



REMTECH  
**Europe**



## SCIENTIFIC PROGRAM

**16-20 September 2024**



























(16-17 Sept. **online** – 18-20 Sept **hybrid**)













































IN PRESENCE IN FERRARA (ITALY): BOOK YOUR FREE TICKET HERE  
ONLINE WITH ZOOM: RESERVE YOUR SEAT IN OUR WEBSITE



























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



TIME ZONES	Mon 16 Sept ONLINE	Tue 17 Sept ONLINE	Tue 17 Sept ONLINE	Wed 18 Sept ONLINE
 CEST 09:00-11:00  CST 15:00-17:00  IST 12:30-14:30  EDT 03:00-05:00  BRT 04:00-06:00	 <b>Soil Pollution: policies and data</b> <span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">1</span>	 <b>Session francophone: comment évaluer la santé des sols?</b> <span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">3</span>	 <b>Monitored Natural Attenuation (MNA)</b> <span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">4</span>	 <b>Risk Assessment</b> <span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">12</span>
 CEST 11:30-13:30  CST 17:30-19:30  IST 15:00-17:00  EDT 05:30-07:30  BRT 06:30-08:30	<span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">1</span>		 <b>Natural Source Zone Depletion (NSZD)</b> <span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">5</span>	
 CEST 14:30-16:30  CST 20:30-22:30  IST 18:00-20:00  EDT 08:30-10:30  BRT 09:30-11:30	 <b>US Army Corps of Engineers</b> ® <b>Dredged sediments</b> <span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">2</span>	 <b>14:30 PFAS in Consumer Products</b> <span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">6</span>	<span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">6</span>	<b>Wed 18 Sept 14:30 BLUE ROOM – 1<sup>st</sup> floor</b>
 CEST 17:00-19:00  CST 23:00-01:00  IST 20:30-22:30  EDT 11:00-13:00  BRT 12:00-14:00	<span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">2</span>	<b>15:30 Assessment of NAPL Ebullition in Sediments with a Flux Chamber</b> <span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">7</span> <b>16:30 Toxicity Testing with the Mayfly</b> <span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">8</span> <b>17:30 A Combination of Three Standards on Storage Tanks</b> <span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">9</span> <b>18:30 Stakeholder Engagement</b> <span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">10</span> <b>20:00 Drone Technology for Site Assessment</b> <span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">11</span>	<span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">7</span> <span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">8</span> <span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">9</span> <span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">10</span> <span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">11</span>	 <b>PROMISCES: PFAS treatment technologies for contaminated sites: soils, sediments and groundwater</b> <span style="border: 1px solid black; border-radius: 50%; padding: 2px 5px;">21</span>

TIME ZONES	Wed 18 Sept WHITE ROOM- 1 <sup>st</sup> floor	Wed 18 Sept EUROPE ROOM – 2 <sup>nd</sup> floor	Thu 19 Sept BLUE ROOM – 1 <sup>st</sup> floor	Thu 19 Sept WHITE ROOM- 1 <sup>st</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	<b>PFAS risk assessment and management</b> 	<b>Biochar and soil amendments</b> 	09:00 – 13:00 BLUE ROOM – <b>LIFE MY SOIL</b>   	<b>Groundwater remediation</b> 
 <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	<b>Drones, artificial intelligence and new frontiers in characterization</b> 	<b>Healthy soil and the Soil Monitoring Law</b> 	<b>Thu 19 Sept</b> <b>13:50- 17:30 CEST</b> <b>In front of Pavillion 1</b> <b>LIVE DEM</b>   	<b>PFAS groundwater remediation</b> 
 <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	<b>3D and High Resolution Characterization Techniques</b> 	<b>Sustainable remediation and national programs</b> 	<b>Thu 19 Sept</b> <b>ONLINE</b> <b>17:00-19:00</b>  <b>LNAPL site management</b> 	<b>CSIA and genetic in Soil Bioremediation</b> 
 <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	<b>In situ thermal remediation</b> 	<b>Bioremediation and nature-based solutions</b> 	<b>Thu 19 Sept</b> <b>ONLINE</b> <b>17:00-19:00</b>  <b>Sediment Cap Chemical Isolation</b> 	<b>Chlorinated solvents remediation</b> 



