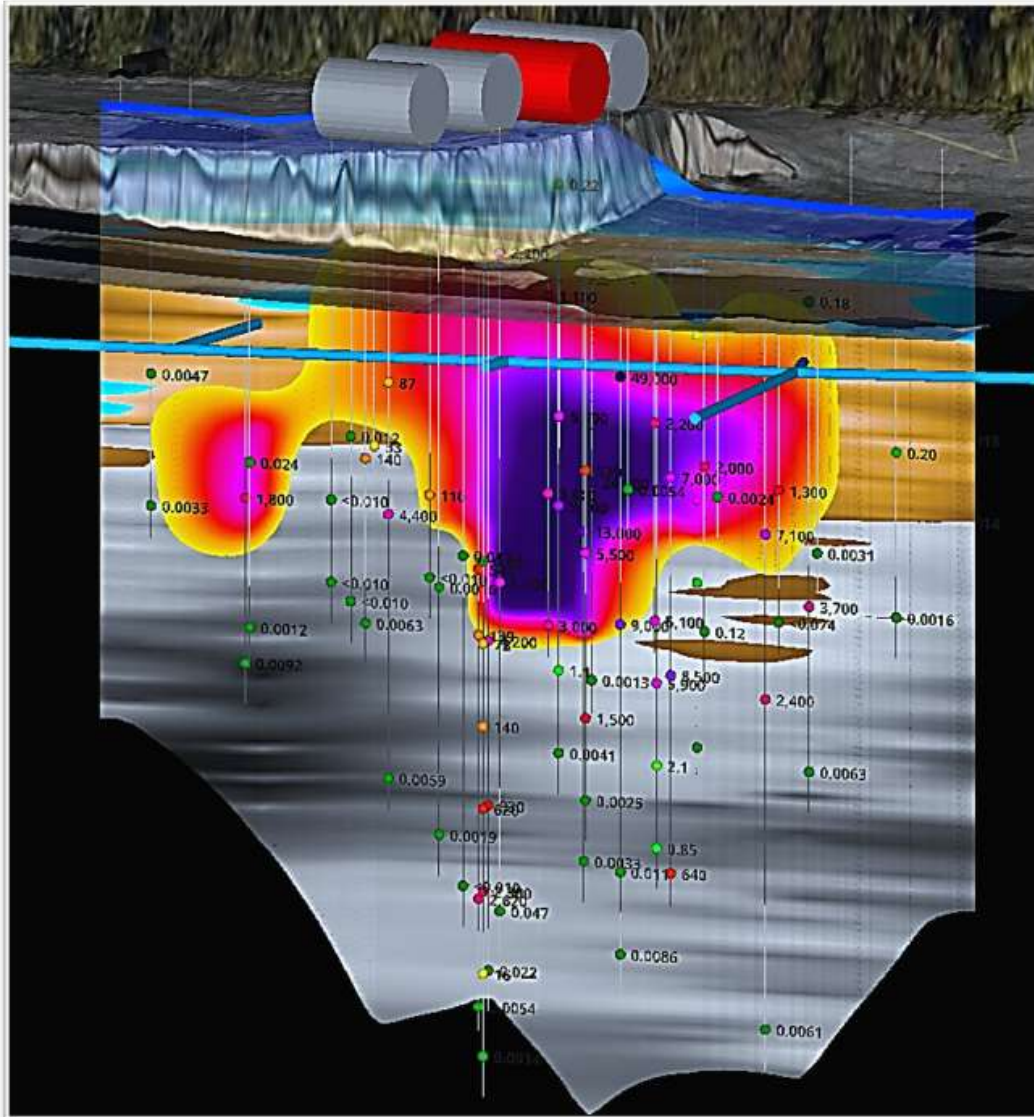


# PROGRAM & EXHIBITION






























## 18-22 September 2023



40 High level sessions  
15 Training courses  
2 Live Demo  
1 Sustanathon – 24h





























<https://www.remtechexpo.com/it/remtech-europe/remtech-europe>



TIME ZONES	Mon 18 Sept ONLINE	Mon 18 Sept ONLINE	Tue 19 Sept ONLINE	Wed 20 Sept ONLINE
 <b>CEST 09:00-11:00</b>  <b>CST 15:00-17:00</b>  <b>IST 12:30-14:30</b>  <b>EDT 03:00-05:00</b>  <b>BRT 04:00-06:00</b>	 <b>EUSO Dashboard for Soil Monitoring Directive and Clean Soil Outlook 2024</b>		 <b>Sustainathon</b> (24 hours from 14:00 CEST to 14:00 CEST)	 <b>UK approach to risk assessment for coal mine gas emissions</b>
 <b>CEST 11:30-13:30</b>  <b>CST 17:30-19:30</b>  <b>IST 15:00-17:00</b>  <b>EDT 05:30-07:30</b>  <b>BRT 06:30-08:30</b>				 <b>Applied Sustainability Assessment</b>
 <b>CEST 14:30-16:30</b>  <b>CST 20:30-22:30</b>  <b>IST 18:00-20:00</b>  <b>EDT 08:30-10:30</b>  <b>BRT 09:30-11:30</b>	 <b>US Army Corps of Engineers</b> <b>Ecological Risk Assessment: risk refinements save time and money!</b>	 <b>Sustainathon</b> (24 hours from 14:00 CEST to 14:00 CEST)	 <b>ASTM INTERNATIONAL</b> Helping our world work better 14:30 Sediment Background Concentrations 15:30 Total PFAS, what does it mean? 16:30 Adaptation to climate change 17:30 Environmental Liability Disclosure 18:30 PFAS Site Screening and Initial Characterization 20:00 ASTM Environmental, Social, and Governance (ESG)	 <b>Tools and Approaches to Quantify PFAS F&amp;T</b>
 <b>CEST 17:00-19:00</b>  <b>CST 23:00-01:00</b>  <b>IST 20:30-22:30</b>  <b>EDT 11:00-13:00</b>  <b>BRT 12:00-14:00</b>				 <b>In Situ Post-Remediation Performance Evaluation</b>





TIME ZONES	Thu 21 Sept EUROPE ROOM – 2 <sup>o</sup> floor	Thu 21 Sept 13:50 - Pavillion 6	Fri 22 Sept WHITE ROOM- 1 <sup>o</sup> floor	Fri 22 Sept EUROPE ROOM – 2 <sup>o</sup> floor
 <b>CEST 09:00-11:00</b>  CST 15:00-17:00  IST 12:30-14:30  EDT 03:00-05:00  BRT 04:00-06:00	Nature based solutions <div>23</div>	13:50 CEST Pavillion 6  LIVE DEM   DAY 2 <div>25</div> <div>26</div>	 SETAC  Italian Language Branch	Soil Remediation <div>33</div>
 <b>CEST 11:30-13:30</b>  CST 17:30-19:30  IST 15:00-17:00  EDT 05:30-07:30  BRT 06:30-08:30	Persistent organic Pollutants <div>25</div>		Zero pollution-ecotoxicology for safe and sustainable remediation <div>34</div>	Aeriforms measurements and management <div>35</div>
 <b>CEST 14:30-16:30</b>  CST 20:30-22:30  IST 18:00-20:00  EDT 08:30-10:30  BRT 09:30-11:30	Contaminated sites management <div>27</div>	Thu 21 Sept ONLINE 17:00-19:00  Contaminants of Emerging Concern <div>29</div>	High Resolution Site Characterization <div>36</div> <div>Fri 22 Sept ONLINE Groundwater sampling  <div>37</div></div>	Wastewater treatment and remediation challenges <div>38</div>
 <b>CEST 17:00-19:00</b>  CST 23:00-01:00  IST 20:30-22:30  EDT 11:00-13:00  BRT 12:00-14:00	Heavy metals and mining <div>31</div>	Thu 21 Sept ONLINE 20:00-22:00  ITRC Microplastics Guideline <div>32</div>	Fri 22 Sept ONLINE  Thermal Desorption <div>39</div>	Goodbye Arrivederci Adios Au revoir Auf wiedersehen Despedida 再见 Tot ziens 

## MONDAY 18 September

### SESSION 1

#### **EUSO Dashboard for Soil Monitoring Directive and Clean Soil Outlook 2024**

Mon 18 SEPTEMBER 09:00 – 13:00 CEST **(ONLINE)**



### SESSION 2

#### **Ecological Risk Assessment: risk refinements save time and money!**

Mon 19 SEPTEMBER 14:30 – 19:00 CEST **(ONLINE)**



**US Army Corps  
of Engineers** ®

### SESSION 3

#### **Sustainathon**

Mon 18 SEPTEMBER 14:00 CEST – Tue 19 SEPTEMBER 14:00 CEST **(ONLINE)**

## TUESDAY 19 September

### SESSION 3

#### **Sustainathon**

Mon 18 SEPTEMBER 14:00 CEST – Tue 19 SEPTEMBER 14:00 CEST **(ONLINE)**



### SESSION 4

#### **ASTM E3242 - Standard Guide for Determination of Representative Sediment Background Concentrations**

Tue 19 SEPTEMBER 14:30 – 15:30 CEST **(ONLINE)**



ASTM INTERNATIONAL  
Helping our world work better

### SESSION 5

#### **Total PFAS, but what does that mean and how do you quantify it?**

Tue 19 SEPTEMBER 15:30 – 16:30 CEST **(ONLINE)**



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### SESSION 6

#### **Adaptation to climate change: how to address climate impacts such as flooding, wildfires, extreme temperature, and economic disparities**

Tue 19 SEPTEMBER 16:30 – 17:30 CEST **(ONLINE)**



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## SESSION 7

### Environmental Liability Disclosure

Tue 19 SEPTEMBER 17:30 – 18:30 CEST (ONLINE)



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## SESSION 8

### PFAS Site Screening and Initial Characterization

Tue 19 SEPTEMBER 18:30 – 19:30 CEST (ONLINE)



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## SESSION 9

### Environmental, Social, and Governance (ESG) Disclosure Related to Climate and Community

Tue 19 SEPTEMBER 20:00 – 22:00 CEST (ONLINE)



ASTM INTERNATIONAL  
Helping our world work better

## WEDNESDAY 20 September

## SESSION 10

### UK approach to risk assessment for coal mine gas emissions

Wed 20 SEPTEMBER 09:00 – 11:00 CEST (ONLINE)



## SESSION 11

### Sediment management and remediation

Wed 20 SEPTEMBER 09:00 – 11:00 CEST (WHITE ROOM 1st floor - hybrid)

## SESSION 12

### Landfills management

Wed 20 SEPTEMBER 09:00 – 11:00 CEST (EUROPE ROOM 2<sup>nd</sup> floor – hybrid)

## SESSION 13

### Applied Sustainability Assessment: Case Study Walk Through

Wed 20 SEPTEMBER 11:30 – 13:30 CEST (ONLINE)



## SESSION 14

### In situ remediation techniques

Wed 20 SEPTEMBER 11:30 – 13:30 CEST (WHITE ROOM 1st floor - hybrid)

## SESSION 15

### Sustainable remediation

Wed 20 SEPTEMBER 11:30 – 13:30 CEST (EUROPE ROOM 2<sup>nd</sup> floor – hybrid)

## SESSION 16

### Live Demo - Day 1

Wed 20 SEPTEMBER 13:50 – 16:20 CEST (Pavillion 6 - hybrid)



## SESSION 17

### Tools and Approaches to Quantify PFAS Fate and Transport in Subsurface Environments

Wed 20 SEPTEMBER 14:30 – 17:00 CEST (ONLINE)



## SESSION 18

### Life CAPTURE - Characterisation and risk assessment of PFAS contaminated sites for an efficient remediation design

Wed 20 SEPTEMBER 14:30 – 19:00 CEST (BLUE ROOM 1st floor - hybrid)



## SESSION 19

### Groundwater remediation

Wed 20 SEPTEMBER 14:30 – 16:50 CEST (WHITE ROOM 1st floor - hybrid)

## SESSION 19 bis

### Isotope and biomolecular techniques for characterization and remediation of contaminated sites

Wed 20 SEPTEMBER 15:30 – 19:00 CEST (EUROPE ROOM 2nd floor – hybrid)



## SESSION 20

### In Situ Post-Remediation Performance Evaluation

Wed 20 SEPTEMBER 17:00 – 19:30 CEST (ONLINE)



## SESSION 21

### DNAPL and chlorinated compounds treatment

Wed 20 SEPTEMBER 17:00 – 19:00 CEST (WHITE ROOM 1st floor - hybrid)

## THURSDAY 21 September

## SESSION 22

### PFAS models and microcosm studies

Thu 21 SEPTEMBER 09:00 – 11:00 CEST (WHITE ROOM 1st floor - hybrid)

## SESSION 23

### Nature based solutions

Thu 21 SEPTEMBER 09:00 – 11:10 CEST (EUROPE ROOM 2<sup>nd</sup> floor – hybrid)

## SESSION 24

### PFAS soil remediation

Thu 21 SEPTEMBER 11:30 – 13:45 CEST (WHITE ROOM 1st floor - hybrid)

## SESSION 25

### Persistent organic Pollutants

Thu 21 SEPTEMBER 11:30 – 13:45 CEST (EUROPE ROOM 2<sup>nd</sup> floor – hybrid)

## SESSION 26

### Live Demo - Day 2

Thu 21 SEPTEMBER 13:50 – 16:20 CEST (**Pavillion 6 - hybrid**)



## SESSION 27

### Contaminated sites management

Thu 21 SEPTEMBER 14:30 – 16:45 CEST (**EUROPE ROOM 2<sup>nd</sup> floor – hybrid**)

## SESSION 28

### PFAS groundwater remediation

Thu 21 SEPTEMBER 14:30 – 16:45 CEST (**WHITE ROOM 1st floor - hybrid**)

## SESSION 29

### Contaminants of Emerging Concern

Thu 21 SEPTEMBER 17:00 – 19:00 CEST (**ONLINE**)

## SESSION 30

### LNAPL and hydrocarbons remediation

Thu 21 SEPTEMBER 17:00 – 19:15 CEST (**WHITE ROOM 1st floor - hybrid**)

## SESSION 31

### Heavy metals and mining

Thu 21 SEPTEMBER 17:00 – 19:00 CEST (**EUROPE ROOM 2<sup>nd</sup> floor – hybrid**)

## SESSION 32

### ITRC Microplastics Guideline

Thu 21 SEPTEMBER 20:00 – 22:00 CEST (**ONLINE**)



## FRIDAY 22 September

## SESSION 33

### Soil remediation

Fri 22 SEPTEMBER 09:00 – 11:00 CEST (**EUROPE ROOM 2<sup>nd</sup> floor – hybrid**)

## SESSION 34

### Zero pollution - ecotoxicology for safe and sustainable remediation

Fri 22 SEPTEMBER 09:00 – 13:00 CEST (**WHITE ROOM 1st floor - hybrid**)

## SESSION 35

### Aeriforms measurements and management

Fri 22 SEPTEMBER 11:30 – 13:30 CEST (**EUROPE ROOM 2<sup>nd</sup> floor – hybrid**)





## SESSION 36

### High Resolution Site Characterization

Fri 22 SEPTEMBER 14:30 – 17:00 CEST (WHITE ROOM 1st floor - hybrid)

## SESSION 37

### Groundwater sampling

Fri 22 SEPTEMBER 14:30 – 16:30 CEST (ONLINE)

## SESSION 38

### Wastewater treatment and remediation challenges

Fri 22 SEPTEMBER 14:30 – 17:30 CEST (EUROPE ROOM 2<sup>nd</sup> floor – hybrid)

## SESSION 39

### Thermal Desorption

Fri 22 SEPTEMBER 16:30 – 18:30 CEST (ONLINE)



Credit for the cover image: JIM DEPA – JAKOB & HEFNER

## CONFERENCE

RemTech Europe, International Conference and Exhibition on land and water remediation markets and technologies, is scheduled for 18-22 September 2023.

