month at least. It will be sent to the same email of your registration. Don't bother our secretariat for that.

HOW TO PARTICIPATE IN PRESENCE?

For who is joining us physically us in Ferrara (Italy), you have to register here not later than **19 September** 2022 https://remtechexpo.com/index.php/en/visitors/visitors-subscription, and selecting the sessions where you are interested to join. **Don't wait till the last week**. You will then have to print your tickets (minimum quality 300 dpi) and bring them in Ferrara and in this way you would avoid the queue at the desk, going directly to the entrance gate.

You may also register on site but in this way, you have to pay a secretariat fee of 15 €/day.
If you come by car, the parking has a cost of 7€/day. Exhibitors and sponsors would park for free.



REMTECH Europe

HOW TO ARRIVE IN FERRARA (ITALY)?

By plane

Guglielmo Marconi airport of Bologna is 45 km away from the Fair Centre. If you land at Marconi, you can enjoy the new shuttle service "Ferrara Bus&Fly" and arrive in Ferrara in just 60 minutes. The service provides 8 daily transfers to and from the ariport. For further info, visit the website www.ferrarabusandfly.it.

By car

From A13 motorway, Ferrara Sud exit leads directly into SS Ferrara-Mare national road. After 200 meters, get off and follow Ferrara Centro signs. At the end of the ramp exiting the clearway, turn left and head towards the town centre for approximately 1 Km. At the first roundabout, turn left and follow the "Fiera" signs. Here is the location in Google Maps https://goo.gl/maps/9PbmggYaU6EEdwMQ7

The website www.carpooling.it, the largest European carsharing network, guarantees an easy to use, cheap and reliable system of car transfer. In just a few click, here You can find a driver or a passenger to save money on your journey costs.

By train

Ferrara is at the junction of several railways lines. Check the timetable in https://www.trenitalia.com/en.html

Connections are frequent, and the station is just 5 km away from the Fair Centre and 1,5 Km from the City Centre.

REMTECH SHUTTLE IN FERRARA (FREE SERVICE)

The bus stop named **"Stazione Ferroviaria"** is located at the exit of the railway station, on the left side, next to the bike parking (https://goo.gl/maps/Bkzi57UHhduQ63Vy5).

The bus stop named **"Castello Estense"** is in the city centre in Viale Cavour, in front of the Hotel Touring, behind the public gardens (https://goo.gl/maps/M4AKxc9kYbqXpXrZA).

You can easily recognize the shuttle by the RemTech logo.

The timetable could change according to the traffic, best choice is to take the first run.

Castello Estense Hotel Touring	Stazione Ferroviaria *Railway Station*	Quartiere Fieristico *Exhibition center*
8.15	8.25	8.40
9.00	9.10	9.25
9.45	9.55	10.15
10.35	10.45	11.00
-	11.15	11.30
-	11.45	12.00
-	12.15	12.30
-	12.45	13.00
-	13.15	13.30
-	13.45	14.00
-	14.15	14.30
-	14.45	15.00
-	15.15	15.30
-	15.45	16.00
-	16.15	16.30
-	16.45	17.00
-	17.15	17.30
-	17.45	18.00
18.20	18.30	18.45
19.05	19.15	19.30
19.55	20.05	-

SESSION 1
From policy talking to industry actions: Zero Pollution for Soil

MONDAY 19 SEPTEMBER
09.30 – 13.00 CEST (Central European Summer Time)

Opening

09:00 Inauguration of Remtech Europe 2022
Marco Falconi (Remtech Europe), Natalia Rodriguez Eugenio (FAO), Frank Swartjes (RIVM)

09:10 Introduction from the Chairs
Piotr Wojda (JRC) Marco Falconi (Remtech Europe)

09:15 **Session 1 "Zero Pollution Outlook: high level synthesis report"**
- Overview on Air, Water, Soil
- Focus on soil pollution outlook: highlights and trends

10:45 Panel discussion, stakeholders questions and wrap up, *Piotr Wojda (JRC)*

11:00 *Coffee break*

11:15 **Session 2 "Watchlist: emerging contaminants"**
- European perspective
- Country legislation and practice
- JRC and EUSO TWG work on the Watchlist

12:45 Discussion and wrap up, *Piotr Wojda, Arwyn Jones, Luca Montanarella (EC JRC D3)*

13:00 **End of the session**

Register yourself in the Google form https://forms.gle/4Q3vrWiXuyULPCQz8

US Army Corps of Engineers ®

REMTECH Europe

SESSION 2
Phytoremediation training

MONDAY 19 SEPTEMBER
14.30 – 19:00 CEST (Central European Summer Time)

Opening

14:30 **Introduction from the Chairs**
Edith Martinez-Guerra (USACE), Marco Falconi (Remtech Europe)

14:45 **Introduction on phytoremediation and its importance**
Dr. Afrachanna Butler (USACE), Dr. Catherine Thomas (USACE)

15:35 **How is phytoremediation done**
Dr. Afrachanna Butler (USACE), Dr. Catherine Thomas (USACE)

16:25 **Panel discussion**
Edith Martinez-Guerra (USACE)

16:35 *Coffee break*

16:50 **Contaminants that can be removed- case studies done by USACE team**
Dr. Afrachanna Butler (USACE), Dr. Catherine Thomas (USACE)

17:40 **Limitations of phytoremediation**
Dr. Afrachanna Butler (USACE), Dr. Catherine Thomas (USACE)

18:30 **Panel discussion**
Edith Martinez-Guerra (USACE)

19:00 **End of the session**

Register yourself in the Google form https://forms.gle/SVFR3JFty7qVEUYr6

SESSION 3
Introduction to Sustainable Remediation - Principles and Practices

TUESDAY 20 SEPTEMBER
09.00 – 13.30 CEST (Central European Summer Time)

Opening

09:00 Introduction from the Chairs
Nicola Harries (CL:AIRE) Marco Falconi (Remtech Europe)

09:15 **Introduction to Sustainable Remediation - Principles and Practices (Part 1)**

- Introduction to Sustainable remediation for absolute beginners
- How and when to use sustainability in contaminated sites management
- Carrying out a sustainability assessment

Alan Thomas, Paul Bardos, Richard Gill (SuRF-UK) and Nicola Harries (CL:AIRE)

11:00 *Break*

11:30 **Introduction to Sustainable Remediation - Principles and Practices (Part 2)**

- Indicators in more detail
- Templates and tools
- Sustainable management practices
- Climate change and resilience

Alan Thomas, Paul Bardos, Richard Gill (SuRF-UK) and Nicola Harries (CL:AIRE)

13:15 Panel discussion, stakeholders questions and wrap up, *Nicola Harries (CL:AIRE)*
13:30 *End of the Training*

Register yourself in the Google form https://forms.gle/vikyZhJHxS1kggCR6

SESSION 4
Molecular Biological Tools

TUESDAY 20 SEPTEMBER
16.30 – 17.30 CEST (Central European Summer Time)

Opening

16:30 Welcome from ASTM International and Remtech Europe
Stephanie Fiorenza (ASTM International) Marco Falconi (ISPRA, Remtech Europe)

Presentations

16:35 The Application of Molecular Biological Tools for Bioremediation: Natural and Enhanced Attenuation
Trent Key (ExxonMobil& ASTM International) and Stephanie Fiorenza (Arcadis/ASTM International)

17:20 Questions and Answers
Stephanie Fiorenza (ASTM International) Marco Falconi (ISPRA, Remtech Europe)

17:30 End of the training

Register yourself in the Google form https://forms.gle/bnXxKvaaoCPML51Q9

This training will give insights on the new Molecular Biological Tools for Bioremediation according to ASTM Guidance. Contaminated sites are largely growing in cost and complexity, and development and implementation of successful bioremediation mitigation strategies is dependent on consistent Molecular Biological Tools data to assess, design, and monitor performance. The development of consensus standard documents through ASTM is paramount in meeting the needs of the remediation industry. The principal users of this standard will be industry project managers, regulators, consultants, laboratories, and contaminate site community stakeholders.