TIME ZONES	Thu 19 Sept EUROPE ROOM – 2 <sup>o</sup> floor	Fri 20 Sept ONLINE	Fri 20 Sept WHITE ROOM- 1 <sup>o</sup> floor	Fri 20 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	<b>Heavy metals and POPs</b> <div style="text-align: right;">24</div>	 <b>The management of cont'd sites in Africa: Challenges and Solutions</b> <div style="text-align: right;">34</div>	<b>Innovative PFAS soil remediation</b> <div style="text-align: right;">36</div>	 <b>BAT in the wastewater treatment</b> <div style="text-align: right;">35</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	<b>Mining and Soil Remediation Innovations</b> <div style="text-align: right;">26</div>	From 14:00 (24 Sept) to 14:00 (25 Sept) CEST 24h <b>SUSTAINATHON</b>  <div style="text-align: right;">45</div>	<b>Test and full scale in-situ soil remediation</b> <div style="text-align: right;">38</div>	<b>Risk assessment and F&amp;T models</b> <div style="text-align: right;">37</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	<b>Oil and petroleum hydrocarbons</b> <div style="text-align: right;">29</div>	<div style="text-align: right;">41</div>  <b>Vapor intrusion</b>	<b>AFFF and PFAS impacted sites</b> <div style="text-align: right;">40</div>	<b>Advances in Ecotoxicology and Ecosystem evaluation</b> <div style="text-align: right;">39</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	<b>Wastewater and sewage sludge</b> <div style="text-align: right;">32</div>	<b>Bioremediation Techniques Used in Brazil</b>  <div style="text-align: right;">44</div>	<b>Climate change and environmental challenges</b> <div style="text-align: right;">42</div>	 <b>An interactive workshop to discover the soil's complexity and propose actions</b> <div style="text-align: right;">43</div>

# REMTECH Europe

## CONFERENCE

RemTech Europe, the International Conference and Exhibition on land and water remediation markets and technologies, is set for **September 16-20, 2024**.

The first two days, September 16-17, will be **fully digital** and **streamed online**. The following three days, **September 18-20**, will be hybrid, allowing **in-person attendance** as well as **Zoom broadcasts**. This format enables global participation, allowing anyone to follow nearly every session throughout the five-day event.

The conference aims to share knowledge, innovations, and case studies, fostering the development of remediation processes and the application of new, sustainable technologies. It also serves as a platform for suppliers and clients to connect and discuss available services and technologies.

The agenda is packed and designed to promote the exchange of knowledge and communication among all relevant parties, involving leading European stakeholders.

The annual RemTech Europe conference provides an overview of the European market and emerging trends. Participation is **free of charge**.



## EXHIBITION

RemTech Europe will be held as part of the RemTech Expo, Europe's leading Environmental Technological Hub, specializing in the rehabilitation, regeneration, and sustainable development of territories. The event takes place annually in Ferrara, Italy, this year from September 18-20, 2024.

RemTech Expo is more than just a platform to present the current state and future outlook of the industry. It is a dynamic network of international experts working year-round to foster constructive and effective collaboration between the public and private sectors. This collaboration supports the development of ideas and projects that benefit Europe. The event is organized each year in partnership with major international authorities.

The Hub features a diverse community, including representatives from public administration, regulatory bodies, private companies, innovative start-ups, universities, research centers, trade associations, and professionals. These participants engage in discussions and intensive networking through conference sessions, workshops, working groups, refresher courses, educational workshops for schools, technological pilot tests, and cultural evenings.

RemTech Expo comprises ten thematic segments and ten public-private Scientific Technical Committees, involving over five hundred experts.

More than three hundred significant companies from various supply chains participate. The event includes two hundred national and international congressional proposals and appointments, with two thousand ambassadors and speakers from one hundred countries across all six continents.



# REMTECH Europe

## WHO WILL PARTICIPATE?

RemTech Europe will attract leaders and key stakeholders from academia, government, regulatory agencies, site owners, private consulting firms, and various other environmental professionals. Some of the job titles represented include CEOs, Chief Scientists, Chief Hydrogeologists, Directors of Environmental Projects, Drinking Water Treatment Engineers, Environmental Chemists, Environmental Remediation Engineers, Environmental Project Scientists, Field Environmental Engineers, Principal Geochemists, Project Directors, Regulators, Remediation Engineers, Research Microbiologists, Restoration Project Managers, Senior Engineering Geologists, Toxicologists, Vice Presidents of R&D, and Wastewater Treatment Engineers.