The first two days of the conference **18-19 September** will be **fully digital**, and broadcasted in streaming. The other three days **20-22 September** will be **hybrid** so in presence but also broadcasted through Remtech platform. Anybody in the world will be able to follow every session for all the 5 days.

The aim of the Conference is to share information on knowledge, innovation and case histories, to encourage the development of remediation processes and the application of new and sustainable technologies and bring together suppliers and problem owners of available services and technologies. RemTech Europe also provides a platform for discussion between stakeholders.

The agenda is rich and is designed to promote the sharing of knowledge and intercommunication between all relevant parties. It involves all leading European stakeholders.

The annual RemTech Europe conference will take a snapshot of the European market and the development trends. Participation is **free of charge**.



## EXHIBITION

Remtech Europe will take place in the framework of RemTech Expo which is the European Environmental Technological Hub, specialized on the issues of rehabilitation, regeneration and sustainable development of territories and meets every year in September in Ferrara, Italy (20-22 September 2023).

RemTech Expo is not only a moment of representation of the current state and of sharing future perspectives, it is above all a network of international experts, operating on a permanent basis to give to public and private sector the opportunity to confront each other in a constructive and effective way by developing thoughts and projects in support of Europe. The event is organized every year in

collaboration with the main international authorities. The Hub is characterized by a qualified and broad community, made up of representatives of the public administration, supervisory bodies, private companies, innovative start-ups, universities, research centers, trade associations, professionals who develop ideas and proposals in the context of moments of discussion and intense networking, conference sessions, workshops, working groups, refresher courses, workshops for schools, technological pilot tests and cultural evenings. It consists of ten thematic segments and ten public-private Scientific Technical Committees for a total of over five hundred experts. The companies involved are over three hundred (300) among the most significant of the various supply chains involved. There are two hundred (200) congressional proposals and appointments, both national and international, with two thousand (2,000) between "Ambassadors" and speakers. One hundred (100) countries are represented, from all five (5) continents.



## WHO WILL PARTICIPATE?

RemTech Europe will draw leaders and key stakeholders from academia, government, regulatory community as well as site owners, private consulting agencies and various other environmental professionals. Here are just a few of the job titles that you will find: CEOs, Chief Scientist, Chief Hydrogeologist, Director of Environmental Projects, Drinking Water Treatment Engineer, Environmental Chemist, Environmental Remediation Engineer, Environmental Project Scientist, Field Environmental Engineer, Principal Geochemist, Project Director, Regulator, Remediation Engineer, Research Microbiologist, Restoration Project Manager, Senior Engineering Geologist, Toxicologist, Vice President of R&D, Wastewater Treatment Engineer



## 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 Modules** provided not later than **11 September** before the starting of Remtech Europe. Our secretariat will send you the link and the password to connect at the email you provided. For the Certificate of Attendance, it is necessary two months at least. It will be sent to the same email of your registration.



The registration form features a header banner with the ITRC logo, the RemTech Europe logo, and an illustration of a water drop containing a plastic bottle. Below the banner, the session title 'ITRC Microplastics Guideline' is displayed, followed by the date and time 'Date: from 20:00 CEST of 21 September 2023 - to 22:00 CEST of 21 September 2023' and the event address 'Event address: Online (ZOOM platform) with free entrance'. The form includes two input fields: 'First Name \*' and 'Last (Family) Name \*', each with a placeholder text 'Testo risposta breve'.



## HOW TO PARTICIPATE IN PRESENCE?

For who is joining us physically us in Ferrara (Italy), you have to register here not later than **18 September 2023** <https://ticket.remtechexpo.com>. **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. This is your **FREE TICKET**.

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.

E-mail \*

remtecheurope@gmail.com

Soggetto partecipante / Attendee \*

☒ Persona fisica / Private ☐ Azienda / Company

Nome / Name \*

Nome / Name campo obbligatorio / mandatory field

Cognome / Surname \*

Cognome / Surname campo obbligatorio / mandatory field

Nazionalità / Nationality \*

NESSUNA OPZIONE

Nazionalità / Nationality campo obbligatorio / mandatory field

Regione / Region \* *obbligatori solo in caso di nazionalità ITALIA / mandatory only in case of nationality ITALY*

SCEGLI UNA REGIONE

Regione / Region campo obbligatorio / mandatory field

Provincia / Province \* *obbligatori solo in caso di nazionalità ITALIA / mandatory only in case of nationality ITALY*

SCEGLI UNA PROVINCIA

Città / City \* *obbligatori solo in caso di nazionalità ITALIA / mandatory only in case of nationality ITALY*

SCEGLI UN COMUNE




# REMTECH Europe

## Registrazione avvenuta con successo

Grazie **MARCO** per esserti registrato all'evento "Remtech Expo 2023", puoi già ora ottenere il biglietto da questa pagina cliccando l'apposito pulsante oppure scaricarlo dalla mail che ti abbiamo inviato all'indirizzo indicato (controlla anche nella cartella spam).

*Thank you **MARCO** for registering for the "Remtech Expo 2023" event, you can already get the ticket from this page by clicking the appropriate button or download it from the email we sent you to the address indicated (also check your spam folder).*

 **SCARICA IL BIGLIETTO / DOWNLOAD TICKET**

[← TORNA ALLA HOME](#)

## THEN PRINT YOUR FREE TICKET

**OPERATORE /  
PROFESSIONAL**



**20-22  
SETTEMBRE 2023**

20-22 SEPTEMBER 2023

[remtechexpo.com](https://remtechexpo.com)

**STAMPA IL TUO  
BIGLIETTO  
ED ENTRA SUBITO  
IN FIERA  
PRINT YOUR TICKET  
AND VISIT  
THE SHOW**

**BIGLIETTO VALIDO PER 3  
GIORNI, 1 INGRESSO AL  
GIORNO (sono ammessi fino  
a due rientri giornalieri).**

**Il biglietto è strettamente  
personale e non cedibile e  
deve essere conservato per  
tutta la durata dell'evento. Il  
personale all'ingresso potrà  
effettuare controlli casuali  
attraverso la verifica di un  
documento di identità.**

*This ticket is strictly personal  
and non-transferable and must  
be kept for the entire duration of  
the event. The staff at the  
entrance will be able to carry  
out random checks by verifying  
an identity document.*

### ATTENZIONE

Il biglietto deve essere stampato in buona qualità e con una risoluzione di almeno 300dpi (a colori o in bianco e nero). Usando il biglietto lei accetta di osservare le norme di accesso al quartiere fieristico. I biglietti non possono essere alterati o copiati e perdono validità se il codice risulta danneggiato e non leggibile. Per questo vanno conservati con cura.

### NOTE

*Your card must be printed in good quality and with a resolution of at least 300dpi (in color or black and white). By using the ticket, you agree to observe the rules of access to the fairgrounds. Tickets cannot be altered or copied and lose validity if the code is damaged and unreadable. This is why they must be kept with care.*

## ORGANIZE YOUR TRIP TO FERRARA (GMaps

<https://goo.gl/maps/nKBmiF9FqVUzYToe9>)

### From Bologna Airport (BLQ)

Bologna's Guglielmo Marconi Airport is 45 km from the Ferrara Exhibition Centre.

'Ferrara Bus&Fly' shuttle bus service and arrive in Ferrara in just 60 minutes. The transfer to and from the airport includes 8 trips per day. For more information, visit <http://www.ferrarabusandfly.it/en/> or call +39 333 2005157. Cost is 17€ online, 20€ on board

**Taxi** is the fastest way as it takes 30 minutes and costs around 80-100 € (<http://www.taxiferrara.it/>, tel. +39 0532 900900)

**Train** takes from 35 to 50 minutes and is the cheapest way, the cost of regional train from Bologna to Ferrara is 5,20 € with more than 30 runs per day (<https://www.trenitalia.com/en.html>). To go from the Bologna Airport to the Bologna train station it takes around 25 minutes with the city bus BLQ with a cost of 6,00 €



### From Venice Airport (VCE)

**Train** takes around 1h15 and is the cheapest way, the cost of train from Venezia Mestre to Ferrara is from 9,00 to 23,90 € depending on train type and service. There are more than 30 runs per day (<https://www.trenitalia.com/en.html>). To go from the Venice Airport to the Venezia Mestre train station it takes around 20 minutes with the ATVO Airport Express Bus or Line 15 with a cost of 9,00 €.

### From Milan Malpensa Airport (FCO)

**Train** takes around 2h20 and is the cheapest way, the cost of train from Milano Centrale to Ferrara is from 25,00 to 50,00 € depending on train type and service. There are more than 20 runs per day (<https://www.trenitalia.com/en.html>). To go from the Milan Malpensa Airport to the Milano Centrale train station it takes around 50 minutes with the Malpensa Express Train with a cost of 13,00 € (<https://www.malpensaexpress.it/en/>).

### From Rome Fiumicino Airport (FCO)

**Train** takes around 2h50 and is the cheapest way, the cost of train from Roma Termini to Ferrara is from 50,00 to 75,00 € depending on train type and service. There are more than 20 runs per day (<https://www.trenitalia.com/en.html>). To go from the Rome Fiumicino Airport to the Roma Termini train station it takes around 45 minutes with the Terravision Bus with a cost of 6,00 € ([https://www.terravision.eu/airport\\_transfer/bus-fiumicino-airport-rome/?noredirect=en\\_US](https://www.terravision.eu/airport_transfer/bus-fiumicino-airport-rome/?noredirect=en_US)).

### From Bergamo Orio al Serio Airport (BGY)

**Train** takes around 3h20 and is the cheapest way, the cost of train from Bergamo to Ferrara is from 28,00 to 60,00 € depending on train type and service. There are more than 20 runs per day (<https://www.trenitalia.com/en.html>). To go from the Bergamo Orio al Serio Airport to the Bergamo train station it takes around 15 minutes with the Airport Bus with a cost of 2,60 € (<https://www.atb.bergamo.it/en>).

### From Munchen Airport (MUC)

**Train** takes around 7h and is the cheapest way, the cost of train from Munchen HBF to Ferrara is from 45,00 to 60,00 € depending on train type and service. There are 3 runs per day (<https://www.trenitalia.com/en.html>). To go from the Munchen Airport to the Munchen HBF train station it takes around 40 minutes with different means of transport and with a cost of 11-15 € (<https://www.munich-airport.com/public-transport-260822>).