SESSION 5
Environmental, Social, and Governance Disclosure

TUESDAY 20 SEPTEMBER
15.30 – 16.30 CEST (Central European Summer Time)

Opening

15:30 Welcome from ASTM International and Remtech Europe
Stephanie Fiorenza (ASTM International) Marco Falconi (ISPRA, Remtech Europe)

Presentations

15:35 Environmental, Social, and Governance (ESG) Disclosure Related to Climate and Community
Eileen Snyder (Alpha Analitycal & ASTM International)

16:20 Questions and Answers
Stephanie Fiorenza (ASTM International) Marco Falconi (ISPRA, Remtech Europe)

16:30 End of the training

Register yourself in the Google form https://forms.gle/DNYVrV2CwMJBBph36

This training will give insights on the new Environmental, Social, and Governance (ESG) Disclosure Related to Climate and Community according to ASTM Guidance. ESG factors continue to become the focus of regulatory guidance, consumer demand, investor goals, academic research, and industry efforts to manage risk and maximize return. This ASTM work effort seeks to build on expanding and recent ESG initiatives in the US and worldwide. In spring 2020, the United Nations Environment Programme (USEP) Finance Initiative released its updated Principles for Responsible Investing (PRI) which provide guidance for industry, academia, regulators, investors, consumers, and communities. To date, the UNEP PRI guidance, initiated in 2006, has been adopted by over 3,000 signatories representing 60 countries worldwide.

SESSION 6
Natural Source Zone Depletion

TUESDAY 20 SEPTEMBER
16.30 – 17.30 CEST (Central European Summer Time)

Opening

16:30 Welcome from ASTM International and Remtech Europe
Stephanie Fiorenza (ASTM International) Marco Falconi (ISPRA, Remtech Europe)

Presentations

16:35 Natural Source Zone Depletion
Parisa Jourabchi (ARIS Environmental & ASTM International)

17:20 Questions and Answers
Stephanie Fiorenza (ASTM International) Marco Falconi (ISPRA, Remtech Europe)

17:30 End of the training

Register yourself in the Google form https://forms.gle/fnXxNRd8GE5QkKWb7

SESSION 7

Mitigation of Wildfire Impact, Risk to Water Utilities

TUESDAY 20 SEPTEMBER
17.30 – 18.30 CEST (Central European Summer Time)

Opening

17:30 Welcome from ASTM International and Remtech Europe
Stephanie Fiorenza (ASTM International) Marco Falconi (ISPRA, Remtech Europe)

Presentations

17:35 Mitigation of Wildfire Impact to Source Water Protection Areas and Risk to Water Utilities
Patrick Robichaud (ASTM International)

18:20 Questions and Answers
Stephanie Fiorenza (ASTM International) Marco Falconi (ISPRA, Remtech Europe)

18:30 End of the training

Register yourself in the Google form https://forms.gle/sfZL47mBVkCFqv5a9

This training will give insights on the new Mitigation of Wildfire Impact to Source Water Protection Areas and Risk to Water Utilities. Wildfires pose a significant risk to water utilities as they can cause contaminants of concern to be released into surface water and groundwater supplies. This can endanger human health if systems were not designed to manage these contaminant loads. This guide provides public-sector and private-sector land managers and water utility operators details on how to assess the potential impacts of wildfires on watersheds and measures that can be employed to minimize or abate those impacts prior to a wildfire occurring or after it occurs.

SESSION 8
Toxicity Test for Freshwater

TUESDAY 20 SEPTEMBER
18.30 – 19.30 CEST (Central European Summer Time)

Opening

18:30 Welcome from ASTM International and Remtech Europe
Stephanie Fiorenza (ASTM International) Marco Falconi (ISPRA, Remtech Europe)

Presentations

18:35 Development and Update of ASTM International Standard Method for Toxicity Tests with Freshwater Mussels
Ning Wang (ASTM International)

19:20 Questions and Answers
Stephanie Fiorenza (ASTM International) Marco Falconi (ISPRA, Remtech Europe)

19:30 End of the training

Register yourself in the Google form https://forms.gle/t3J7kEE7NLM9Nh8o8

This training will give insights on the Toxicity test for Freshwater. Freshwater mussels are one of the most imperiled groups of animals and environmental contamination has been linked as a contributing factor to the decline of mussel populations.. In 2006, ASTM International published a standard for conducting laboratory toxicity tests with freshwater mussels. More mussel studies have been conducted recently on the propagation and culture of test organisms, starting ages of organisms for toxicity testing, test duration, feeding, and toxicity endpoints. In addition, a new short-term test method for estimating the chronic toxicity of effluent to freshwater mussels was developed. These recent findings and the new method have been included in the 2022 revision of the ASTM standard E2455-22 for toxicity tests with freshwater mussels. This training will illustrate the standard method and application, as well as highlight the use of mussel data generated from toxicity tests.

SESSION 9

Phase I Environmental Site Assessment Process

TUESDAY 20 SEPTEMBER
20.00 – 22.00 CEST (Central European Summer Time)

Opening

20:00 Welcome from ASTM International and Remtech Europe
Stephanie Fiorenza (ASTM International) Marco Falconi (ISPRA, Remtech Europe)

Presentations

20:10 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process
Julie Kilgore, (ASTM International)

21:40 Questions and Answers
Stephanie Fiorenza (ASTM International) Marco Falconi (ISPRA, Remtech Europe)

22:00 End of the training

Register yourself in the Google form https://forms.gle/6wxTw7e2mNwHZRV17

This training will give insights on how to perform a Phase I Site assessment according to ASTM Guidance. The purpose of this practice is to define good commercial and customary practice for conducting an environmental site assessment of a parcel of commercial real estate. As such, this practice is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner, contiguous property owner, or bona fide prospective purchaser limitations on CERCLA liability: that is, the practice that constitutes all appropriate inquiries into the previous ownership and uses of the property consistent with good commercial and customary standards and practices.