## 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 **9 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.



INTERSTATE TECHNOLOGY COUNCIL REGULATORY ITRC

REMTECH Europe

Microplastics

**ITRC Microplastics Guideline**

Date: from 20:00 CEST of 21 September 2023 - to 22:00 CEST of 21 September 2023  
Event address: Online (ZOOM platform) with free entrance

First Name \*

Testo risposta breve

Last (Family) Name \*

Testo risposta breve

Credit for the cover image: **MANEL FERNANEZ – LAMOR CORPORATION**

# REMTECH Europe

## HOW TO PARTICIPATE IN PRESENCE?

For who is joining us physically us in Ferrara (Italy), you have to register here not later than **16 September 2024** <https://ticket.remtechexpo.com>. **Don't wait till the last week, the system may be overloaded with requests.** You will then have to print your ticket 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 not a big amount, but there could be the queue at the ticket office.

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](mailto: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

Then you have to read and agree/disagree on the treatment of your data.



## Registrazione avvenuta con successo

Grazie **Marco** per esserti registrato all'evento "RemTech Expo 2024", 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 2024" 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 JUST PRINT YOUR FREE TICKET OR SAVE IT IN YOUR MOBILE PHONE



Organizzato da



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### OPERATORE / PROFESSIONAL



**18-20 SETTEMBRE 2024**

18-20 SEPTEMBER 2024  
remtechexpo.com

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

#### COME ARRIVARE HOW TO GET HERE



##### AEREO - AIRPLAIN

L'aeroporto Guglielmo Marconi di Bologna dista 45 Km dal Quartiere fieristico di Ferrara. Chi sbarca al Marconi può usufruire del servizio di bus-navetta "Ferrara Bus&Fly" e arrivare in soli 60 minuti a Ferrara. Il trasferimento da e verso l'aeroporto prevede 8 corse giornaliere. Per maggiori informazioni, visitate il sito [www.ferrarabusandfly.it](http://www.ferrarabusandfly.it).

*The Guglielmo Marconi airport of Bologna is 45 km from the Ferrara exhibition center. Those who disembark at the Marconi can take advantage of the shuttle bus service "Ferrara Bus & Fly" and arrive in Ferrara in just 60 minutes. The transfer to and from the airport includes 8 trips a day. For more information, visit the website [www.ferrarabusandfly.it](http://www.ferrarabusandfly.it).*

**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.*



#### SHOW OFFICE

Ferrara Expo srl  
Via della Fiera, 11  
44124 Ferrara

Ph. +39.0532.900713  
segreteria@ferraraexpo.com

[www.remtechexpo.com](http://www.remtechexpo.com)  
[www.ferraraexpo.com](http://www.ferraraexpo.com)

C.F., P.IVA e Reg.Imp. FE 02113830380  
REA FE- 226928



## 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>).

# REMTECH Europe

## 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>	€ 86,00	€ 120,00	€ 130,00		<a href="mailto:info@hoteldeprati.com">info@hoteldeprati.com</a> +39 0532 241905
<b>LUCREZIA BORGIA</b>	€ 75,00	€ 85,00	€ 104,00	€. 140,00	<a href="mailto:info@hotellucreziaborgia.it">info@hotellucreziaborgia.it</a> +39 0532 909033
<b>HOTEL TOURING</b>		€ 139,00	€. 159,00	DEPENDANCE	<a href="mailto:info@hoteltouringfe.it">info@hoteltouringfe.it</a> +39 0532206200
	€ 129,00	€ 149,00	€ 169,00	HOTEL CLASSIC	
		€ 169,00	€. 189,00	HOTEL DELUXE	
<b>ANNUNZIATA</b>			€ 190,00 € 220,00 € 170,00	STANDARD SUPERIOR DEPENDANCE	<a href="mailto:info@annunziata.it">info@annunziata.it</a> +39 0532 201111 WhatsApp +39 39250 26757
<b>B&amp;B NETTUNO</b>		€ 69,00	€ 74,00	COLAZIONE ESCLUSA	<a href="mailto:ferrara@hotelbb.com">ferrara@hotelbb.com</a> +39 0532 977155
<b>HOTEL CARLTON</b>	Sconto 10%, indicare codice "RemTech" sul sito <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>	€ 79,00	€ 79,00	€ 99,00	€ 129,00	<a href="mailto:info@ilducadeste.it">info@ilducadeste.it</a> +39 0532 977676
<b>HOTEL EUROPA</b>	€ 80,00	€ 100,00	€ 120,00		<a href="mailto:info@hoteleuropaferrara.com">info@hoteleuropaferrara.com</a> +39 0532 205456
<b>HOTEL NAZIONALE</b>	€ 125,00	€ 135,00	€ 140,00		<a href="mailto:info@hotelnazionaleferrara.it">info@hotelnazionaleferrara.it</a> +39 0532 243596
<b>HOTEL OROLOGIO</b>		€ 200,00	€ 250,00		<a href="mailto:info@hotelorologio.com">info@hotelorologio.com</a> +39 0532 769576
<b>RADISSON HOTEL</b>		€ 125,00 € 135,00	€ 140,00 €. 150,00	PREMIUM SUPERIOR	<a href="mailto:info.ferrara@radisson.com">info.ferrara@radisson.com</a> +39 351 6645647
<b>TORRE DELLA VITTORIA</b>		€ 120,00	€ 150,00		<a href="mailto:info@hoteltorredellavittoriaferrara.com">info@hoteltorredellavittoriaferrara.com</a> Tel.: +39 0532 769298