## Where to sleep? Suggested accommodation

### CONVENTIONS RESERVED



HOTEL	SINGOLA	DUS	DOPPIA	TRIPLA	CONTATTI
	<i>SINGLE</i>	<i>DOUBLE SINGLE USE</i>	<i>DOUBLE</i>	<i>TRIPLE</i>	
<b>HOTEL DE PRATI</b>	€ 72,00	€ 98,00	€ 102,00		<a href="mailto:info@hoteldeprati.com">info@hoteldeprati.com</a> +39 0532 241905
<b>LUCREZIA BORGIA</b>	€ 65,00	€ 75,00	€ 94,00	€ 130,00	<a href="mailto:info@hotellucreziaborgia.it">info@hotellucreziaborgia.it</a> +39 0532 909033
<b>HOTEL TOURING</b>	Discount of 10% for booking from the site <a href="http://www.touringfe.it">www.touringfe.it</a> and from the phone Discount code "RemTech"				<a href="mailto:info@hoteltouringfe.it">info@hoteltouringfe.it</a> +39 0532206200
<b>B&amp;B NETTUNO</b>	€ 69,00	€ 69,00	€ 94,00		<a href="mailto:ferrara@hotelbb.com">ferrara@hotelbb.com</a> +39 0532 977155
<b>HOTEL CARLTON</b>	Discount 10%, Indicate discount promocode "RemTech" on site <a href="http://www.hotelcarlton.net">www.hotelcarlton.net</a>				<a href="mailto:info@hotelcarlton.net">info@hotelcarlton.net</a> +39 0532 211130
<b>HOTEL IL DUCA D'ESTE</b>	€ 75,00	€ 75,00	€ 95,00	€ 130,00	<a href="mailto:info@ilducadeste.it">info@ilducadeste.it</a> +39 0532 977676
<b>HOTEL EUROPA</b>	€ 67,00	€ 82,00	€ 100,00		<a href="mailto:info@hoteleuropaferrara.com">info@hoteleuropaferrara.com</a> +39 0532 205456
<b>HOTEL NAZIONALE</b>	€ 95,00	€ 145,00	€ 145,00		<a href="mailto:info@hotelnazionaleferrara.it">info@hotelnazionaleferrara.it</a> +39 0532 243596
<b>HOTEL OROLOGIO</b>		€ 160,00	€ 190,00		<a href="mailto:info@hotelorologio.com">info@hotelorologio.com</a> +39 0532 769576
<b>RADISSON HOTEL</b>		€ 120,00	€ 135,00		<a href="mailto:info.ferrara@radisson.com">info.ferrara@radisson.com</a> +39 351 6645647

(#) TOURIST TAX EXCLUDED

At the moment of the booking, you are request to refer to the REMTECH EXPO 2023 AGREEMENT

For further information, please contact the Organizing Secretary: Tel. + 39 0532 900713



## How to arrive from downtown Ferrara to the conference venue

### FREE REMTECH COUCH

The most convenient way is the couch of Remtech, that will leave from the city centre, pass to the train station than it will arrive to the venue. Frequency is every 50 minutes starting from 8:10 and it is free. 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	-



### BUS n.11

Bus n.11 from the Train Station "**Stazione FS**" (<https://goo.gl/maps/W3cvZhctmL6CCgfT8>) or from the Estense Castle "**Cavour Giardini**" stop (<https://goo.gl/maps/YasF8mKbm3das3DG8>) in the direction "**Chiesuol del Fosso**". The nearest stop to Ferrara fiere is "**Centro Congressi**" (<https://goo.gl/maps/NzsNWCPR4Fgvax6P7>) at 500 meters from FerraraFiere (<https://www.tper.it/fe-11>), cost is **1,50 €**. Runs from the central station (from Cavour Giardini add 5 minutes) 05:17 06:15 06:30 06:54 07:09 07:24 07:47 08:12 08:37 08:57 09:17 09:37 09:57 10:17 10:37 10:57 11:17 11:37 11:57 12:17 12:37 12:57 13:17 13:37 13:57 14:17 14:37 14:57 15:17 15:37 15:57 16:17 16:37 16:57 17:17 17:37 17:57 18:17 18:37 18:57 19:17 19:37 19:57 20:17 20:31 20:49. Timetable could change.

### TAXI

Fastest way from downtown to the venue is the taxi, the cost is around **12,00-15,00 €** and the time is around 10 minutes according to the traffic (<http://www.taxiferrara.it/>, tel. +39 0532 900900)



### WALKING

Walking is the most environmental sustainable way to reach the venue. It is 4 km from the City Centre, it takes around 50 min, but it is not suggested in hot hours and when you have luggage with you.



# NOT ONLY REMTECH EUROPE – ENJOY FERRARA AND ENJOY ITALY- ACTIVITIES & IDEAS

## CYCLETOURISM

Ferrara is the 'Italian city of bicycles'. Flat and surrounded by the water of the river Po and its tributaries, the entire Province of Ferrara is a richly evocative landscape in which land and water are the protagonists. From Cento to Comacchio, from the hinterland to the sea, there are hundreds of kilometres marked by a formidable network of cycling routes that wind between the city and the countryside, between protected oases and villages on the plains. There are simple and evocative routes such as the one along the banks of the Po River with restaurants along the way. The daily bicycle rental is 8 €. [LINK FOR MORE INFO](#)



## FERRARA CITY CENTRE IS UNESCO WORLD CULTURAL HERITAGE

Ferrara's historic centre was awarded from UNESCO the prestigious title of 'Renaissance City' in 1995 as an '*admirable example of a city designed in the Renaissance, which preserves its historic centre intact and expresses urban planning canons that have had a profound influence on the development of town planning in the following centuries*'. Some truly characteristic streets such as Via delle Volte, as well as the main square (today Piazza Trento e Trieste), beside which stands the Romanesque-Gothic Cathedral (1135). An extraordinary period began in the 12th century when the Este family settled in Ferrara, with the construction of the Castello Estense (1385), Palazzo Schifanoia (1385) and Palazzo dei Diamanti (1492). <https://whc.unesco.org/en/list/733> Guided tour costs 12€/person, [LINK FOR MORE INFO](#)



## THE HEART OF PO DELTA PARK ON HORSEBACK

The Delta breed horses, present at the Spiaggia Romea stud farm and of Camargue derivation, are ideal for peaceful walks immersed in the nature of the Po delta, thanks to their meek and docile temperament. Accompanied by a specialized guide, you can go horseback riding in an environment of extraordinary charm. Cost is 24€ [INFO LINK](#)



## THE COMACCHIO'S LAGOONS BY BOAT

Boat trips along the inner waterways of the mirror lagoon, a unique environment and spectacular home to flamingos. The guided tour includes a visit to the fishing stations. Cost is 14€. [INFO LINK](#)



## RELAX IN THE BEACHES IN “LIDI FERRARESI”

26 km of coast with beaches of white and thin sand, the seven Lidi Ferraresi are an ideal destination for a vacation at the sea with children, for the lover of open air activities and to relax. On its 26 km of coast 7 lidos follow one another: Volano, Nazioni, Pomposa, Scacchi, Porto Garibaldi, Estensi and Spina. All of them are characterized by safe beaches and equipped for families, with golden sand and a sea which reverses gently. [INFO LINK](#)



## VISIT BOLOGNA, VENICE, PADUA, FLORENCE, PISA, ROME

All these destinations are easily reachable by train from Ferrara (<https://www.trenitalia.com/en.html>)



**Bologna** 35 min



**Venice** 1h15min



**Padua** 40 min



**Florence** 1h40min



**Pisa** 2h30min



**Rome** 2h50min



# SESSION 1

## EUSO Dashboard for Soil Monitoring Directive and Clean Soil Outlook 2024

**MONDAY 18 SEPTEMBER**  
**09:00 – 13:00 CEST (Central European Summer Time)**

**ONLINE**

### Opening

**09:00** Inauguration of Remtech Europe 2023  
*Marco Falconi (Remtech Europe), Christian Wermeille (BAFU), Wouter Gevaerts (NICOLE), Alessandra Zampieri (Director, JRC, EC), Silvia Paparella (Remtech Expo)*

**09:20** Introduction from the Chairs  
*Piotr Wojda (JRC) Marco Falconi (Remtech Europe)*

### **09:30 Session 1 “Soil Monitoring Directive and EUSO Dashboard”**

- Overview on the proposal for a Soil Monitoring and Resilience Directive  
*Ion Codescu (Head of Unit, DG ENV, EC)*
- The role of EUSO Dashboard in the Soil Directive  
*Diana Vieira, Felipe Yunta, Calogero Schillaci, Arwyn Jones, Piotr Wojda (JRC, EC)*
- Soil Mission projects  
*Kirsti Loukola-Ruskeeniemi (ISLANDR)*

**11:00** Panel discussion, stakeholders questions and wrap up,  
*Piotr Wojda (EC JRC D3)*

**11:15** Coffee break

### **11:30 Session 2 “Clean Soil Outlook 2024”**

- Introduction  
*Piotr Wojda (JRC, EC)*
- Sewage Sludge in arable soils, potential heavy metals contamination  
*Felipe Yunta (JRC, EC)*
- Land Degradation and the SDG 15.3.1 indicator reporting  
*Calogero Schillaci (JRC, EC)*
- Nature Restoration Law: the use of technosols as soil amendment (*tbd*)

**12:45** Discussion and wrap up  
*Diana Vieira, Felipe Yunta, Calogero Schillaci, Arwyn Jones, Piotr Wojda (JRC, EC)*

**13:00 End of the session**

Register yourself in the Google form <https://forms.gle/vgrRLVy4aLBcHSXW7>



US Army Corps  
of Engineers ®

REMTECH  
Europe

## SESSION 2

# Ecological Risk Assessment: risk refinements save time and money!

MONDAY 18 SEPTEMBER

14:30 – 19:00 CEST (Central European Summer Time)

ONLINE

### Opening

**14:30 Introduction from the Chairs**

*Edith Martinez-Guerra (USACE), Marco Falconi (Remtech Europe)*

**14:45 Ecological Risk Assessment – Part 1**

*Cheryl Montgomery, Michelle Bourne, Brook Stevens (USACE)*

**16:25 Panel discussion**

*Edith Martinez-Guerra (USACE)*

**16:35 Coffee break**

**16:50 Ecological Risk Assessment – Part 2**

*Cheryl Montgomery, Michelle Bourne, Brook Stevens (USACE)*

**18:30 Panel discussion**

*Edith Martinez-Guerra (USACE)*

**19:00 End of the session**

Register yourself in the Google form

<https://forms.gle/f8WMX5zQgn1ebM5V7>

The introduction to this course will provide a review of the fundamentals of screening level risk assessments (SLERAs) and baseline ecological risk assessments (BERAs), stressing how problem formulation and the development of both a thorough Conceptual Site Model (CSM) and defensible Data Quality Objectives (DQO) are essential and applicable to chemical, radionuclide and physical stressors in air, water, soil or sediment for a variety of terrestrial and aquatic receptors.

The fundamental components of the risk framework allow for completion of the risk characterization, but to adapt to budget constraints and timelines, it is essential to incorporate site-specific refinements as well as questions of scale at both the problem formulation stage and while the site investigation is underway. These technically defensible, site-specific refinements produce a refined screening level risk assessment (RSLERA) that can be used to reduce the conservatism of the SLERA and focus the BERA on only those receptors truly requiring further evaluation. Both time and money are saved by being proactive in utilizing these opportunities when they present themselves throughout the site investigation process.

Through case studies and discussion, we will examine how to take a risk assessment through a sequence of technically defensible refinements to focus, streamline and expedite the risk assessment process without compromising risk to human health and the environment.



Cheryl Montgomery



Michelle Bourne



Brook Stevens



## SESSION 3

# SUSTAINATHON



**Sustainability the road to global value**

**18-19 SEPTEMBER 2023**

**From 14:00 (18 September) to 14:00 (19 September) CEST – 24 HOURS**

### 7 REASONS TO ATTEND

**ONLINE**

**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/qRRibSwKWgcaNsci9>

**Sustainathon Secretariat:** Lana Kukobat – [sustainathon2023@gmail.com](mailto:sustainathon2023@gmail.com)



## Some of the confirmed speakers

Guncha Annageldieva (TM) 	Lucila Martelli (AR) 	Sher Shah Khan (PK) 	Sreelakshmi S Menon (IN) 
Francesco La Vigna (IT) 	Lisa Kurbiel (US) 	Dong-ryul KANG (KR) 	Reinhold Mangundu (NB) 
Scott Warner (AU) 	Amaru Aragon (PE) 	Olga Olson 	Vladica Jankovic 
Thomas Jacob (IN) 	Varsha Ajmera (MY) 	Aktaruzzaman Hasan (BD) 	Awa Niang Fall (SN) 
Bulat K. Yessekin (KZ) 	James Mwangi Ndiritu (KE) 	Perez Tayebwa (UG) 	Marilyn Balmeo (US) 
Kwasi Samuel Benefto (GH) 	Ange Dorine Irakoze (BI) 	Graeme Warnell (UK) 	Diana Gutierrez 
Dyana Sari (ID) 	Venerando Gambuzza (IT) 	Valentin Mawougnigan (TG) 	Rosalina Gonzalez Forero (CO) 
Demamu Haligamo (ET) 	Mr. Bayan Mahmoud Athamneh (AE) 	Nor Ayshah Alia Binti Ali Hassan (MY) 	Pooya Payal (FJ) 
Oo cheng Keat (MY) 	Terry Long (CA) 	Gopal Mahadev (OM) 	Marija Babović (RS) 
Balmeo Marilyn (PH) 	Sohail Ahmed Ahmed (PK) 	Sawsan Elawady (EG) 	Maciej Zalewski (PL) 
Nina Koele (NZ) 	Surendra Kumar Yadav (IN) 	Juan Ignacio Tuccillo (AR) 	Manfredi Vale (IT) 
Anna Koterla (AE) 	Ileana Luminita Balan (RO) 	 Sustainability the road to global value	 Sustainability the road to global value

## SESSION 4

# ASTM E3242 - Standard Guide for Determination of Representative Sediment Background Concentrations

**TUESDAY 19 SEPTEMBER**

**14:30 – 15:30 CEST (Central European Summer Time)**

**ONLINE**

### Opening

**14:30** Welcome from ASTM International and Remtech Europe  
*Stephanie Fiorenza (ASTM International) Marco Falconi (ISPRA, Remtech Europe)*

### Presentations

**14:35** ASTM E3242 - Standard Guide for Determination of Representative Sediment Background Concentrations  
*Eric Litman (Newfields, ASTM International)*

**15:20** Questions and Answers  
*Stephanie Fiorenza (ASTM International) Marco Falconi (ISPRA, Remtech Europe)*

**15:30** End of the training



Eric Litman

Register yourself in the Google form <https://forms.gle/FUTUK7UFVDzcbYzn7>

### BRIEF DESCRIPTION OF THE TRAINING

ASTM E3242 (one of thirteen sediment-focused ASTM guides) is focused on the determination of representative sediment background concentrations used for remedial actions performed under various regulatory programs. This guide provides a framework, including specific statistical and geochemical considerations, as well as case studies, demonstrating the approach to determine representative sediment background concentrations. The presentation will discuss how to apply the guidance to contaminated sediment sites where sediment data have been collected and are readily available, as well as addressing collecting additional data. At many sediments sites, contaminants/chemicals of interest that exceed risk-based thresholds have been identified and the established risk-based thresholds are low enough to pose corrective action implementation challenges, and/or the site is subject to recontamination from ongoing anthropogenic and/or natural sources that are not controlled. In both cases, representative sediment background concentrations are useful for determining the extent of corrective remedial actions (when used as remedial goals), evaluating risks posed by representative background concentrations, and establishing appropriate post-remedial monitoring plans.