REMTECH Europe

SESSION 10
In situ soil treatment

WEDNESDAY 21 SEPTEMBER
09.00 – 11.00 CEST (Central European Summer Time)

Opening

09:00 Welcome and introduction from the Chairs

Presentations

09:05 Biochar - from organic waste to resource for treatment of contaminated soil
Anja Enell, Dan Berggren Kleja, Peter Flyhammar, Mats Fröberg, Yvonne Ohlsson, Charlotta Tiberg, Sofie Hermansson (Swedish Geotechnical Institute), Elias Azzi, Asterios Papageorgiou, Cecilia Sundberg (KTH Royal Institute of Technology), Sigrun Dahlin, Sara Hallin, Christopher Jones, Prune Leroy (Swedish University of Agricultural Sciences), Alf Ekblad, Maria Larsson, Ingrid Rijk (Örebro University), Felix Ertel (Pamoja Cleantech AB), Ludvig Landen, Anna Sorelius (NSR-AB)

09:20 Soil microarthropods for monitoring the soil pollution hazard in an industrial region in Kerala, India
Lakshmi Gopakumar (Cochin University of Science and Technology), Ammini Joseph (School of Environmental Studies, CUSAT)

09:35 Immobilization of soil metal(loid)s with engineered biochar: Modeling the long-term performances under accelerated aging
Liuwei Wang, Deyi Hou (Tsinghua University, China)

09:50 RIBAS, Reactive Infiltration BAsin for in-situ Soil treatment
Carme Bosch, Lídia Fernández, Irene Jubany (Fundació Eurecat), Jordi Guimerà (Amphos 21)

10.05 FLUX measurements to design a nature based barrier in an urban canal
Marjan Joris, Goedele Verreydt, Erik Bosmans (iFLUX)

10.20 Distribution of pathogens and antibiotic resistance genes in the vadose zone of soil-aquifer treatment (SAT) system
Niraj Yadav, Gilboa Arye (French Associates Institute for Agriculture and Biotechnology for Drylands, France), Zeev Ronen (Ben Gurion University)

10.35 Integrated Nutrients Management is Key for Sustaining Crop Productivity and Soil Health
Dr. Amanullah (The University of Agriculture, Pakistan)

10:50 Panel discussion moderated by chairs

11:00 End of the session

Register yourself in the Google form https://forms.gle/bg8Cvj6EGkLAicXj8

iFLUX

REMTECH Europe

SESSION 11
Oil and hydrocarbons remediation

WEDNESDAY 21 SEPTEMBER
11.30 – 13.30 CEST (Central European Summer Time)

Opening

11:30 Welcome and Introduction from the Chairs

Presentations

11:35 Thermal desorption of heavy polluted oily sludge from a deposit in a refinery
Laurent Thannberger, Pierre-Alexandre Nicq (Valgo)

11:50 Overview of the Concawe LNAPL toolbox, a new web-based decision support system for managing LNAPL sites
Markus Hjort, Eleni Vaiopoulou (Concawe), Charles J. Newell, Hannah Podzorski (GSI Environmental)

12:05 Kuwait Environmental Remediation Program – bioremediation treatment optimization study
Cosimo Masini (DND Biotech)

12.20 Technology of oil pollution control and elimination by using method of biological destruction of hydrocarbon compounds
Giorgi Mtchedlishvili, Mariam Mtchedlishvili, Ani Getiashvili (Ministry of Environmental Protection and Agriculture of Georgia)

12.35 Inventory of leakages underground industrial pipelines
Jasper Schmeits (Tauw)

12.50 Hydrocarburoclastic fungi and bacteria to improve bioavailability and degradability of petroleum hydrocarbons in a historically contaminated soil
Simone Becarelli, Ilaria Chicca, Simona Di Gregorio (University of Pisa)

13.05 Combined Oxidative Remedies in a Single Application to treat Petroleum Hydrocarbon Contamination
Brant Smith, Alberto Leombruni, Mike Mueller (Evonik active Oxygens)

13:20 Panel discussion moderated by chairs

13:30 End of the session

Register yourself in the Google form https://forms.gle/MQSHCztfjqeobmkG7

DnD biotech Discover New Direction

VALGO

Concawe

TAUW

EVONIK Leading Beyond Chemistry

GSI ENVIRONMENTAL

REMTECH Europe

SESSION 12
PFAS treatment in soil

WEDNESDAY 21 SEPTEMBER
14.30 – 16.30 CEST (Central European Summer Time)

Opening

14:30 Welcome and introduction from the chairs

Presentations

14:35 On-site stabilization of PFAS contamination in volcanic ash soil using Rembind® – A case study in New Plymouth New Zealand
Ben Keet (Geo & Hydro – K8)

14:50 The occurrence, distribution, and risks of PFAS at AFFF-impacted sites in Finland
Jussi Reinikainen, Noora Perkola, Lauri Äystö, Jaana Sorvari (SYKE,Finnish Environment Institute)

15:05 PFAS In Soil – Limitation and Solution in Germany
Jurgen Buhl (Cornelsen Umwelttechnologie)

15:20 Stabilization of PFAS contaminated soil to minimize cost for construction works and carbon footprint for widely contaminate and active areas
Robin Axelsson, Helena Hinrichsen (Envytech)

15.35 Forever chemicals and climate change: physical risks assessment for PFAS impacted sites
Giovanni Marsilio, Anna De Fina, Rodolfo Chiastellaro, Jean Pierre Davit (Golder WSP)

15.50 Thermal Treatment of PFAS Impacted Soil – Field Demonstration and Scale-Up Considerations
Lynette Stauch, Gorm Heron, Emily Crownover, Patrick Joyce (TRS Group)

16.05 Firefighting Validation Testing of the Leading Commercially Available PFAS-Free Foams, ESTCP Project WP21-3465
Gerard G. Back (SERDP-ESTCP)

16:20 Panel discussion moderated by chairs

16:30 End of the session

Register yourself in the Google form https://forms.gle/wXDbjdbDGHJSuK2L6

TRS Europe · Cornelsen · envytech Miljö & teknik · Geo & Hydro – K8 Ltd Excellence in Environmental Engineering · WSP GOLDER · SERDP DOD • EPA • DOE | ESTCP

REMTECH Europe

SESSION 13
PFAS treatment in groundwater

WEDNESDAY 21 SEPTEMBER
17.00 – 19.30 CEST (Central European Summer Time)

Opening
Opening
17:00 Welcome and introduction from the chairs:

Presentations

17:05 Demonstration and evaluation of an on-site treatment train for PFAS polluted groundwater: the LIFE SOuRCE project
Laura del Val, Carme Bosch, Leónidas Pérez (Eurecat), Lutz Ahrens, Oscar Skirfors (Swedish University of Agricultural Sciences), Anja Enell, Dan Berggren Kleja Michel Pettersson (Swedish Geotechnical Institute), Philip McCleaf, Sofia Bjälkefur (Uppsala Vatten och Avfall AB), Patrik Hollman (Nova Diamant AB), Helena Hinrichsen (Envytech), Hector de Buen, Ricard Mora (Esolve), Dahn Rosenquist (Laqua Treatments AB)

17:20 Proven low-cost PFAS treatment: converting polluted aquifers into purifying filters
Scott B. Wilson (Regenesis)

17:35 The versatility of surface-modified clay adsorbents for PFAS treatment
Anna Willett, Matt Geary (CETCO-Minerals Technologies)

17.50 Forever chemicals captured and destroyed: PFAS selective ion exchange resin treatment
Cathy Swanson, Francis Boodoo (Purolite)

18.05 Phytoremediation of PFAS in leachate and effects of biochar
Anna Sorelius (Nordvästra Skånes Renhållnings AB (NSR)), Anja Enell, Michael Pettersson (Swedish Geotechnical Institute)