## 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 costi s 12€/person, [LINK FOR MORE INFO](#)



Cost is 12€. [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 FERRARESÌ”

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

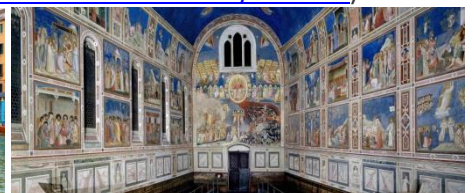
All these destinations are easily reachable by train from Ferrara (<https://www.trenitalia.com/en.html>)



**Bologna** 35 min



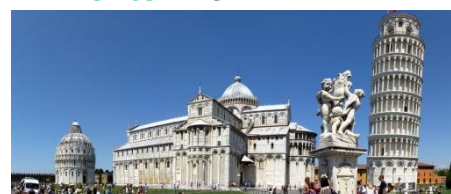
**Venice** 1h15min



**Padua** 40 min



**Florence** 1h40min



**Pisa** 2h30min



**Rome** 2h50min





## SESSION 1

# Soil Pollution: policies and data

MONDAY 16 SEPTEMBER

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

ONLINE

### Opening

**09:00** Inauguration of Remtech Europe 2024

*Marco Falconi (Remtech Europe), Alessandra Zampieri (Director, European Commission, JRC), Silvia Paparella (Remtech Expo)*

**09:20** Introduction from the Chairs

*Piotr Wojda (European Commission, JRC) Marco Falconi (Remtech Europe)*

**09:30** **Session 1 “Soil Pollution Monitoring, Prevention and Remediation Policies Perspective”**

- State of play of the Soil Monitoring Law, *Ion Codescu (Head of Unit, European Commission, DG ENV)*
- The role of EUSO in implementing the Soil Monitoring Law (*EU Soil Observatory, European Commission, DG JRC*)
- Safe & Sustainable by Design, *Serenella Sala (Head of Unit, European Commission, DG JRC)*
- The Mission Soil: contribution to soil pollution policies and data, *Luis Sanchez Alvarez (European Commission, DG AGRI)*

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

**11:15** *Coffee break*

**11:30** **Session 2 “Soil Pollution and Remediation: Data and Knowledge Harmonisation”**

- Soil Pollution and Remediation Data, as treated by Aragorn, *Dr. Juliane Glüge (Senior Researcher, ETH Zürich)*
- Soil pollution data and knowledge: workshop summary *Manhattan Lebrun and Pierre Cattoire (Chrono-environnement, Université de Franche-Comté CNRS, Edaphos)*
- Data on contaminated sites and remediation: perspectives on inventories and how to enhance *Rainer Baritz (EEA), Dietmar Müller-Grabherr (Common Forum)*
- Urban Soils Systematic review (*Calogero Schillaci EC, JRC*)
- Soil Pollution State in the EU and its outlook (*Diana Vieira EC, JRC*)

**12:45** Panel discussion, stakeholders questions and wrap up, *Diana Vieira, Elise van Eynde, Felipe Yunta, Calogero Schillaci, Arwyn Jones, Piotr Wojda (EC JRC D3)*