## SESSION 5

# Total PFAS, but what does that mean and how do you quantify it?

**TUESDAY 19 SEPTEMBER**

**15:30 – 16:30 CEST (Central European Summer Time)**

**ONLINE**

### Opening

**15:30** Welcome from ASTM International and Remtech Europe

*Stephanie Fiorenza (ASTM International) Marco Falconi (ISPRA, Remtech Europe)*

### Presentations

**15:35** Total PFAS, But What Does That Mean and How Do You Quantify It?

*Nick Nigro (Pace Analytical, 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/dnuW6kCeBxBaisnR6>

### BRIEF DESCRIPTION OF THE TRAINING

*This presentation will provide an international perspective on the evolving concept of “Total PFAS,” also described as evaluating “PFAS as a Class.”*

*First, we will offer an overview of the definition of PFAS using two categorical lenses: (a) per-, poly-, and polymers, vs. (b) volatile, semivolatile, and nonvolatile. Understanding these concepts will be central to the discussion of available laboratory methods.*

*Second, we will provide an international perspective on the definition of “PFAS” – how many compounds are there? And whose definition is correct?*

*Third, we will talk about the various jurisdictions and regulations where the concept of “total PFAS” is being discussed, including some stakeholders using TOF as a proxy estimate.*

*Finally, we will discuss the current and evolving methods for quantifying “total PFAS” (however so defined). With the rapid advancement of PFAS restrictions and bans in Consumer Products, this final section will discuss a wide range of environmental and commercial matrices.*



Nick Nigro

## SESSION 6

# Adaptation to climate change: how to address climate impacts such as flooding, wildfires, extreme temperature, and economic disparities

TUESDAY 19 SEPTEMBER

16:30 – 17:30 CEST (Central European Summer Time)

**ONLINE**

### Opening

**16:30** Welcome from ASTM International and Remtech Europe

*Stephanie Fiorenza (ASTM International) Marco Falconi (ISPRA, Remtech Europe)*

### Presentations

**16:35** Adaptation to climate change: how to address address climate impacts such as flooding, wildfires, extreme temperature, and economic disparities. The New Guide for Climate and Community Mapping

*Barbara Maco, Cynthia Annett, Stephanie Fiorenza (ASTM International)*

**17:20** Questions and Answers

*Stephanie Fiorenza (ASTM International) Marco Falconi (ISPRA, Remtech Europe)*

**17:30** End of the training

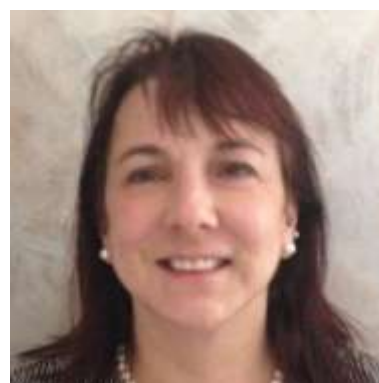
Register yourself in the Google form <https://forms.gle/Wkmic6kjZLdAeSq37>



Barbara Maco



Cynthia Annett



Stephanie Fiorenza



## SESSION 7

### Environmental Liability Disclosure

TUESDAY 19 SEPTEMBER

17:30 – 18:30 CEST (Central European Summer Time)

**ONLINE**

#### Opening

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

#### Presentations

**17:35** Environmental Liability Disclosure  
*John Rosengard (Environmental Risk Communications, 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/ySvgyymbGUZpcKUoj7>

#### BRIEF DESCRIPTION OF THE TRAINING

*With the development of Federal environmental laws, new accounting principles and stakeholder expectations have become part of the ASTM Standard setting activity. This course reviews ASTM standard guides covering the valuation, settlement and reporting of all types of environmental liabilities.*



John Rosengard

## SESSION 8

### PFAS Site Screening and Initial Characterization

**TUESDAY 19 SEPTEMBER**  
**18:30 – 19:30 CEST (Central European Summer Time)**

**ONLINE**

#### Opening

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

#### Presentations

**18:35** PFAS Site Screening and Initial Characterization  
*Paul Sonnenfeld (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/KeGU3txkjFd9gzPB9>



Paul Sonnerfeld

## SESSION 9

### Environmental, Social, and Governance (ESG) Disclosure Related to Climate and Community

**TUESDAY 19 SEPTEMBER**  
**20:00 – 22:00 CEST (Central European Summer Time)**

**ONLINE**

#### Opening

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

#### Presentations

**20:05** Environmental, Social, and Governance (ESG) Disclosure  
Related to Climate and Community  
*Eileen Snyder (Alpha Analytical, ASTM International)*

**21:50** Questions and Answers  
*Stephanie Fiorenza (ASTM International) Marco Falconi (ISPRA, Remtech Europe)*

**22:00** End of the training



Eileen Snyder

Register yourself in the Google form <https://forms.gle/feFhGFpK552AATFu5>

#### BRIEF DESCRIPTION OF THE TRAINING

ASTM (E50.07) task group WK77095 is in the process of developing a new standard guide for Environmental, Social, and Governance (ESG) Disclosure Related to Climate and Community. This new guide outlines the major ESG reporting frameworks and the regulations that require ESG disclosures, as well as resources for organizations that disclose this type of information. This guide includes information data sources and metrics; materiality determinations that address legal and financial reporting; and communications methods and best practices for making ESG disclosures. This task group, which formed in May 2021, is working through the ASTM ballot process. Once published, this new guide will be updated frequently as the ESG disclosures regulatory landscape changes.

## SESSION 10

### UK approach to risk assessment for coal mine gas emissions

WEDNESDAY 20 SEPTEMBER  
09:00 – 11:00 CEST (Central European Summer Time)

**ONLINE**

#### Opening

**09:00** Introduction from the Chairs

*Nicola Harries (CL:AIRE) Marco Falconi (Remtech Europe)*

**09:10** UK approach to risk assessment for coal mine gas emissions

*Steve Wilson and Amy Juden (Environmental Protection Group, CL:AIRE)*

**10:50** Panel discussion, stakeholders questions and wrap up, *Nicola Harries (CL:AIRE)*

**11:00** *End of the Training*

Register yourself in the Google form <https://forms.gle/GycgVfxsGByR5pPq6>



Amy Juden - ERP, CL:AIRE



Steve Wilson - ERP, CL:AIRE



## SESSION 11

### Sediment management and remediation

WEDNESDAY 20 SEPTEMBER

09:00 – 11:00 CEST (Central European Summer Time)

White Room 1° floor
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#### Opening

**09:00** Welcome from *Marco Falconi (ISPRA)* and introduction from the Chairs: *Christiane Wermeille (BAFU)*, *Piotr Wojda (JRC)*, *Mentore Vaccari (UniBS)*

#### Presentations

**09:05** Radionuclide concentration in the sediments of the sacca di Goro (Italy)  
*Chiara Telloli, Antonietta Rizzo (ENEA), Elena Marrocchino, Carmela Vaccaro (University of Ferrara)*

**09:20** Synthesis and possibility of application of magnesium titanates based photocatalysts for reduction of environmental contaminants in sediments  
*Jelena Beljin, Nina Đukanović, Nataša Slijepčević, Tamara Apostolović, Marijana Kragulj Isakovski, Snežana Maletić (University of Novi Sad) Iryna Matsukevich (National Academy of Sciences of Belarus)*

**09:35** Multi-level approach of the characterization of riverine sediments affected by unauthorized chemical wastes managements. Results from Contaminated Site of National Interest "Bussi sul Tirino"  
*Antonio Diligenti, Gianluca Marinelli (ARTA Abruzzo)*

**09:50** LIFE NARMENA: Nature based remediation techniques for heavy metals in sediment - constructed wetlands  
*Axelle Mineur, Jan De Vos (ABO nv), Froukje Kuijk (OVAM, Mechelen), Karel Viaene (ARCHE), Dirk Dubin (bio2clean BV)*

**10:05** Use of sunflower for plant-assisted bioremediation of a degraded soil mixed with marine sediments contaminated by polychlorobiphenyls  
*Valeria Ancona, Giorgia Aimola, Marina Tumolo, Paola Grenni, Gian Luigi Garbini, Livia Mariani, Anna Barra Caracciolo (CNR - Water Research Institute), Angela Gatto (CNR - Institute of Sciences of Food Production), Daniela Napolitano, Vito Alessio Lacirignola (CISA)*

**10:20** Panel discussion moderated by chairs

**11:00** End of the session

Register yourself in the Google form <https://forms.gle/avZaHR2v3rmg11At5>

## SESSION 12

### Landfills management

WEDNESDAY 20 SEPTEMBER

09:00 – 11:10 CEST (Central European Summer Time)

Europe Room  
2<sup>o</sup> floor

#### Opening

**09:00** Welcome from *Marco Falconi (ISPRA)* and introduction from the Chairs: *Wouter Gevaerts (NICOLE)*, *Laurent Thannberger (RNEST)*, *Deyi Hou (Tsinghua University)*

#### Presentations

- 09:05** Field application of endophytic fungi and *alocasia calidora* for effective remediation of heavy metal contaminated landfill soil  
*Auwalu Hassan (Federal University of Kashere)*, *Fauziah Shahul Hamid (University of Malaya)*  
*Agamuthu Pariatamby (Sunway University)*
- 09:20** A risk based Plan of inspections at waste recycling installations: the experience at the Sardinian Environmental Protection Agency  
*Romano Ruggeri, Lorenzo Cau, Simonetta Fanni, Mauro Iacuzzi, Veronica Lecca (Sardinian Regional Environmental Protection Agency (ARPAS))*
- 09:35** Landfill diversion: Repurposing Construction & Demolition waste & advancing the circular economy  
*Jelena Hercegovac (Repurposelt)*
- 09:50** Screening and Optimisation of the Biodegradation Potential for Low Density Polyethylene (LDPE) Films by *Fusarium Equiseti* and *Brevibacillus Parabrevis*  
*Sally A.Ali, Shima Zakarya, Shima Khaled (Helwan University)*
- 10:05** Safety considerations about biodigesters in the biogas productionImplementation of a multi-sensor protocol for the evaluation of diffuse methane emissions in landfill sites  
*Romualdo Marrazzo (ISPRA)*, *Cosetta Mazzini (ARPAE)*
- 10:20** Implementation of a multi-sensor protocol for the evaluation of diffuse methane emissions in landfill sites  
*Bruno Notarnicola, Pietro Alexander Renzulli, Maurizio De Molfetta, Rosa Di Capua, Gianfranco Spizzirri, Francesco Astuto (University of Bari)*
- 10:35** Panel discussion moderated by chairs
- 11:00** End of the session

Register yourself in the Google form <https://forms.gle/T8CLXa3eoAsMgIq87>

## SESSION 13

# Applied Sustainability Assessment: Case Study Walk Through

**WEDNESDAY 20 SEPTEMBER**  
**11:30 – 13:30 CEST (Central European Summer Time)**

**ONLINE**

### Opening

**11:30** Introduction from the Chairs

*Nicola Harries (CL:AIRE) Marco Falconi (Remtech Europe)*

**11:40** Applied Sustainability Assessment: Case Study Walk Through

*Richard Gill (Shell, CL:AIRE), Alan Thomas (ERM, CL:AIRE) and Paul Bardos (r3 environmental technology, CL:AIRE)*

**13:20** 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/Vd2ttcdxrogYBQJD7>



Richard Gill - Shell, CL:AIRE



Alan Thomas - ERM, CL:AIRE



Paul Bardos – r3, CL:AIRE

## SESSION 14

### In situ remediation techniques

WEDNESDAY 20 SEPTEMBER  
11:30 – 13:30 CEST (Central European Summer Time)

White Room  
1<sup>o</sup> floor

#### Opening

**11:30** Welcome from *Marco Falconi (ISPRA)* and introduction from the Chairs: *Iustina Boaja (IGR)*, *Mentore Vaccari (UniBS)*, *Natalia Rodriguez Eugenio (FAO)*

#### Presentations

**11:35** Treatment of hydrocarbon-contaminated soils with biosurfactants obtained from agricultural wastes  
*Teklit Ambaye, Mentore Vaccari (University of Brescia), Francesca Formicola, Andrea Franzetti (University of Milano-Bicocca), Silvia Scaffoni (ENEA - Sustainability Department)*

**11:50** Last updates for in situ applications, lessons learned from several field cases  
*Laurent Thannberger, Matthieu Sangely (Valgo)*

**12:05** Injection of colloidal reagents for in situ soil remediation: lessons learned on more than 100 projects over Europe  
*Jeroen Vandenbruwane, Lionel Counet, Bram Vandekerhove (Injectis)*

**12:20** The evolution of two remediation methods: combined in situ stabilization (ISS) and in situ chemical oxidation (ISCO)  
*Brant Smith, Josephine Molin (Evonik Active Oxygens), Alberto Leombruni (Evonik Operations)*

**12:35** Thermal remediation of a DNAPL source in fractured rock  
*Niels Ploug, Jesper Holm, Fredrik Engelcke (Krüger)*

**12:50** Remediation of the most polluted site in Latvia – Incukalna acid tar ponds  
*Linda Einika (The State Environmental Service of Latvia)*

**13:05** Panel discussion moderated by chairs

**13:30** End of the session

Register yourself in the Google form <https://forms.gle/iNWUPduxbf7down66>





## SESSION 15

### Sustainable remediation

WEDNESDAY 20 SEPTEMBER

11:30 – 13:30 CEST (Central European Summer Time)

Europe Room  
2<sup>o</sup> floor

#### Opening

**11:30** Welcome from *Marco Falconi (ISPRA)* and introduction from the Chairs: *Frank Swartjes (RIVM)*, *Felipe Yunta (JRC)*, *Sergejus Ustinov (FAO)*