18.20 Surface Active Foam Fractionation (SAFF) in combination with Electrochemical Oxidation: Effective PFAS removal from water using only air, creating zero waste
Helena Hinrichsen, Peter Murphy (Envytech)

18.35 Degradation of PFAS by electrochemical oxidation
Lama Saleh, Manon Remot, Christophe Coutanceau, Jean Philippe Croue (University of Poitiers, France) Mahmut Ersan, Paul Westerhoff (Arizona State University, USA)

18.50 Enhanced Affinity for Per- and Polyfluoroalkyl Substances on a Modified Clay
Bei Yan, Faezeh Pazoki, Jinxia Liu (McGill University, Canada)

19:05 Panel discussion moderated by chairs

19:30 End of the session

Register yourself in the Google form https://forms.gle/dmVVAzayeSvU1aqC8

REGENESIS MINERALS TECHNOLOGIES CETCO Purolite envytech Miljö & teknik

SESSION 14
Munitions Response training course

WEDNESDAY 21 SEPTEMBER
14.30 – 19.00 CEST (Central European Summer Time)

Opening

14:30 **Introduction from the Chairs**
Marvin Unger (SERDP-ESTCP), Frank Swartjes (RIVM)

14:35 **Introductory remarks from SERDP/ESTCP director**
Kim Spangler (SERDP-ESTCP director)

14:45 **UXO Response/Overview of the SERDP/ESTCP Munitions Response Program**
Dave Bradley (SERDP-ESTCP)

15:35 **UXO Response/Activities Comprising a UXO Response Program**
Anne Andrews (SERDP-ESTCP)

16:25 Panel discussion
Marvin Unger (SERDP-ESTCP), Frank Swartjes (RIVM)

16:35 *Coffee break*

16:50 **UXO Response/Protocols and Procedures of UXO Response**
John Jackson (SERDP-ESTCP)

17:40 **SERDP/ESTCP bioremediation technologies to address subsurface munitions contaminants**
Paul Hatzinger (SERDP-ESTCP)

18:30 Panel discussion
Marvin Unger (SERDP-ESTCP), Frank Swartjes (RIVM)

19:00 **End of the session**

Register yourself in the Google form https://forms.gle/4uVubL8EgqAQCrrz5

REMTECH Europe

SESSION 15
Sustainable management of contaminated sites

THURSDAY 22 SEPTEMBER
09.00 – 11.00 CEST (Central European Summer Time)

Opening

09:00 Welcome and introduction from the Chairs

Presentations

09:05 Management of contaminated sites in the Slovak Republic
Katarína Paluchová, Elena Bradiaková (Slovak Environment Agency)

09:20 SURE by Ramboll: a tool for sustainability assessment in remediation. Case example for groundwater contamination
Arianna Pantano, Aldo Trezzi, Simone Brunelli, Marco Pettinella (Ramboll Italy)

09:35 Analysis of the economic, environmental and social sustainability of saturated and unsaturated soil remediation technologies with Aecom sustainable remediation tool
Francesca Motta, Samuele Boccardo, Ciro Viscotti, Patrick Cellie (Aecom)

09:50 Environmental and social project financing: opportunities and requirements
Barbara Grosso, Eugenio Napoli (RINA Consulting)

10.05 Accelerating the exploration of the contaminated sites registry of the state of São Paulo, Brazil
Nouha Samlani, T.Pak (Teesside University) D.S Pino (University of São Paulo), Carlo Bianco (Polytechnic University of Turin), N.L.Archilha (Brazilian Synchrotron Light Laboratory (LNLS))

10.20 Urban regeneration: managing complex social and regulatory challenges in Chile
Jaime Henriquez (Antofagasta Railway Company), Raul Victor (WSP Golder Chile), Jean Pierre Davit (WSP Golder Italy) – TO BE CONFIRMED

10:35 Sustainable resilient remediation
Jessica Gattenby, Stephanie Fiorenza (Arcadis)

10:50 Panel discussion moderated by chairs

11:00 End of the session

Register yourself in the Google form https://forms.gle/W3JHHBuyz6HtLBRU7

AECOM RAMBOLL RINA ARCADIS WSP GOLDER

REMTECH Europe

SESSION 16
Wastewater innovative treatment and constructed wetlands

THURSDAY 22 SEPTEMBER
09.00 – 11.00 CEST (Central European Summer Time)

Opening

09:00 Welcome and introduction from the Chairs

Presentations

09:05 Constructed wetlands for drained wastewater treatment and sludge stabilization: Role of plants, microbial fuel cell and earthworm assistance
Tanveer Saeed (Bangladesh Academy of Sciences), Nehreen Majed, Md Jihad Miah (University of Asia Pacific), Asheesh Kumar Yadav (CSIR-Institute Minerals and Materials Technology, India), Aktaruzzaman Hasan (Bangladesh Government)

09:20 Improving Deodorizing Efficiency by Nutrients Medium Optimization of Odorous Hydrogen Sulfide Biological Trickling Tower
Synthia Wong (Shang Hai Bioscience)

09:35 Outdoor cultivation of an autochtonous microalgal strain in pilot-scale prototype for urban wastewater treatment
Sara Demaria, Pierluigi Giacò, Elisa Benà, Costanza Baldisserotto (University of Ferrara), Simonetta Pancaldi (Terra&Acqua Tech Laboratory)

09:50 Removal of chlorinated phenols from water using biochar
Tamara Apostolović, Jelena Tričković, Marijana Kragulj Isakovski, Snežana Maletić, Aleksandra Tubić, Maja Vujić, Jasmina Agbaba (University of Novi Sad, Serbia)

10.05 Performance of raw zeolitic tuff for pharmaceutical wastewater treatment using constructed wetland
Othman Almashaqbeh, Layal Alsalhi Lana Salaymeh (Royal Scientific Society, Jordan), Tao Lyu, Gabriela Dotro (Cranfield University, UK)

10.20 Development and validation of a clean technology for the integral treatment of metallurgical effluents and tailings neutralization based on the use of calcareous agents
Silvana Flores, Edison Zegarra (private), Jorge Del Carpio (Universidad de Ciencias y Humanidades, Lima-Perú), Janet Flores (Universidad Nacional Federico Villarreal, Lima-Perú), Nora Flores (Universidad Privada del Norte, Lima-Perú)

10:35 Panel discussion moderated by chairs

11:00 End of the session

Register yourself in the Google form https://forms.gle/kKJZgywhPWmfYXE49

Università degli Studi di Ferrara

Terra & Acqua Tech

SESSION 17

SUSTAINATHON

Sustainability the road to global value

20-21 SEPTEMBER 2022

From 14.00 (23 September) to 14.00 (24 September) CEST – 24 HOURS

7 REASONS TO ATTEND

RELISH the progress being made towards one, more or all of the 17 UN SDGs by different countries.

ENJOY the variety of approaches and methods being used to deliver and monitor progress on individual targets for specific SDGs.

MANAGE your participation to fit with other commitments over the 24 hours – attend as little or as much of Sustainathon as you want.

TAKE AWAY inspiration and ideas that you can apply in your country, on your projects for your stakeholders.

EXPERIENCE the presentations at a time that suits you – whether you attend live or follow the recorded presentations when it is more convenient for your time zone.