#### Presentations

- 11:35** A sustainable approach for DNAPLS contaminated groundwater remediation: raw polyhydroxyalkanoates (PHA) from organic waste as electron donor for biological reductive dechlorination coupled with adsorption on biochar  
*Laura Lorini, Lorenzo Gianni, Marco Petrangeli Papini (University of Rome La Sapienza) Bruna Matturro (National Research Institute)*
- 11:50** Sustainable soil management using Ground Penetrating Radar technique  
*Constantina Filipciuc, Elena Tudor, Irina Stoian, Avram Ovidiu, Ioan Scutelnicu, Antonio Ulmeanu, Adrian Tătaru, Iustina Boaja (Geological Institute of Romania)*
- 12:05** Sustainable remediation: quantitative evaluation of carbon and water footprint reduction for in-situ groundwater bioremediation vs. pump&treat  
*Piero Mori, Edoardo Masut, Michele Remonti, Tania Fantasia, Michela Sangalli, Ximena Ferreyra Marinucci (ERM Italia)*
- 12:20** Integrated use of screening matrix, sustainability criteria and engagement for design remediation of an agricultural site  
*Paolo Angelini, Fabio Allegrini, Marcello Mancini, Marcello Pianu, Valentina Raffaele (Eni – Energy Evolution Green), Manuel Valagussa, Valentina Vieri, Alberto Francioli, Diego Donati, Davide Colombo (HPC Italia)*
- 12:35** Sustainable remediation: an approach to reach and completely destroy contaminant mass in low-permeability storage zones with high-resolution data  
*Cesar Malta-Oliveira, Sandro Souto, Felipe Sisto, Taisi Marrone, Mateus Simonato (Finkler Sustainable Technologies)*
- 12:50** Risk assessment applied to backfill materials non-compliant to leaching test as defined by Law no. 108 of July 29, 2021  
*Elena Leide, Andrea Guerini, Gianbattista Attinasi, Federica Quaresmini (NCE)*
- 13:05** Transforming Environmental Restoration: TISRTM - A Sustainable Approach for Contaminant Remediation  
*Jonah Munholland (Arcadis)*
- 13:20** Panel discussion moderated by chairs
- 13:45** End of the session

Register yourself in the Google form <https://forms.gle/16eoj6K4hVMrfhue7>





# LIVE DEM



## SESSION 16

### Live Demo Day 1

WEDNESDAY 20 SEPTEMBER

13:50 – 16:20 CEST (Central European Summer Time)

**Pavilion 6**

**13:50 Meeting at the entrance of Pavilion 6 with the Chairs**

*Paola Grenni (CNR), Giovanni Savarese (ARPA Lazio), Laurent Thannberger (RNEST)*

**14:00 3D-Georadar**

*Maurizio Porcu (Codevintec)*

**14:20 Polyethylene Passive Samplers**

*Guido Bonfedi (Eni Rewind), Mario Salvalaggio (Eni), Antonella Vecchio (ISPRA)*

**14:40 Qualitative and quantitative analysis with LIBS technology**

*Luca Marta, Chiara Fumagalli, Luca Lorenzi (Smart NDT)*

**15:00 Coffee break in field**

**15:10 Vapor Pin®, a device for soil gas sub slab**

*Laurie Chilcote (Cox-Colvin), Alessia Fortunati (Ecosearch)*

**15:30 UVOST® system**

*Claudio Carusi (Mares), Eugen Martac (Fugro), Thilo Hartung (Fugro)*

**15:50 Thearen Non Stationary Flux Chambers**

*Luca Spinelli (Thearen)*

**16:10 Gadgets and certificates**

**16:20 End of the session**

Register yourself in the Google form <https://forms.gle/ERb76pNivRvDerut6>



rewind



CODEVINTEC



## SESSION 17

### Tools and Approaches to Quantify PFAS F&T

WEDNESDAY 20 SEPTEMBER  
14:30 – 17:00 CEST (Central European Summer Time)

**ONLINE**

#### Opening

**14:30** Welcome from SERDP-ESTCP International and Remtech Europe  
*Marvin Unger (SERDP-ESTCP), Marco Falconi (ISPRA, Remtech Europe), Frank Swartjes (RIVM)*

#### Presentations

**14:35**

- “PFAS Leaching at AFFF-Impacted Sites: Insight into Soil-to-Groundwater Ratios” by Dr. Charles Schaefer (ESTCP Project ER20-5088)
- “PFAS Bioaccumulation in Freshwater Fish ” by Dr. Christopher Salice (SERDP Project ER19-1193)
- “Development and Validation of Novel Techniques to Assess Leaching and Mobility of PFAS in Impacted Media” by Dr. Jennifer Guelfo (SERDP Project ER20-1126)
- “In Silico Estimation of PFAS Properties” by Dr. Paul Tratnyek (SERDP Project ER20-1481)

**16:50** Questions and Answers  
*Marvin Unger (SERDP-ESTCP), Frank Swartjes (RIVM)*

**17:00** End of the training

Register yourself in the Google form <https://forms.gle/iSoBkMZXg9gpZbbQA>



Charles Schaefer



Christopher Salice



Jennifer Guelfo



Paul Tratnyek

## SESSION 18

# LIFE CAPTURE: Characterisation and risk assessment of PFAS contaminated sites for an efficient remediation design

WEDNESDAY 20 SEPTEMBER

14:30 – 19:00 CEST (Central European Summer Time)

**Blue Room**  
**1° floor**

### Opening

**14:30** Welcome from *Marco Falconi (ISPRA)* and introduction from the Chairs, *Valeria Mezzanotte (UniMiB)*, *Jan De Vos (ABO)*

### **14:30**      Session: part 1

- 1) "Combining novel Analytical protocols for PFAS contamination with Technologies for sustainable Remediation", *Axelle Mineur (ABO)*
- 2) "Sampling and analysis of PFAS in soil and groundwater: novel three-step protocol", *Laurens Siemons (SGS)*
- 3) "Design of pilot treatment trains for PFAS soil and groundwater treatment", *Silvia Franz (POLIMI)*, *Lutz Ahrens (SLU)*
- 4) "Risk assessment of PFAS contamination and impact on water resources: approaches and mitigation undertakings", *Emilio Brivio Sforza (UniMiB)*, *Paolo Ronco (Viacqua)*
- 5) "Field pilot tests for PFAS treatment of soil and groundwater: upscaling and implementation of innovative remediation technologies", *Michaela Bhend (GREENSOIL)*
- 6) "On-site pilot testing of the remediation technologies with new analytical and sampling protocols", *Marjan Joris (IFLUX)*

### **16:00**      Coffee Break

### **16:30**      Session: part 2

- 1) "Determinants of PFOA serum half-life after end of exposure: a longitudinal study on highly exposed subjects in the Veneto region", *Cristina Canova (University of Padova)*
- 2) "Fate and emission pathways of PFAS in full-scale plants for landfill leachate treatment", *Massimiliano Sgroi (Universita Politecnica delle Marche)*, *Nicola Lancioni (PROMISCES project)*
- 3) "Pilot and lab scale experiences for PFAS treatment in landfill leachate", *Edoardo Slavik (Erica)*
- 4) "PFAS removal in (waste)water via non-thermal plasma (ntp) treatment PFAS treatment in groundwater", *Wouter De Weirde, Sergio Vignali (Tectero)*
- 5) "LIFE FOUNTAIN: Per and polyfluorinated Alkyl Substances in groundwater: water treatment for industrial use in the surface finishing industry", *Davide Ceriotti (POLIMI)*
- 6) Open discussion & Questions

### **18:00-19:00**      Aperitif

Register yourself in the Google form <https://forms.gle/odyHTs6Qe7pN9P93A>



# REMTECH Europe

## SESSION 19

### Groundwater Remediation

WEDNESDAY 20 SEPTEMBER

14:30 – 16:50 CEST (Central European Summer Time)

White Room  
1<sup>o</sup> floor

#### Opening

**14:30** Welcome from *Marco Falconi (ISPRA)* and introduction from the Chairs: *Piotr Wojda (JRC)*, *Christiane Wermeille (BAFU)*, *Jussi Reinikainen (SYKE)*

#### Presentations

**14:35** Field test of a pilot scale sequential reductive/oxidative bioelectrochemical processes for cabs removal from contaminated groundwaters  
*Edoardo Dell'Armi, Marco Zeppilli, Paolo Ciampi, Marco Petrangeli Papini ("La Sapienza" University of Rome)*

**14:50** Surfactant Enhanced Extraction of NAPL, Globule, and Sorbed Phase Contamination Resolving Primary Hydro-Geo-Chemical Limitations  
*George A. Ivey, B.Sc, CES, CESA, P.Chem (Ivey International Inc)*

**15:05** Green synthesis of nZVI with common reed and its application in Fenton-like decolorization process  
*Nataša Slijepčević, Aleksandra Kulić Mandić, Đurđa Kerkez, Anita Leovac Maćerak, Dunja Rađenović, Milena Bečelić-Tomin, Dragana Tomašević Pilipović (University of Novi Sad)*

**15:20** Technology for Continuous, In-Situ Production of Reactive Oxygen Species  
*Troy Lizer, Will Moody (Provectus Environmental Products), Claudio Sandrone (BAW Remediation Technologies), Elie Elgressy (Elgressy Ltd.)*

**15:35** Activation of persulfate and peroxymonosulfate by zero-valent iron and iron-copper bimetal for the chemical oxidation of halogenated contaminants in water  
*Giovanni Scaggiante, Daniela Zingaretti, Renato Baciocchi (University of Tor Vergata), Alicia Checa-Fernandez, Carmen Maria Dominguez, Aurora Santos (University Complutense Madrid)*

**15:50** Accurate distribution and its importance for the treatment of petroleum hydrocarbons using colloidal activated carbon  
*Todd Herrington, Mariangela Donati, Marcello Carboni (Regenesis)*

**16:05** Adsorption process as the best available treatment technology for PFAS removal from water: current gaps and research needs  
*Erica Gagliano (University of Genoa), Massimiliano Sgroi (Polytechnic University of Marche), Pietro P. Falciglia, Federico G.A. Vagliasindi, and Paolo Roccato (University of Catania)*

**16:20** Development and testing of an algorithm for the dynamic management of a multiple and interfering hydraulic barrier system  
*Roberta Perico, Giorgio Volpi, Elena Leale (AECOM), Paola Frattini, Giovanni Prassede (Eni Rewind)*

**16:35** Panel discussion moderated by chairs

**16:50** End of the session

Register yourself in the Google form <https://forms.gle/BDZhk6611DD3ipxr9>



SESSION 19 BIS

Isotope and biomolecular techniques for  
characterization and remediation of contaminated  
sites

WEDNESDAY 20 SEPTEMBER

15:30 – 19:00 CEST (Central European Summer Time)

Europe Room  
2<sup>o</sup> floor

**Opening**

**15:30** Welcome from *Marco Falconi (ISPRA)* and introduction from the Chairs: *Tatiana Stella (M3R)*,  
*Massimo Marchesi (IT2 Laboratories)*

**Presentations**

**15:45** Theory and application principles of biomolecular techniques, in particular new generation sequencing (NGS) and quantitative PCR (qPCR) techniques for the microbiological characterization of contaminated sites and for the definition and monitoring of site-specific bioremediation interventions. Application cases in Italy will be presented.  
*Tatiana Stella, Valentina Rivelli (M3R)*

**16:45** *Coffee break*

**17:00** Theory, Modeling and application application of isotope techniques, in particular CSIA (Compound-Specific Isotope Analysis) for the characterization of contaminated site by chlorinated solvents and hydrocarbons with regard to forensic aspects (identification of the source) and the monitoring of physical (SVE, Bio-sparging, etc.) chemical (ISCO, PRB, etc.) and biological (MNA, Enhanced Biodegradation, Landfarming, etc.) remediation interventions. Application cases in Italy and North America will be presented.  
*Massimo Marchesi, Orfan Shouakar-Stash (IT2 Laboratories)*

**18:00** Cases of application of isotopic and biomolecular techniques (e-limina<sup>®</sup> brand, acronym for Eni Linking Isotopic and Microbial Investigations aid Natural Attenuation) at contaminated sites  
*Ilaria Pietrini (Eni)*

**18:30** Concluding remarks and Q&A  
*Tatiana Stella (M3R), Massimo Marchesi (IT2 Laboratories)*

**19:00** End of the session

Register yourself in the Google form <https://forms.gle/kYm2wnaobbiKax7r7>



## SESSION 20

# In Situ Post-Remediation Performance Evaluation

WEDNESDAY 20 SEPTEMBER  
17:00 – 19:30 CEST (Central European Summer Time)

**ONLINE**

### Opening

**17:00** Welcome from SERDP-ESTCP International and Remtech Europe

*Marvin Unger (SERDP-ESTCP), Marco Falconi (ISPRA, Remtech Europe), Frank Swartjes (RIVM)*

### 17:05 Presentations

- Post-Remediation Performance Assessment at a Petroleum Impacted Site/ Jovan Popovic, Ph.D., NAVFAC

The primary objective of this project was to help the Department of Defense (DoD) and others make a stronger case for closure of legacy petroleum sites, and expand users' knowledge of high-impact methods that can better reveal the actual risk associated with LNAPL presence and therefore help stakeholders make more informed remediation decisions.

- Assessing Post-bioremediation Sustained Treatment - Fact Sheet/ Travis McGuire, GSI Environmental Services, Inc.

The objectives of this project were: i) to develop new process knowledge on how to measure and demonstrate sustained treatment following application of ISB and ii) to evaluate and quantify MNA processes in low-K matrix diffusion zones. This Fact Sheet summarizes efforts under ESTCP project, "Performance of Two Technologies to Control Difficult-to-Treat Matrix Diffusion Zones: Post-Bioremediation Sustained Treatment and MNA in Low Permeability Units.

- MNA Rate Constant Estimator User's Guide and Tool/ Anthony Danko, Ph.D., NAVFAC EXWC

The MNA Rate Constant Estimator is a screening model that simulates natural attenuation of dissolved compounds in groundwater. The software has been programmed using the Microsoft Excel platform and has the ability to simulate 3-D solute transport that incorporates advection-dispersion, linear adsorption, and various transformation processes using a modification of the analytical solutions developed by Wexler (1992)

### 19:20 Questions and Answers

*Marvin Unger (SERDP-ESTCP), Frank Swartjes (RIVM)*

### 19:30 End of the training

Register yourself in the Google form <https://forms.gle/BMpWNxZMkTaX9hcDA>

## SESSION 21

### DNAPL and chlorinated compounds treatment

WEDNESDAY 20 SEPTEMBER

17:00 – 19:00 CEST (Central European Summer Time)

White Room  
1<sup>o</sup> floor

#### Opening

**17:00** Welcome from *Marco Falconi (ISPRA)* and introduction from the Chairs: *Piotr Wojda (JRC)*, *Wouter Gevaerts (NICOLE)*, *Iustina Boaja (IGR)*

#### Presentations

**17:05** Surfactant Enhanced Extraction of Carbon Tetrachloride Source Zone At Active Grain Elevator Facility

*George A. Ivey, B.Sc, CES, CESA, P.Chem (ivey International) Eric Dulle (Burns & McDonnell)*

**17:20** In-Situ Remediation of DNAPL Source and Plume at an Active Industrial Facility with Innovative Enhanced Reductive Dichlorination Technology

*Gabriele Giorgio Ceriani (Ejlskov)*

**17:35** Chlorinated solvent daughter product management and expedited remediation

*Michael Mazzaresse (AST Environmental)*

**17:50** Metagenomics of a bioreactor with polyhydroxybutyrate (PHB) and biochar as biomaterials to prompt reductive dechlorination

*Bruna Matturro, Maria Letizia Di Franca, Simona Rossetti, Laura Lorini (National Research Council), Marta Maria Rossi, Marco Petrangeli Papini (University of Rome La Sapienza)*

**18:05** Constructed wetland bioremediation of chlorinated organic compounds in a groundwater capture and reinjection system

*William Pepe, Richard Sellen (Stantec), Scott Wallace (Naturally Wallace) Edward Kolodziej (General Electric), Marco Lassini (Stantec)*

**18:20** Panel discussion moderated by chairs

**19:00** End of the session

Register yourself in the Google form <https://forms.gle/evFfMGcbl3NlfPky7>





## SESSION 22

### PFAS models and microcosm studies

THURSDAY 21 SEPTEMBER

09:00 – 11:00 CEST (Central European Summer Time)

White Room  
1<sup>o</sup> floor

#### Opening

**09:00** Welcome from *Marco Falconi (ISPRA)* and introduction from the Chairs: *Wouter Gevaerts (NICOLE)*, *Edith Martinez-Guerra (USACE)*, *Sergejus Ustinov (FAO)*

#### Presentations

- 09:05** Microbially mediated PFAS degradation, a microcosm study  
*Patrizia Pretto (Biosearch Ambiente)*, *Massimo Carmagnani*, *Carla Indorato (Gestore del servizio idrico integrato Acque Veronesi)*, *Francesca Bruni*, *Andrea Negroni*, *Giulio Zanaroli (Bologna University)*
- 09:20** Environmental forensics: challenges, opportunities and limitations of source-tracking PFAS contamination under complex site conditions  
*Patrick Jacobs*, *Vera Koss*, *Doreen Mäurer*, *Sadjad Mohammadian*, *Florian Wölfl (Tauw)*, *Alberto Guadagnini*, *Angeliki Koupa*, *Giovanni Porta*, *Monica Riva (Politecnico di Milano)*
- 09:35** Webgis of potential PFAS sites in Italy  
*Valerio Caroselli*, *Stefania Annicchiarico (Iptsat)*
- 09:50** Complex groundwater flow and contaminant transport model for groundwater management of a PFAS contaminated site  
*Michele Remonti*, *Alberto Stefania*, *Gerd Van Den Daele*, *Nicholas Gwyther*, *Dirk Nuyens (ERM)*
- 10:05** PFAS leaching test and soil threshold calculations by means of analytical models  
*Francesca Motta*, *Stefania Verdelocco*, *Giorgio Volpi (AECOM)*
- 10:20** The PFAS Risk Management Strategy  
*Nicolas Pycke*, *Jolanda Boisson (Antea Group)*
- 10:35** Panel discussion moderated by chairs
- 11:00** End of the session

Register yourself in the Google form <https://forms.gle/mTzHsbYwNYjic6gg6>



## SESSION 23

### Nature based solutions

THURSDAY 21 SEPTEMBER

09:00 – 11:10 CEST (Central European Summer Time)

Europe Room  
2<sup>o</sup> floor

#### Opening

**09:00** Welcome from *Marco Falconi (ISPRA)* and introduction from the Chairs: *Frank Swartjes (RIVM)*, *Paola Grenni (CNR)*, *Natalia Rodriguez Eugenio (FAO)*

#### Presentations

- 09:05** The soil-OMIC for soil and groundwater decontamination, an integrated chemical-physicalbiological process supported by metabarcoding by next generation sequencing of soil bacterial communities  
*Simone Becarelli, Simona Di Gregorio (University of Pisa), Serena Doni (CNR-IRET), Carlos Garcia Izquierdo (CEBAS-CSIS), Alessandro Gentini (Teseo Bonifiche)*
- 09:20** Investigation on microbial community composition of Biological tricklingdeodorant tower efficiency with and without nutrients supply.  
*Hyacinth Wong (Zhengzhou nonferrous metal research institute)*
- 09:35** Towards rapid and sensitive biomonitoring tools for bioremediation: exploring digital droplet PCR as a thirdgeneration quantification method  
*Bruna Matturro, Maria Letizia Di Franca, Simona Rossetti, Laura Lorini (National Research Council)*
- 09:50** Application cases of bioremediation, experiences on phytoremediation of agricultural areas contaminated by hydrocarbons  
*P. Angelini, F. Allegrini, M. Mancini, M. Pianu M. (Eni), A. Francioli, G. Cerutti, D. Donati, L. Camilla (HPC), T. Stella (M3R), A. Franzetti, S. Citterio, E. Casati (University Milano Bicocca)*
- 10:05** Tolerance threshold and phyto-assessment of cadmium and lead in vetiver grass  
*Chuck Chuan Ng (China-ASEAN College of Marine Sciences, Xiamen University Malaysia)*
- 10:20** Feasibility of mycoaugmentation in the clean-up of TPH-contaminated soils: THE LIFE MYSOIL Project  
*Flora Bagnato, Guido Bonfedi, Rachele Ciacciarelli, Federico Villani (Eni Rewind), Silvia Crognale, Alessandro D'Annibale, Andrea Firrincieli, Davide Lelli, Maurizio Petruccioli (University of Tuscia - DIBAF)*
- 10:35** From tree pruning wastes to Sustainable Soil Remediation  
*Laura Passatore, Serena Carloni, Valentina Mazzurco Miritana, Eleonora Peruzzi, Fabrizio Pietrini, Massimo Zacchini, Isabel Nogues (CNR - Research Institute on Terrestrial Ecosystems) Alessio Cherubini, Sara Marinari, Luisa Massaccesi (DIBAF - University of Tuscia)*
- 10:50** Panel discussion moderated by chairs
- 11:10** End of the session

Register yourself in the Google form <https://forms.gle/jpVYqFow9hkDYycb6>

## PFAS soil remediation

THURSDAY 21 SEPTEMBER

11:30 – 13:45 CEST (Central European Summer Time)

White Room  
1° floor

### Opening

**11:30** Welcome from *Marco Falconi (ISPRA)* and introduction from the Chairs: *Piotr Wojda (JRC)*, *Jussi Reinikainen (SYKE)*, *Dietmar Müller-Grabherr (COMMON FORUM)*

### Presentations

**11:35** What is the environmental footprint of per-and polyfluoroalkyl substances (PFAS) treatment technologies for liquid and solid?

*Claudio Albano, Alessandro Monteverdi, Nicoletta Cavaleri (Jacobs Italy), Paige Molzahn, Betsy Collins, Bill Diguiseppi, Paul Favara, Scott Grieco (Jacobs US)*

**11:50** Immobilisation: a viable solution for large volumes of diffuse PFAS cont'd soil at airports

*Dr Matthew Askeland, Mubiana Matakala (ADE Consulting Group), Richard Stewart (RemBind), Nick Walker (Australia Pacific Airports Melbourne (APAM)), Thomas Hanley (EDCORP Project Solutions), Nial Finegan (EDCORP Project Solutions), Alison Price (SoilCyclers)*

**12:05** Successful treatment of PFAS-contaminated soils on large scale: practical experience with improved soil-washing

*Benjamin Faigle, Bernhard Volz, Hans-Georg Edel, Simone Alberio (Zueblin Umwelttechnik)*

**12:20** Surface active foam fractionation (SAFF) treating PFAS contaminated soil wash water, coupled with electrochemical oxidation for destruction of foam concentrate

*Helena Hinrichsen, Robin Axelson (Envytech)*

**12:35** PFAS-contaminated soil management: Learned lessons from soil-washing treatment strategies implemented in France and Belgium

*Marco Droghetti, Vincenzo Bennici, Olivier Sibourg, Boris Devic-Bassaget, Patrice Imberti (SARPI Remediation)*

**12:50** High-energy in situ injection of a modified clay for sequestration of PFAS

*Michael Mazzaresse (AST Environmental)*

**13:05** STAR and STARx: A Smouldering Solution to PFAS from Laboratory to Field Scale Application

*Laura Kinsman, David Major, Gavin Grant, Jorge Gabayet (Savron), Brian Harrison, Joshua Brown, Jason Gerhard (Univ. of W. Ontario), David Patch, Kela Weber (RMC of Canada)*

**13:20** Elimination of PFAS Contamination

*Martin Bunzel, Aaron Limberg (Schauenburg Maschinen - und - Anlagen-Bau)*

**13:35** Panel discussion moderated by chairs

**13:50** End of the session

Register yourself in the Google form <https://forms.gle/hrn6EvCQ9VVVoXL8H9>



# REMTECH Europe

## SESSION 25

### Persistent Organic Pollutants

THURSDAY 21 SEPTEMBER

11:30 – 13:45 CEST (Central European Summer Time)

Europe Room  
2<sup>o</sup> floor

#### Opening

**11:30** Welcome from *Marco Falconi (ISPRA)* and introduction from the Chairs: *Wouter Gevaerts (NICOLE)*, *Mentore Vaccari (UniBS)*, *Felipe Yunta (JRC)*

#### Presentations

**11:35** Integrated sustainable approach to lindane biodegradation  
*Cosimo Masini, Federica Brogioli (DND Biotech)*

**11:50** Clay minerals as simultaneous sorbents of PFAS and pesticides  
*Eleni Gianni, Pavlos Tyrologou, Nikolaos Koukoulas (Centre for Research & Technology Hellas, CERTH), Daniel Moreno-Rodríguez, Eva Scholtzová (Slovak Academy of Sciences), Nazaré Couto (NOVA University Lisbon), Miroslav Pospíšil (Charles University), Dimitrios Papoulis (University of Patras)*

**12:05** Assessing organic amendment's ability to reduce bioavailability of Trifluralin  
*Jelena Beljin, Marijana Kragulj Isakovski, Nina Đukanović, Jelena Molnar Jazić, Tamara Apostolović, Srđan Rončević, Snežana Maletić (University of Novi Sad)*

**12:20** Decontamination of PAH-impacted soils using Liquid Activated Carbon (LAC) – enhanced microwave treatment  
*Pietro P. Falciglia, Guido De Guidi, Fabiana Vento, Federico Vagliasindi (University of Catania), Monica Granetto, Tiziana Tosco, Rajandrea Sethi (Politecnico di Torino)*

**12:35** Widening the scope of Thermal desorption, example of mercury removal  
*Laurent Thannberger, Matthieu Sangely (Valgo)*

**12:50** Soil washing and vacuum thermal desorption for remediation of a mercury contaminated site case study on best-practice  
*Tobias Gschnaidtner, Christian Stiels, Xavier Ibarz Formatger, Reinhard Schmidt (Econ industries services)*

**13:05** A field pilot study demonstrating sustainable remediation of mercury-contaminated soil and groundwater sources using a novel amendment known as Merclok™ P-640  
*Jon Miller, Kim Pingree (Albemarle), Peter Martus (AECOM)*

**13:20** Panel discussion moderated by chairs

**13:45** End of the session

Register yourself in the Google form <https://forms.gle/jMDW9ZWNNxbkYZtd9>







# LIVE DEM



**SESSION 26**

**Live Demo Day 2**

**THURSDAY 21 SEPTEMBER**

**13:50 – 16:20 CEST (Central European Summer Time)**

**Pavilion 6**



**13:50 Meeting at the entrance of Pavilion 6 with the Chairs**

*Paola Grenni (CNR)), Giovanni Savarese (ARPA Lazio), Laurent Thannberger (RNEST)*

**14:00 ReSoil® - sustainable extraction of heavy metals from soil**

*Envit Ltd. & Matec Industries S.p.A.*

**14:20 e-hyrec®/e-lorec® devices for selective recover of LNAPL and DNAPL**

*Guido Bonfedi, Camilla Lanari (Eni Rewind), Francesca Rubertelli (Eni)*

**14:40 Groundwater Passive Sampling: Snap Sampler®**

*Claudio Sandrone (BAW)*

**15:00 Coffee break in field**

**15:10 EVO droplets, the difference in size between factory and in the field created emulsions**

*Robert Wagenweld (QM Environmental)*

**15:30 Whitelab Non Stationary Flux Chamber**

*Marcello Tognacci (Whitelab)*

**15:50 Gadgets and certificates**

**16:20 End of the session**

Register yourself in the Google form <https://forms.gle/zQV1bYZnMTWFdbLj9>



# REMTECH Europe

## SESSION 27

### Contaminated sites management

THURSDAY 21 SEPTEMBER

14:30 – 16:45 CEST (Central European Summer Time)

Europe Room  
2<sup>nd</sup> floor

#### Opening

**14:30** Welcome from *Marco Falconi (ISPRA)* and introduction from the Chairs: *Frank Swartjes (RIVM)*, *Piotr Wojda (JRC)*, *Erika von Zuben (AESAS)*