CHAT online with other like-minded practitioners from around the world – during and after the event.

HONOUR those sharing their hard won experience – even if we cannot give them a warm round of applause

To reserve your seat and for the Certificate, **register here** https://forms.gle/qKkxqE8geRrMpipZA

Chairs: Paul Nathanail (CABERNET), Marco Falconi (ISPRA), Nicola Harries (CL:AIRE), Natalia Rodriguez Eugenio (FAO), Patricia Ruiz (AESAS), Pedro Sifuentes (RELASC), Isabella Scamdenberg, Amanda McNally (SuRF USA), Yanju Liu (University of Newcastle, Australia), Olcay Unver.
Sustainathon Secretariat: Lana Kukobat

REMTECH Europe

SESSION 18
Heavy metals and critical raw materials

THURSDAY 22 SEPTEMBER
11.30 – 13.30 CEST (Central European Summer Time)

Opening

11:30 Welcome and Introduction from the Chairs

Presentations

11:35 Effects of endophytic fungi on phytoremediation ability of jatropha sp. of heavy metal contaminated landfill soil
Auwalu Hassan (University of Kashere), Fauziah Shahul Hamid, Innocent Chukwunonso Ossai (University of Malaya), Agamuthu Pariatamby (Sunway University)

11:50 Functionalization of carbon-based materials for Critical Raw Materials (CRMs) removal from aqueous solution
Roberta Pulcher, Nicolas Greggio, Enrico Dinelli, Diego Marazza, Alessandro Buscaroli (University of Bologna)

12:05 Different approach to assessment of heavy metals contaminated sediments in the Great Backa canal
Dunja Rađenović, Đorđe Pejin, Dejan Krčmar, Jelena Beljin, Nataša Slijepčević, Slaven Tenodi, Dragana Tomašević-Pilipović (University of Novi Sad)

12.20 Coal power plant ashes: a prospective look at a source of rare earth elements
Nazaré Couto, Ana Rita Ferreira, Vanda Lopes, Eduardo P. Mateus, Alexandra B.Ribeiro (NOVA School of Science and Technology, Portugal), Sibel Pamukcu (Lehigh University, US)

12.35 The process of production of Fe Mn and Si Mn in "TOPILNICA" JSC SKOPJE
Emil Kazankov (Ministry of Environment and physical planning (MOEPP of North Macedonia)

12.50 Transparent tailings initiative: monitoring and early warning system for tailings facilities
Cristóbal Girardi, Carla Calderón, Verónica Gautier, Nelida Heresi, Bryan Casanova,Angela Oblasser (Fundación Chile), Iván Honorato, Patricio Walker(Superintendency of the Environment of Chile), Daniela Fredes (General Water Authority, of Chile) and René Pérez (Codelco)

13.05 Panel discussion moderated by chairs

13:30 End of the session

Register yourself in the Google form https://forms.gle/aA9wDPXLtgnwwMHx7

REMTECH Europe

SESSION 19
Soil gas and vapor intrusion

THURSDAY 22 SEPTEMBER
11.30 – 13.30 CEST (Central European Summer Time)

Opening

11:30 Welcome and Introduction from the Chairs

Presentations

11:35 Examining the applicability of the soil gas radon deficit technique for quantifying residual LNAPL contamination
Alessandra Cecconi, Iason Verginelli, Renato Baciocchi (University of or Vergata, IT)

11:50 Human Exposure associated to emitted and settled dusts coming from contaminated soil
Antonella Vecchio, Maria Gabriella Andrisani (ISPRA), Elisa Mariani (freelance), Federica Scaini (ISS)

12:05 Soil gas, Vapor intrusion & Innovative investigation systems
Craig Sandefur, Chris Lee (REGENESIS)

12.20 Soil gas emergency safety measures and environmental monitoring activities through multiple lines of evidence
Paolo Angelini Marcello Mancini, Marcello Pianu (ENI), Alberto Francioli, Marco Chiolo, Davide Colombo, Stefano Giacchetto, Diego Donati (HPC Italia)

12.35 Short time variability of soil gas chemical-physical properties. Venetian case study of the Greener Sites european project
Federico Fuin, GianMaria Formenton, Daniela Fiaccavento, Leonardo Mason, Paolo Zilli (ARPAV), Davide Casabianca, Giovanni Porto (Copernico)

12.50 Panel discussion moderated by chairs

13:30 End of the session

Register yourself in the Google form https://forms.gle/VXfrgR4PFR7HWjTdA

HPC

REGENESIS

eni rewind
remediation & waste into development

ISPRA
Istituto Superiore per la Protezione e la Ricerca Ambientale

Sistema Nazionale per la Protezione dell'Ambiente

REMTECH Europe

SESSION 20
Phytoremediation and nature based solutions

THURSDAY 22 SEPTEMBER
14.30 – 16.30 CEST (Central European Summer Time)

Opening

14:30 Welcome and introduction from the chairs

Presentations

14:35 Phyto-assessment of copper, lead and zinc in water spinach and okra
Chuck Chuan Ng (Xiamen University Malaysia)

14:50 Remediation of contaminated land using phyotoremediation techniques
Arindam Ghosh, James Stening (Orica)

15:05 Assisted phytoextraction as a nature- based solution for sustainable soil remediation
Ramona Balint, Iustina Popescu Boajă (Geological Institute of Romania)

15:20 Phytoremediation potential of cereals on petroleum hydrocarbons mixed soil
Silvana Manasievska Simikj, Tatjana Mitkova, Mile Markoski (Faculty of Agricultural Sciences and Food, MK) Ice Rikaloski (OKTA)

15.35 The influence of phytoremediation on heavy metals bioavailability in sediment
Nina Đukanović, Jelena Beljin, Jelena Tričković, Srđan Rončević, Snežana Maletić (University of Novi Sad), Tijana Zeremski, Nadežda Stojanov (Institute of Field and Vegetable Crops)

15.50 Pot test study to determine the best phytoremediation treatment for TPH contaminated soils using plant species with potential for biofuel production
Francesca Audino Alba Catalán Merlos, Sergio Aguado, Sonia Sanchis, (Leitat), Natàlia Blázquez-Pallí, Carlos Herrarte-Marrón, David Garriga, Marçal Bosch (Litoclean)

16.05 Panel discussion moderated by chairs

16:30 End of the session

Register yourself in the Google form https://forms.gle/KX1pYsY7Vi5CmvQL7

ORICA

INVESTIGACIÓN & REMEDIACIÓN DE SUELOS litoclean

REMTECH Europe

SESSION 21
DNAPL and chlorinated compounds: optimizing the process

THURSDAY 22 SEPTEMBER
14.30 – 16.30 CEST (Central European Summer Time)

Opening

14:30 Welcome and introduction from the chairs

Presentations

14:35 Assessment of shear-thinning fluids and strategies for enhanced in situ removal of heavy chlorinated compounds-DNAPLs in an anisotropic aquifer
Iheb Bouzid (Université de Bourgogne Franche-Comté), Nicolas Fatin-Rouge (Université de Poitiers), Antoine Joubert, Julien Maire, Thomas Invernizzi (Serpol), David Cazaux, Cédric Marion (Inovyn)

14:50 Addressing high concentration solvent sites (DNAPL) with a combined-remedy: emulsified oil and ZVI
Robert Wagenveld (QM Environmental), Brad Elkins (EOS Remediation)