#### Presentations

**14:35** Progress in addressing contamination caused by military activities in the territory of the Slovak Republic

*Katarína Paluchová, Elena Bradiaková (Slovak Environment Agency)*

**14:50** Use of geostatistics for remediation treatment monitoring

*Juliette Chastanet, Eve Dujardin, Jacques Villemagne (GINGER BURGEAP)*

**15:05** Determining the background values for soils and groundwater: the Italian Guidelines by SNPA

*Maurizio Guerra (ISPRA)*

**15:20** Assessing a methodology for estimating soil pollution costs in Luxembourg

*Anna Espinoza, Arno Biwer (Luxembourg Institute of Science and Technology), Gaëtan Fourvel, Pol Tock (Administration de l'environnement)*

**15:35** Phytotechnology practices to remediate polluted soils and water in Africa

*Isabel Weiersbye (University of the Witwatersrand, Johannesburg, South Africa)*

**15:50** American perspective of the soil remediation market

*Tatiana Morin, Paul Mankiewicz, Meg Brown (Urban Soils Institute)*

**16:05** The proposed EU Nature Restoration Law: challenges and opportunities

*Luigi Servadei (CREA)*

**16:20** Panel discussion moderated by chairs

**16:45** End of the session

Register yourself in the Google form <https://forms.gle/67DaVio4PyGxFk1M9>



## SESSION 28

### PFAS groundwater remediation

THURSDAY 21 SEPTEMBER

14:30 – 16:45 CEST (Central European Summer Time)

White Room  
1<sup>o</sup> floor

#### Opening

**14:30** Welcome from *Marco Falconi (ISPRA)* and introduction from the Chairs: *Christiane Wermeille (BAFU)*, *Edith Martinez-Guerra (USACE)*, *Jussi Reinikainen (SYKE)*

#### Presentations

- 14:35** Effectiveness of microwave irradiation in regenerating PFAS-loaded GAC  
*Erica Gagliano (University of Genoa)*, *Pietro P. Falciglia*, *Paolo Rocco (University of Catania)*,  
*Jeakub Zaker*, *Tanju Karanfil (Clemson University)*
- 14:50** Technical and economic assessment of pilot testing PFAS removal from groundwater using GAC and SORBIX™ ion exchange resin at a swedish airport  
*Jeffrey Lewis*, *Jörgen Lindahl (ECT2 Sweden)*, *Carol Jarpa de Emilson (Skövde municipality)*
- 15:05** Destruction of spent media from PFAS remediation using Supercritical Water Oxidation  
*Tali Harif*, *Sudhakar Viswanathan*, *Marc Deshusses (374Water)*
- 15:20** In-situ elimination of PFAS in contaminated Soil and Groundwater by Washing with Protein Bio-polymers and Stabilization by GAC high pressure injection  
*Stephan Huettmann*, *Anja Wilken (Sensatec)*
- 15:35** Surface Active Foam Fractionation (SAFF) in Combination with A Patented All Natural Amendment To Increase The PFAS Removal Efficiency of SAFF for complex leachate  
*Helena Hinrichsen*, *Hugo Carronnier*, *Wassism Almouallem*, *Robin Axelson (Envitech)*
- 15:50** High PFAS concentrations in water and on solid surfaces  
*Martin Cornelsen (Cornelsen Umwelttechnologie)*
- 16:05** Development and Demonstrations of the PFAS Effluent Treatment System (PETS) and Planned Research and Development Efforts at the ERDC  
*Scott Waisner*, *José Mattei-Sosa*, *Edith Martinez (U.S. Army Engineer Research and Development Center)*

**16:20** Panel discussion moderated by chairs

**16:45** End of the session

Register yourself in the Google form <https://forms.gle/AMiNt6u44a7WMuQH6>

374WATER<sup>o</sup>

**cornelsen**  
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Montrose Environmental Group

**envytech**  
Miljö & teknik

 **SENSATEC**



## SESSION 29

### Contaminants of Emerging Concern

THURSDAY 21 SEPTEMBER  
17:00 – 19:00 CEST (Central European Summer Time)

ONLINE

#### Opening

**17:00** Welcome from Interstate Technology Regulatory Council (ITRC) and Remtech Europe  
*Charles Reyes (ITRC Director), Claudio Sorrentino (DTSC, ITRC), Marco Falconi (ISPRA, Remtech Europe)*

#### Presentations

**17:10** Contaminants of Emerging Concern  
*Paula Panzino (ADEQ Arizona Department of Environmental Quality, ITRC), Vivek Mathrani (Department of Toxic Substances Control California, ITRC)*

**19:50** Questions and Answers  
*Claudio Sorrentino (DTSC, ITRC), Marco Falconi (ISPRA, Remtech Europe)*

**20:00** End of the training

Register yourself in the Google form <https://forms.gle/9yh3c5PZMcAitq6p7>

#### BRIEF DESCRIPTION OF THE TRAINING

Contaminants of emerging concern (CEC) require a clear technical approach on how to identify, evaluate, and manage them while acknowledging uncertainties in their environmental fate and transport, receptor exposure, and/or toxicity. Such an approach can be conducive to improved allocation of regulatory response resources and provide a foundation for communicating potential risk to stakeholders. This ITRC framework is comprised of a white paper and four associated fact sheets. In the white paper, CEC are defined as: **“substances and microorganisms including physical, chemical, biological, or radiological materials known or anticipated in the environment, that may pose newly identified risks to human health or the environment.”** The framework is meant to help environmental regulatory agencies by providing examples of CEC monitoring programs and guiding the user through the process of identifying CEC key characteristics, how to communicate real and perceived risk from CEC to the public, and how laboratory analytical methods can be used in the identification process.



## SESSION 30

### LNAPL and hydrocarbons remediation

THURSDAY 21 SEPTEMBER

17:00 – 19:15 CEST (Central European Summer Time)

White Room  
1° floor

#### Opening

**17:00** Welcome from *Marco Falconi (ISPRA)* and introduction from the Chairs: *Piotr Wojda (JRC)*, *r Wemeille (BAFU)*, *Robert Jelinek (Slovak State Geological Institute)*

#### Presentations

**17:05** Legacy urban underground storage tank site achieves site closure using surgical injection strategy  
*Michael Mazzaresse (AST Environmental)*

**17:20** A Novel Adsorbent Material for Oil Spills Management  
*Alessandra de Folly D'Auris (Eni, Environmental & Biological Laboratories)*, *Francesca Rubertelli (Eni, Renewable, New Energies and Material Science Research Center)*, *Alessandro Taini (Test1 SB)*, *Marco Vocciante (University of Genova)*

**17:35** Assessing the Genetic Potential for Natural Source Zone Depletion at a Petroleum-Contaminated Site  
*Sam Rosolina, Dora Taggart (Microbial Insights)*

**17:50** SEAR Combined With MPE To Resolved Recalcitrant NAPL At Coal Tar Brownfield Site  
*George A. Ivey, B.Sc, CES, CESA, P.Chem -Daniel Hirth, CEnvP (Ivey International)*

**18:05** Demonstrating technical impracticability at LNAPL sites  
*Raj Mahadevaiah, P.E. CGWP (Environmental International Corporation (EIC))*

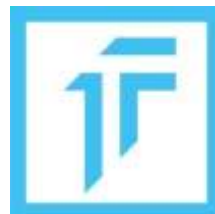
**18:20** Remediation and Closure of LNAPL Contaminated Site Using an Innovative 3-Step Approach from Remedial Design to In-Situ Remediation  
*Gabriele Giorgio Ceriani (Ejlskov)*

**18:35** 3D hydrogeophysical and time-sensitive model for remediation of a LNAPL-polluted site  
*Paolo Ciampi Carlo Esposito, Edoardo dell'Armi, Marco Petrangeli Papini (Sapienza University of Rome)*, *Giorgio Cassiani (University of Padua)*, *Gian Piero Deidda (University of Cagliari)*

**18:50** Panel discussion moderated by chairs

**19:15** End of the session

Register yourself in the Google form <https://forms.gle/oGSDXD1Y43ZzURWq9>



## SESSION 31

### Heavy metals and mining

THURSDAY 21 SEPTEMBER

17:00 – 19:00 CEST (Central European Summer Time)

Europe Room  
2<sup>nd</sup> floor

#### Opening

**17:00** Welcome from *Marco Falconi (ISPRA)* and introduction from the Chairs: *Wouter Gevaerts (NICOLE)*, *Felipe Yunta (JRC)*, *Edith Martinez-Guerra (USACE)*

#### Presentations

- 17:05** The influence of low molecular weight organic acids on the bioavailability of heavy metals in sediments  
*Nina Đukanović, Jelena Beljin, Marijana Kragulj Isakovski, Srđan Rončević, Snežana Maletić (University of Novi Sad), Tijana Zeremski, Nadežda Stojanov (Institute of Field and Vegetable Crops)*
- 17:20** Bioremediation; A useful way to mitigate heavy metal toxicity in soil  
*Muneeb Ur Rehman, Aziz Ullah, Sapana Parajuli (Ondokuz Mayıs University) Naseer Ahmad, (University of Agriculture Peshawar)*
- 17:35** Nature based solution to precipitate heavy metals  
*Dirk Paulus, Herwig De Wilde (TAUW Belgium)*
- 17:50** Simultaneous removal of toxic metalloids and metals from soil using ReSoil® technology  
*Domen Lestan, Juan F.M. Arteaga (University of Ljubljana), Simon Gluhar, Anela Kaurin (ENVIT)*
- 18:05** Importance of using background concentrations to assess anthropogenic impact on soil and groundwater. Case: Metals in Andean soils  
*Alejandra Romero, Maria Villalobos (Novambientti Soluciones Ambientales)*
- 18:20** Cadmium in cocoa beans of Trinidad & Tobago and Ecuador: watershed scale initial approach  
*Sasha Hart, Sander Eskes, Luciana Ferreira, Ana Moeri (Instituto Ekos Brasil and NICOLE Latin America), Lucia Buvé, Olivier Maurer (NICOLE Foundation), Sergejus Ustinov, Natalia Rodríguez Eugenio (FAO)*
- 18:35** Panel discussion moderated by chairs
- 19:00** End of the session

Register yourself in the Google form <https://forms.gle/hrKVCEi2fkGBzxau6>



## SESSION 32

### ITRC Microplastics Guideline

THURSDAY 21 SEPTEMBER  
20:00 – 22:00 CEST (Central European Summer Time)

ONLINE

#### Opening

**20:00** Welcome from Interstate Technology Regulatory Council (ITRC) and Remtech Europe  
*Charles Reyes (ITRC Director), Claudio Sorrentino (DTSC, ITRC), Marco Falconi (ISPRA, Remtech Europe)*

#### Presentations

**20:10** Contaminants of Emerging Concern  
*Valerie Hanley (Department of Toxic Substances Control California, ITRC), Kim Nimmer (City of Raleigh, ITRC)*

**21:50** Questions and Answers  
*Claudio Sorrentino (DSTC, ITRC), Marco Falconi (ISPRA, Remtech Europe)*

**22:00** End of the training

Register yourself in the Google form <https://forms.gle/yWxJsmhi9YMKtobh8>

#### BRIEF DESCRIPTION OF THE TRAINING

*Because of their small size and pervasiveness in the environment, Microplastics (MP), along with any other contaminants that are adsorbed to the MP or intentionally added through the manufacturing process, may be consumed by humans and other organisms. Microplastics have been reported in human blood, in the deep lung, and in placenta, meconium, and human excrement. The science surrounding MP, their potential health effects, and knowledge of their fate and transport is very new and ongoing, with research articles being published at a rapidly accelerating rate. Even techniques and best practices for sample collection and analysis of these tiny particles and fibers are still very much evolving. The ITRC MP guidance document was written for an individual who has a reasonable level of scientific understanding, but not a lot of MP-specific knowledge. The guidance provides a user with information on MP and the state of the applied science without having to go to the scientific literature*

## SESSION 33

### Soil remediation

FRIDAY 22 SEPTEMBER

09:00 – 11:00 CEST (Central European Summer Time)

Europe Room  
2<sup>o</sup> floor

#### Opening

**09:00** Welcome from *Marco Falconi (ISPRA)* and introduction from the Chairs: *Christiane Wermeille (BAFU)*, *Laurent Thannberger (RNEST)*, *Dietmar Mueller-Grabherr (COMMON FORUM)*

#### Presentations

- 09:05** Inadequate municipal solid waste management and occurrence of phthalate esters in soil in Serbia  
*Dragana Vidojević (Serbian Environmental Protection Agency)*, *Nataša Stojić*, *Mira Pucarević*, *Dunja Prokić*, *Ljiljana Ćurčić (University Educons)*
- 09:20** Kuwait soil remediation  
*Manel Fernandez*, *Miikka Tunturi (Lamor)*
- 09:35** LCA in the development of an in-situ innovative remediation technology: the case of ERASE - ElectRode-Aided Soil rEmediation  
*Gabriele Beretta*, *Elena Sezenna*, *Giovanni Dolci*, *Lucia Rigamonti*, *Sabrina Saponaro (Politecnico di Milano)*, *Claudio Carnabuci*, *Daniele Vezzoli (HPC)*
- 09:50** Current trends and chinese perspective of the soil remediation methods using remediation trains  
*Jian Shen (RPU Rheinische Pflanzenpower & Umwelttechnik GmbH)*, *Grega E. Voglar*, *Simon Gluhar (ENVIT Ltd.)*, *Anela Kaurin*, *Domen Lestan (University of Ljubljana)*
- 10:05** LIFE FRAC IN: enabling in situ soil remediation on low-permeability sites through hydraulic and pneumatic fracturing  
*Stijn Decru*, *Axelle Mineur*, *Jan De Vos (ABO)*, *Ondřej Lhotský (Dekonta)*
- 10:20** Sustainable Remediation in Italy: The Potential of Thermal Remediation  
*Simone Bruschi*, *Raul Mucciolella*, *Silvia Cattarino (Geostream)*
- 10:35** Panel discussion moderated by chairs
- 11:00** End of the session