15:05 The state of the art toolbox for chlorinated solvent investigations: Smart combination of Enhanced MIP, targeted soil and groundwater sampling and the 3D conceptual site model
Petter Wetterholm (Wescon Miljökonsult), Pieter Buffel (EniSSA)

15:20 Dehalogenation of trichloroethylene vapors through horizontal permeable reactive barriers based on zero-valent bimetals in the unsaturated zone
Clarissa Settimi, Daniela Zingaretti, Iason Verginelli, Renato Baciocchi (University of Rome Tor Vergata)

15.35 Evaluation and remediation of a large commingled chlorinated solvent plume in the united states eastern coastal plain
Khan Mazeeda, Agrios Liana (USEPA)

15.50 Surfactant enhanced extraction of NAPL, globule, and sorbed phase contamination resolving hydro-geo-chemical limitation to contaminant availability
George A. Ivey (Ivey International), Claudio Sandrone (BAW)

16.05 In-Situ Thermal Remediation of DNAPL under a Former Manufacturing Facility
Lynette Stauch, Robert Glass (TRS Europe), Thomas Keijzer (Signify)

16.20 Mass discharge calculation for rehabilitation of industrial site
Norbert Brandsch, Victor Vanin Sewaybricker, Rodrigo Otávio Coelho (EBP Brasil)

16.35 Panel discussion moderated by chairs

16:45 End of the session

Register yourself in the Google form https://forms.gle/kAXyS5VYUdfM4Rxh8

SESSION 22
Soil Background and Risk Assessment

THURSDAY 22 SEPTEMBER
17.00 – 19.00 CEST (Central European Summer Time)

Opening
Patricia Reyes (ITRC Director)
Marco Falconi (Remtech Europe)

Introduction/overview
Claudio Sorrentino (Department of Toxic Substances Control - California)

Establishing Soil Background
Chrissy Peterson (EHS Support)

Using Soil Background in Risk Assessment
Bonnie Brooks (Department of Ecology - Washington State)

Geochemical Evaluations as a Line of Evidence
Karen Thorbjornsen (APTIM)

Environmental forensics as a Line of Evidence
Charlie DeWolf (Trihydro Corp.)

Register yourself in the Google form https://forms.gle/YVT6ZCHQVQft3JPy5

The training event will provide an overview of the ITRC guidance document "Soil Background & Risk Assessment" (https://sbr-1.itrcweb.org/) and will discuss establishing and using default and site-specific soil background in risk assessment. At the conclusion, attendees will be able to:

- Use a consensus definition of natural background and anthropogenic ambient background
- Recognize the importance of establishing soil background and using it in risk assessment to inform risk management decisions
- Understand the difference between default and site-specific background and when they can be used in the risk assessment process
- Recognize in workplans, reports, or other documents issues relevant to sample design, analytical methods, statistics, and data analysis important to effective development and use of background in risk assessment.

Recognize the role of geochemical evaluations and environmental forensics when determining default and site-specific soil background and when evaluating a project site to determine whether site concentrations reflect background.

REMTECH Europe

SESSION 23
HRSC, High Resolution Site Characterization

THURSDAY 22 SEPTEMBER
17.00 – 19.00 CEST (Central European Summer Time)

Opening

17:00 Welcome and introduction from the chairs:

Presentations

17:05 Combining High-Resolution characterization and monitoring with statistical methods: a proposal to overcome the limitations of traditional methods
Marcello Mancini, Marcello Pianu (ENI), Mattia De Caro, Giulia Giambelli, Giovanni Formentin, Alberto Francioli (HPC Italia)

17:20 Considerations within different digital communcation techniques
Jasper Schmeits (Tauw)

17:35 An accurate injection strategy by combining EnISSA-MIP data and the SPIN® injection technology
Jeroen Vandenbruwane (Injectis), Pieter Buffel (EniSSA)

17.50 Using high-resolution tools and 3-D visualization and animation (3-DVA) technology to support environmental investigations
Jim Depa (Jacob and Hefner Associates)

18.05 Improving site management sustainability and remediation effectiveness by utilizing more robust conceptual site models
Mateus Evald, Sandro Souto, Cesar Malta-Oliveira, Taisi Marrone (Finkler Ambiental)

18.20 QUANTARRAY®-NSZD: a new tool for the assessment of natural source zone depletion
Sam Rosolina, Kate Clark, Dora Taggart (Microbial Insights)

18:35 Panel discussion moderated by chairs

19:00 End of the session

Register yourself in the Google form https://forms.gle/CryYmhMPL82f399p6

INJECTIS Finkler SUSTAINABLE TECHNOLOGIES HPC

EnISSA enhanced in-situ soil analysis TAUW eni rewind

microbialinsights JACOB & HEFNER ASSOCIATES

SESSION 24
Description, Characterization and Treatment of PFAS

THURSDAY 22 SEPTEMBER
20.00 – 22.00 CEST (Central European Summer Time)

Opening
Patricia Reyes (ITRC Director)
Marco Falconi (Remtech Europe)

Introduction/overview
Sandra Goodrow, Ph.D. (Research Scientist, New Jersey Department of Environmental Protection)

Main presentations:
- PFAS overview, including current/historical uses and sources to the environment,
- Surface water concerns and bioaccumulation in aquatic biota,
- Aqueous Film Forming Foam (AFFF) and the current best management practices,
- Site characterization of PFAS-use, storage, or disposal areas, and
- Current and developing treatment processes for PFAS in multiple media.

Presenters:
Sandra Goodrow, Ph.D., Research Scientist 1, ITRC PFAS Team Lead, NJDEP
Shalene Thomas, VP and Global Emerging Contaminants Program Manager, Wood
Mitch Olson, Ph.D., Senior Engineer, Emerging Contaminants Practice Lead, Trihydro Corporation
Scott Grieco, Ph.D., P.E., Emerging Contaminants Global Technology Leader, Jacobs

Register yourself in the Google form https://forms.gle/CC9S3AB43MdAhu2X9

The Interstate Technology and Regulatory Council (ITRC) is a state-led coalition working to advance the use of innovative environmental technologies and approaches. The ITRC PFAS team is comprised of over 600 environmental professionals from state, local, and federal government, private industry, academia, and public stakeholders, collaborating to produce resources to address the challenges of PFAS contamination. The ITRC PFAS Team published the original Technical and Regulatory Guidance Document on the web at https://pfas-1.itrcweb.org in April of 2020 and provided updates in December of 2021 to include new and relevant information that can be useful for professionals working on PFAS issues.

REMTECH Europe

SESSION 25
Challenges and research in remediation

FRIDAY 23 SEPTEMBER
09.00 – 11.00 CEST (Central European Summer Time)

Opening

09:00 Welcome and introduction from the Chairs

Presentations

09:05 Adsorption performance of hydrochars or chlorfenvinphos removal from water
Irina Jevrosimov, Marijana Kragulj Isakovski, Tamara Apostolović, Snežana Maletić, Aleksandra Tubić, Srđan Rončević, Jasmina Agbaba (University of Novi Sad)

09:20 Removal of methyl green from aqueous solutions by adsorption on the shrimp carapace and photodegradation using UV-C
Ould Brahim Insaf (University of Sciences and Technology Houari Boumediene)

09:35 Evaluation of the PFAST method – Perfluorinated Assisted Soil Treatment on different soils from an airport in Sweden, using Surface Active Foam Fractionation (SAFF) in combination with different additives to perform PFAS soil washing
Helena Hinrichsen, Peter Murphy, Richard Stewart (Envytech)

09:50 Microbial electrochemical Cr(VI) reduction in continuous flow system
Gabriele Beretta, Michela Sangalli, Elena Sezenna, Sabrina Saponaro (Polytechnic University of Milan), Anna Espinoza, Andrea Franzetti (University of Milano-Bicocca)

10.05 The First Implementation of a Combined Electric Resistive Heating (ERH) and Multi Phase Extraction (MPE) Remedy at a Fractured Bedrock Site in Scotland, UK
Andrew Morgan (Geosyntec Consultants), Lynette Stauch (TRS Europe)

10.20 Simulateous degradation of PAH and immobilisation of arsenic in contaminated soil by electrokinetics
Kim Johansson, Jurate Kumpiene, Ivan Carabante (Luleå Technical University)

10:35 Panel discussion moderated by chairs

11:00 End of the session

Register yourself in the Google form https://forms.gle/mZte8Dfuy32o1om76

envytech Miljö & teknik

TRS Europe

Geosyntec consultants

REMTECH Europe

SESSION 26

Emerging contaminants of concern

FRIDAY 23 SEPTEMBER
11.30 – 13.30 CEST (Central European Summer Time)

Opening

11:30 Welcome and Introduction from the Chairs

Presentations

11:35 Photochemical degradation of contaminants of emerging concern in aqueous matrix
Luisa Pasti, Mirco Cescon, Tatiana Chenet, Claudia Stevanin, Vito Cristino, Stefano Caramori (University of Ferrara)

11:50 Assessment of Drinking Water Treatment Processes in Nanoplastics Removal: Pilot- scale and Modelling Studies
Gerardo Pulido-Reyes, Ralf Kaegia (Eawag), Leonardo Magherini, Carlo Bianco, R. Sethi (Turin Polytechnic University), Urs von Guntena (École Polytechnique Fédérale de Lausanne), D) Denise M. Mitrano (ETH Zurich)

12:05 Water for human use and ubiquitous contaminants: PFAS and Bisphenol A, from the text of the new directive to laboratory testing
Paola Verza, Francesca Faraon, Alessio Mattiazzo, Barbara Scantamburlo (Mérieux NutriSciences Italia)

12.20 Uncovering electrochemical removal mechanisms in the remediation of emerging organic contaminants from a clay soil
P. Guedes, C. Silva Pereira (Universidade Nova de Lisboa), N. Couto, E. Mateus, A.B. Ribeiro (NOVA School of Science and Technology)

12.35 Environmental monitoring protocol of the Capo Frasca Military Training Site, West Sardinia
Maurizio Guerra, Luigi Marangio (ISPRA), Paolo Rizzetto (General Secretariat of Defense) Andrea Pizzi (Italian Air Force)

12.50 Aerobic cometabolism for treatment of traditional and emerging groundwater contaminants
Paul B. Hatzinger (SERDP-ESTCP)

13.05 Panel discussion moderated by chairs

13:30 End of the session

Register yourself in the Google form https://forms.gle/tqQwRBU3pkFuhGCVA

Mérieux NutriSciences

ISPRA Istituto Superiore per la Protezione e la Ricerca Ambientale

Sistema Nazionale per la Protezione dell'Ambiente

SERDP DOD · EPA · DOE | ESTCP

Università degli Studi di Ferrara

REMTECH Europe

SESSION 27
Environmental damage and sediment management

FRIDAY 23 SEPTEMBER
14.30 – 16.30 CEST (Central European Summer Time)

Opening

14:30 Welcome and introduction from the chairs

Presentations

14:35 Evaluation of river sediment trend and status from the aspect of PAH content
Nataša Slijepčević, Jelena Beljin, Dejan Krčmar, Dunja Rađenović, Tamara Apostolović,Slaven Tenodi, Dragana Tomašević Pilipović (University of Novi Sad)

14:50 Mercury in european river bed sediments and climate change
Patrick Jacobs (Tauw GmbH), Giada Vitale (Tauw Italia), Enrico Coggiola (Tauw Iberia), John van Tol (Tauw The Netherlands)

15:05 Significant damage facts and experience of remediation/reforestation of damage forest in Georgia
Nino Tandilashvili, Tamar Sharashidze, Akaki Veltauri, Khatuna Tsiklauri (Ministry of Environment protection and Agriculture of Georgia)

15:20 Criteria for the assessment of the environmental damage
Francesco Andreotti (ISPRA)

15.35 Heavy metals in overbank sediments of the serbian part of the Ibar river
Božidar V. Đokić (Geological Survey of Serbia), Dragana Vidojević (Serbian Environmental Protection Agency), Olivera Đokić (Highway Institute) , Lana Kukobat (University of Belgrade)

15.50 Environmental impact assessment of remediation strategy in an oil spill in the ecuadorian amazon region
Karina García-Villacís, Daniel Hidalgo-Lasso (Petroecuador), Luis Ramos-Guerrero (Universidad UTE), José Luis Canga (Instituto Superior de Medio Ambiente), Paul Vargas-Jentzch (Escuela Politécnica Nacional)

16.05 Panel discussion moderated by chairs

16:30 End of the session

Register yourself in the Google form https://forms.gle/uNoRFW81jAep2R5D7

TAUW

ISPRA Istituto Superiore per la Protezione e la Ricerca Ambientale

Sistema Nazionale per la Protezione dell'Ambiente

Ministry of Environmental Protection and Agriculture of Georgia

EP PETROECUADOR

REMTECH Europe

SESSION 28
Waste and circular economy in the remediation sector

FRIDAY 23 SEPTEMBER
17.00 – 19.00 CEST (Central European Summer Time)

Opening

17:00 Welcome and introduction from the chairs:

Presentations

17:05 Sustainable remediation projects that prioritise the reuse of resources as well as the circular economy
Marçal Bosch, Carlos Herrarte, Andrés Carmona, Núria Rasós, Adrià Obiols, David Garriga, Javi Cortón (Litoclean)

17:25 Leaching pollutants from municipal waste in a lysimeter experiment
Dominika Dabrowska, Marek Soltysiak, Agnieszka Nowak, Paulina Biniecka, Daniel Wasilkowski (University of Silesia)

17.45 A non routinary inspection campaign in non hazardous waste landfills in Sardinia
Romano Ruggeri, Lidia Alicicco, Lorenzo Cau, Veronica Lecca, Nicola Salis, Maurizio Testa, Mara Todde (Sardinian Regional Environmental Protection Agency (ARPAS))

18.05 Assessment of the "mindset" and culture for circular economy with the use of IT: A case study in the Electronic Waste Industry in Brazil
Celene Almeida de Brito (UCES), Marianna Ottoni (University of Waterloo), Marcelo Souza (CIESP Jundiaí)

18.25 Decisional key elements for a profitable urban mining project on past mettallurgical sites and deposites – the NWE -REGENERATIS project
Iqra Aziz, Claudia Neculau (SPAQuE)