Register yourself in the Google form <https://forms.gle/2upAaqrJTbfQkefB7>





## SESSION 34

# Zero pollution - ecotoxicology for safe and sustainable remediation

FRIDAY 22 SEPTEMBER

09:00 – 13:00 CEST (Central European Summer Time)

White Room 1° floor
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### Opening

**09:00** Welcome from the Chairs *Ilaria Corsi (SETAC ILB), Paola Grenni (SETAC IB), Sabine Apitz (Editor in Chief SETAC-IEAM), Peter Benhish (BDS), John Pitchel (Ball State University)*

### Presentations

- 09:10** Protecting health through the redevelopment urban contaminated sites  
*Matthias Braubach (European Centre for Environment and Health, WHO)*
- 09:30** Cont'd sites and health: from the Italian SENTIERI experience to the international context  
*Ivano Iavarone (Dipartimento ambiente e salute, Istituto Superiore di Sanità, Roma)*
- 09:50** Resistance, Resilience, Recovery, Remediation and Restoration: ensuring assessment supports sustainable land- and water-scapes  
*Sabine E. Apitz (Editor in Chief SETAC IEAM))*
- 10:20** Toxic-free pollution - in vitro toxicity profiling for more safety and sustainability in plastic additives, plastics and recycling  
*Peter Behnisch (Director BioDetection Systems, BDS)*
- 10:40** Ecotoxicological analyses in the sediment quality assessment: advancements in the Italian legislation  
*Fulvio Onorati, Lorenzo Morroni, Cristian Mugnai, David Pellegrini (ISPRA)*
- 11:00** Innovative procedure for HP14 (ecotoxicity) classification of waste from a remediation project: a case study in Veneto Region  
*Alberto Pivato Giovanni Beggio (Padova University) Gianvittore Vaccari, Francesco Trevisan (Veneto Acque)*
- 11:20** Ecotoxicological set of tests for waste re-use  
*Maria Chiara Neri, Silvia Messinetti (LabAnalyses)*
- 11:40** Automation of the characterization process, ranking and estimation of LEG on samples of marine sediment  
*Massimiliano Lippi (Biochimie Lab)*
- 12:00** Environment Remediation: benefits and challenges on a global scale  
*John Pitchel (Ball State University)*
- 12:20** Environmental safety of nanotechnologies for environmental remediation: The case study of bio-based nanostructured materials between past and future  
*Carlo Punta (Politecnico di Milano)*
- 12:40** Round table discussion and concluding remarks
- 13:00** End of the session

Register yourself in the Google form <https://forms.gle/Fgi2bprFWwfQnnUN8>

## SESSION 35

### Aeriforms measurements and management

FRIDAY 22 SEPTEMBER

11:30 – 13:30 CEST (Central European Summer Time)

Europe Room  
2<sup>o</sup> floor

#### Opening

**11:30** Welcome from *Marco Falconi (ISPRA)* and introduction from the Chairs: *Frank Swartjes (RIVM)*, *Antonella Vecchio (ISPRA)*, *Deyi Hou (Tsinghua University)*

#### Presentations

**11:35** Modelling the influence of advection on the soil gas radon deficit technique for the quantification of LNAPL saturation  
*Alessandra Cecconi, Iason Verginelli, Renato Baciocchi (University of Rome Tor Vergata)*  
*Fernando Barrio-Parra, Eduardo De Miguel (Universidad Politécnica de Madrid)*

**11:50** Using real-time monitoring to understand the variability of TCE concentrations in indoor air in a site in Belgium  
*Paulo Valle, Elena Marino (ERM)*

**12:05** Tracing Airborne Microplastics in Modena: results from the MicroTRACES project  
*Giorgio Veratti, Alessandro Bigi, Sergio Teggi, Valentina Ferrari, Marco Scaramelli, Sara Righi, Roberto Simonini, Daniela Prevedelli, Elisa Bergami, Grazia Ghermandi (University of Modena and Reggio Emilia)*

**12:20** Using Ternary Plots to Evaluate the Influence of Sewer Gas in Vapor Intrusion Pathway Evaluations  
*Craig A. Cox (Cox-Colvin & Associates)*

**12:35** Investigating the relevance of density-driven transport on the vapor intrusion pathway for chlorinated VOCs  
*Clarissa Settimi, Iason Verginelli, Daniela Zingaretti, Renato Baciocchi (University of Rome Tor Vergata)*

**12:50** A new duo to supercharge your sub-slab characterization  
*Kelly Horiuchi, Rafael Sato (Volterre Environmental), Craig A. Cox (Cox-Colvin & Associates), Laurie A. Chilcote (Vapor Pin Enterprise)*

**13:05** Panel discussion moderated by chairs

**13:30** End of the session

Register yourself in the Google form <https://forms.gle/3ob1JUzZhDwL4nRp8>



## High Resolution Site Characterization

FRIDAY 22 SEPTEMBER

14:30 – 17:00 CEST (Central European Summer Time)

White Room  
1<sup>o</sup> floor

### Opening

**14:30** Welcome from *Marco Falconi (ISPRA)* and introduction from the Chairs: *Felipe Yunta (JRC)*, *Iustina Boaja (IGR)*, *Nicola Harries (CL:AIRE)*

### Presentations

**14:35** Introducing continuous monitoring of individual contaminant species  
*Eugen Martac (Fugro)*, *Claudio Carusi (Mares)*

**14:50** POWER BI as an innovative analytical and visualization tool in a short-term remediation project  
*Charline Kaplan*, *Mattias Verbeeck*, *Paulo Valle (ERM)*

**15:05** Optimizing risk management plans for pollutants dispersion in aquifers by use of innovative mass flux and mass discharge approaches  
*Pierre Jamin*, *Maxime Evrard (Nagaré Hydro)*

**15:20** 4C SYSTEM - tool for managing contamination sources at complexes sites  
*Andre Souza*, *Calvin Iost*, *Felipe Valença*, *Gerson Garofano*, *Luana Prates*, *Osvaldo Damy*, *Silvio Albertino (Cetrel)*

**15:35** Revolutionize your site characterization with our analytical techniques for soil core mobile phase recovery and determination  
*Kelly Horiuchi (Volterre Environmental)*, *Paul Michalski (212 Environmental)*

**15:50** Comparison of sample preparation methods for characterization of soil geochemistry by handheld X-RAY Fluorescence  
*Robert Szabo*, *Iustina Boaja*, *Adrian Tătaru (Geological Institute of Romania)*, *Ana Maria Turculet (Politehnica University of Bucharest)*

**16:05** Possibilities and challenges of AI in remediation of mining environmental liabilities  
*Ysmael Ormeño Zender (Activos Mineros)*

**16:20** Utilizing drone technology for monitoring and estimating gully expansion in an Environmental Protection Area in Nova Lima-MG, Brazil  
*Valéria C P Zago*, *Rafael F. Ercoli (Federal Center of Technological Education of Minas Gerais)*, *Beatriz Amanda Watts (Leuphana University)*

**16:35** Panel discussion moderated by chairs

**17:00** End of the session

Register yourself in the Google form <https://forms.gle/k9Kcq8fnjXreQyiU6>



## SESSION 37

### Groundwater sampling

FRIDAY 22 SEPTEMBER

14:30 – 16:30 CEST (Central European Summer Time)

**ONLINE**

#### Opening

**14:30** Welcome to the session

*Marco Falconi (ISPRA, Remtech Europe)*

**14:35** Introduction from the chairs

*Patricia Ruiz (AESAS), Natalia Rodriguez Eugenio (FAO)*

#### Presentations

**14:40** Groundwater Sampling

*Paulo Negrão (Clean Environment Brasil, AESAS), Cristina Gonçalves (CPEA, AESAS)*

**16:15** Panel discussion moderated by chairs

**16:30** End of the session

Register yourself in the Google form <https://forms.gle/1nusZnQ9vLtPgF5dA>



Paulo Negrão  
Clean Environment Brasil



Cristina Gonçalves  
CPEA



# REMTECH Europe

## SESSION 38

### Wastewater treatment and remediation challenges

FRIDAY 22 SEPTEMBER

14:30 – 17:45 CEST (Central European Summer Time)

Europe Room  
2<sup>o</sup> floor

#### Opening

**14:30** Welcome from *Marco Falconi (ISPRA)* and introduction from the Chairs: *Laurent Thannberger (RNEST)*, *Paola Grenni (CNR)*, *Robert Jelinek (Slovak State Geological Institute)*

#### Presentations

- 14:35** Struvite Minimization in Domestic WW Systems: Prototyping & Optimization in Full-Scale Plants  
*MA. Cleofas O. Maceda (Association of Water & Wastewater Mechanical Systems Specialists)*
- 14:50** Unlocking the Magic of Phosphate Solubilizing Bacteria: an efficient move towards sustainable crop production  
*Prof. Dr. Amanullah (University of Agriculture Peshawar)*
- 15:05** Application of natural and modified zeolites for wastewater treatment  
*Francesco Panattoni, Marianna Tardani, Cosimo Masini (DND Biotech)*
- 15:20** How To Resolve Risk of Cross Contamination to ASTM Standards Using PFAS and 1,4 Dioxane Free Products  
*George A. Ivey, B.Sc, CES, CESA, P.Chem (Ivey International)*
- 15:35** Hidden Sources of Soil Pollution: Implications of Microbially Induced Corrosion in Operational Heating and Cooling Systems  
*Beatriz Amanda Watts (Leuphana University)*
- 15:50** Impact Assessment of WGC BAT Conclusions Implementation on IED Permit Release for the Chemical Industry in Italy  
*Davide Iaria (ISPRA)*
- 16:05** Semi-continuous summer-season cultivation in a flat outdoor prototype of an autochthonous microalgae for the phytoremediation of urban wastewaters at the Ferrara (Italy) plant  
*E. Benà, C. Baldisserotto, N. Maccapani, P. Giacò, S. Demaria, R. Marchesini (University of Ferrara), G. Zanotti, A. Benini, L. Benetti (HERA), S. Pancaldi (Terra&Acqua Tech Laboratory)*
- 16:20** Adsorption isotherms and kinetic models for removal endocrine disruptors and from wastewater using advanced oxidation processes in MATLAB  
*Ould Brahim Insaf, Chaouch Saad, Belgacem Ahmed (CRTI)*
- 16:35** "REMEDIAPP"-integral treatment system for the remediation of mining-metallurgical effluents for their conversion into farming water and drinking wastewater  
*Silvana Flores, Edison Zegarra (Green Metallurgy Technologies)*
- 16:50** Evaluation of circular skills and circular mind-set of consumers with the use of it  
*Celene Brito (Instituto Mentalidade Ecosistêmica-Brazil - UCES)*
- 17:05** The Alliance for Water Stewardship in Europe: the innovative and synergic model for water challenges  
*Ilaria Troncia, Beatrice Bizzaro, Eugenio Capponi, Cristina Sala, Martina Mazzocchi (HPC Italia)*
- 17:20** Panel discussion moderated by chairs
- 17:45** End of the session

Register yourself in the Google form <https://forms.gle/8eQkaHh9RYZHt2Vj8>





## SESSION 39

# Thermal Desorption

FRIDAY 22 SEPTEMBER

16:30 – 18:30 CEST (Central European Summer Time)

ONLINE

### Opening

**16:30** Welcome to the session

*Marco Falconi (ISPRA, Remtech Europe)*

**16:35** Introduction from the chairs

*Patricia Ruiz (AESAS), Laurent Thannberger (RNEST)*

### Presentations

**16:40** Thermal desorption

*Gorm Heron (DOXOR, AESAS), Nicolas van Tilburg Bernardes (Reconditec, AESAS)*

**18:15** Panel discussion moderated by chairs

**18:30** End of the session

Register yourself in the Google form <https://forms.gle/oQRDLzEMVzuW7veh8>



Gorm Heron  
Doxor



Nicolas van Tilburg Bernardes  
Reconditec



## Remtech Europe Scientific Committee

Marco Falconi	ISPRA, Italy
Wouter Gevaerts	NICOLE - Network of Industrial Contaminated Land in Europe
Christiane Wermeille	BAFU - Federal Office for the Environment, Switzerland
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
Iustina Boaja	IGR Romanian Geological Institute, RO
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
Paola Grenni	National Research Council (CNR), Italy
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
Natalia Rodríguez Eugenio	FAO Food and Agriculture Organization
Juliana Rolla de Leo	FEAMIG Faculdade de Engenharia de Minas Gerais, Brasil
Pedro Sifuentes	Red Latinoamericana de Prevención y Gestión de Sitios Contaminados, Peru
Claudio Sorrentino	California Department of Toxic Substances Control, ITRC
Frank Swartjes	National Institute for Public Health and the Environment, The Netherlands
Nino Tarantino	Illegal Landfills Extraordinary Commissioner Office, Italy
Laurent Thannberger	Réseau National d'Expertise Scientifique et Technique sur les sols (RNEST), France
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 Empresas de Consultoria e Engenharia Ambiental, Brasil

Stephen Weber

NICOLA Africa

Piotr Wojda

JRC - European Commission

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ISPRA, Italy

Patricia Ruiz

AESAS, Brasil

Lana Kukobat

Belgrade University, Serbia

Paola Grenni

National Research Council (CNR), Italy

## Sustainathon Organizing Committee

Marco Falconi

ISPRA, Italy

Paul Nathanail

CABERNET, UK

Nicola Harries

CL:AIRE - Contaminated Land: Applications in Real Environments, United Kingdom

Natalia Rodriguez Eugenio

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Sergejus Ustinov

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JRC - European Commission

Patricia Ruiz

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WATER POLICY GROUP

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Sabine Apitz

Society of Environmental Toxicology and Chemistry (SETAC)

Isabella Stasi Castriota Scanderbeg

United Nation

## Sustainathon Secretariat

Lana Kukobat

Belgrade University, Serbia



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*Ambassadors*