18.45 Panel discussion moderated by chairs

19:00 End of the session

Register yourself in the Google form https://forms.gle/AupoybTengvVr7PbA

assainir · valoriser les sols spaque

INVESTIGACIÓN & REMEDIACIÓN DE SUELOS litoclean

SardegnaArpa

SESSION 29
AESAS training

FRIDAY 23 SEPTEMBER
14.30 – 16.30 CEST (Central European Summer Time)

Opening

14:30 Welcome and introduction from the chairs:

Presentations

14:35 Training by AESAS
Fernando Ricardo Scolarieri Pereira (AESAS)

16.15 Panel discussion moderated by chairs

16:30 End of the session

Register yourself in the Google form https://forms.gle/VjU3RET15JABbu5h7

Remtech Europe Scientific Committee

Marco Falconi	ISPRA, Italy
Natalia Rodríguez Eugenio	FAO Food and Agriculture Organization
Frank Swartjes	National Institute for Public Health and the Environment, The Netherlands
Christian Andersen	Danish Regions, Denmark
Diego Angotti	Italian Ministry for Ecological Transition
Veronique Antoni	WG on Contaminated Sites and Brownfields, France
Thomas Aspray	Scottish Contaminated Land Forum, United Kingdom
Patrizia Bianconi	RemTech Expo, Italy
Baran Bozoğlu	ClimateChange Policy and Research Association, Turkey
Antonio Callaba de Roa	Environmental Ministry - Foro de las Comunidades Autónomas sobre Emplazamientos Contaminados, Spain
Said El Fadili	Brussels Capital Region and Irisnet, Brussels
Nicolas Fatin-Rouge	University of Bourgogne Franche-Comté, France
Stefanie Fiorenza	ASTM International, USA
Jörg Frauenstein	UmweltBundesAmt, Germany
Josè Carlos Gouvea	NICOLE Latin America
Wouter Gevaerts	NICOLE - Network of Industrial Contaminated Land in Europe
Nicola Harries	CL:AIRE - Contaminated Land: Applications in Real Environments, United Kingdom
Deyi Hou	Tsinghua University, Beijing, China
Róbert Jelínek	Slovak State Geological Institute of Dionyz Stur, Slovakia
Joytishna Jit	CRC Care - Cooperative Research Centre for Contamination Assessment and Remediation of the Environment, Australia
Grzegorz Malina	AGH University of Science and Technology, Poland
Edith Martinez-Guerra	US Army Corps of Engineers (USACE), USA
Kine Martinsen	Ministry of Environment, Norway
Dietmar Müller-Grabherr	Common Forum and European Topic Centre on Urban, Land Use and Soil, Austria
Paul Nathanail	CABERNET, UK
Jussi Reinikainen	Finnish Environment Institute, Finland
Juliana Rolla de Leo	FEAMIG Faculdade de Engenharia de Minas Gerais, Brasil
Claudio Sorrentino	California Department of Toxic Substances Control, ITRC
Pedro Sifuentes	Red Latinoamericana de Prevención y Gestión de Sitios Contaminados, Peru
Nino Tarantino	Illegal Landfills Extraordinary Commissioner Office, Italy
Pavlos Tyrologou	EFG European Federation of Geologists, Brussels-Belgium
Marvin Unger	SERDP-ESTCP, USA
Olcay Unver	Water Policy Institute
Antonella Vecchio	ISPRA, Italy
Erika von Zuben	Associação Brasileira das Empresasde Consultoria e Engenharia Ambiental, Brasil
Christiane Wermeille	Federal Office for the Environment FOEN Berne, Switzerland
Stephen Weber	NICOLA Africa
Piotr Wojda	JRC - European Commission

REMTECH EUROPE AMBASSADORS

REMTECH Europe

Ambassadors

TIME ZONES	Mon 19 Sept ONLINE	Tue 20 Sept ONLINE	Tue 20 Sept ONLINE	Wed 21 Sept IN PRESENCE - hybrid
CEST 09:00-11:00 CST 15:00-17:00 IST 12:30-14:30 EDT 03:00-05:00 BRT 04:00-06:00	European Commission **Zero Pollution for Soil Outlook: high level synthesis report and Watchlist on emerging contaminants** 1	CL:AIRE LEADING SUSTAINABLE LAND REUSE SuRF SUSTAINABLE REMEDIATION FORUM UK **Introduction to Sustainable Remediation - Principles and Practices** 3		**In situ soil treatment** 10
CEST 11:30-13:30 CST 17:30-19:30 IST 15:00-17:00 EDT 05:30-07:30 BRT 06:30-08:30				**Oil and hydrocarbons remediation** 11
CEST 14:30-16:30 CST 20:30-22:30 IST 18:00-20:00 EDT 08:30-10:30 BRT 09:30-11:30	US Army Corps of Engineers ® **Phytoremediation training**	ASTM INTERNATIONAL Helping our world work better 14:30 Molecular Biological Tools 4 15:30 Environmental, Social, and Governance Disclosure 5 16:30 Natural Source Zone Depletion 6 17:30 Mitigation of Wildfire Impact, Risk to Water Utilities 7 18:30 Toxicity Test for Freshwater 8 20:00 ASTM Phase I 9	SUSTAINATHON Sustainability the road to global value **Sustainathon** **(24 hours from 14:00 CEST to 14:00 CEST)** 17	**PFAS treatment in soil** 12
CEST 17:00-19:00 CST 23:00-01:00 IST 20:30-22:30 EDT 11:00-13:00 BRT 12:00-14:00	2			**PFAS treatment in groundwater** 13

TIME ZONES	Wed 21 Sept ONLINE	Thu 22 Sept ONLINE	Thu 22 Sept IN PRESENCE - hybrid	Fri 23 Sept IN PRESENCE - hybrid	
CEST 09:00-11:00 CST 15:00-17:00 IST 12:30-14:30 EDT 03:00-05:00 BRT 04:00-06:00	SUSTAINATHON Sustainability the road to global value Sustainathon	Wastewater innovative treatment and constructed wetlands 16	Sustainable management of contaminated sites 15	Challenges and research in remediation 25	
CEST 11:30-13:30 CST 17:30-19:30 IST 15:00-17:00 EDT 05:30-07:30 BRT 06:30-08:30	(24 hours from 14:00 CEST to 14:00 CEST) 17	Heavy metals and critical raw materials 18	Soil gas and vapor intrusion 19	Emerging contaminants of concern 26	
CEST 14:30-16:30 CST 20:30-22:30 IST 18:00-20:00 EDT 08:30-10:30 BRT 09:30-11:30	SERDP DOD • EPA • DOE ESTCP Munitions Response training course	Phytoremediation and nature based solutions 20	DNAPL and chlorinated compounds: optimizing the process 21	Environmental damage and sediment management 27	AESAS training ONLINE 29
CEST 17:00-19:00 CST 23:00-01:00 IST 20:30-22:30 EDT 11:00-13:00 BRT 12:00-14:00	14	INTERSTATE COUNCIL ITRC TECHNOLOGY REGULATORY 17:00 Soil Background and Risk Assessment 22 20:00 Description, Characterization and Treatment of PFAS 24	HRSC, High Resolution Site Characterization 23	Waste and circular economy in the remediation sector 28	