**13:00** End of the session

Register yourself in the Google form <https://forms.gle/F4oSzhe4ASHYuXcD7>



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## SESSION 2

# Dredged Sediments

MONDAY 16 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 Dredged sediments – Part 1**

*Damarys Acevedo-Acevedo (USACE), Paul Schroeder(USACE), Susan E. Bailey (USACE)*

**16:25 Panel discussion**

*Edith Martinez-Guerra (USACE)*

**16:35 Coffee break**

**16:50 Dredged sediments – Part 2**

*Damarys Acevedo-Acevedo (USACE), Paul R. Schroeder(USACE), Susan E. Bailey (USACE)*

**18:30 Panel discussion**

*Edith Martinez-Guerra (USACE)*

**19:00 End of the session**

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## Damarys Acevedo-Acevedo, P.E.

Research Environmental Engineer

Program Manager for the Installation Energy and Water Plan Program

Environmental Laboratory - U.S. Army Engineer Research and Development Center



Damarys Acevedo-Acevedo is a research environmental engineer and the interim program manager for the Installation Energy and Water Plan (IEWP) Program in the Environmental Laboratory at the U.S. Army Engineer Research and Development Center (ERDC) in Vicksburg, Mississippi. Mrs. Acevedo-Acevedo began her career with ERDC in 2008. She conducts research and development (R&D) on new approaches related to ecosystem restoration, sediment management, and water resilience, and introduces novel approaches to existing procedures and protocols. As a research environmental engineer, she has provided engineering expertise to cover a broad spectrum of projects including: treatment technologies for sediments, soils, and water, dredged material evaluations, capping of contaminated sediments, beneficial use of dredged material, design for confined disposal facilities (CDFs), coastal vulnerability, ecosystem restoration, thin layer placement of dredged material, and development of IEWPs. She serves as the principal investigator (PI) and co-PI for multiple projects, and currently manages the Installation Energy and Water Plan (IEWP) Program.



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## Susan E. Bailey, PE

Research Civil Engineer

U.S. Army Engineer Research and Development Center, CEERD-EPE

Susan Bailey is a research civil engineer with 20 years of experience working in the Environmental Engineering Branch at the USACE Engineer Research and Development Center. As part of the Sediment Management Team, she works with sediment and dredged material management, primarily in support of the USACE navigation mission. Her work includes evaluation of water quality impacts from dredging and placement activities, design and evaluation of placement area capacity, evaluation of contaminant and sediment transport, sediment remediation and developing sustainable solutions. She performs laboratory research and testing, conducts field studies, and performs modeling. Her focus is primarily on modeling dredged material behavior and contaminant transport to evaluate risk related to dredged material placement and management of contaminated sediments. She has a research interest in beneficial use of dredged material and sustainability. She has conducted studies concerning the consolidation behavior of dredged material upon thin layer placement which involved laboratory experiments as well as field evaluation.



## Paul R. Schroeder, PhD, PE

Research Civil Engineer

U.S. Army Engineer Research and Development Center, CEERD-EPE

Paul R. Schroeder serves as the Sediment Management Team Leader in the Environmental Engineering Branch of the U.S. Army Engineer Research and Development. Over the last 40+ years Dr. Schroeder has worked on hundreds of projects related to dredged material management, modeling of sediment/dredged material behavior, design of dredged material placement operations and facilities, laboratory testing for beneficial use applications, laboratory and desktop evaluations of environment effects of dredging operations, and sediment remediation design. He has co-authored more than 200 publications and presentations in the area of dredging and dredged material disposal and remediation of contaminated sediments, including all of the current USACE guidance documents for evaluation of dredged material management alternatives, and dredging and dredged material disposal. Additionally, he has developed 10 models for the ADDAMS dredging toolbox for evaluating and managing dredged material.

## SESSION 3

# RNEST, session spéciale francophone: comment évaluer la santé des sols?

TUESDAY 17 SEPTEMBER

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

**ONLINE**

## RNEST, session spéciale francophone: comment évaluer la santé des sols?

### Ouverture

- 09:00** Introduction par les modérateurs ; présentation de RNEST, réseau scientifique pour les sols  
*Laurent THANNBERGER (Valgo, RNEST), Flavien POINCOT (ACTA)*
- 09:10** Pour une approche fonctionnelle de l'évaluation de la santé des sols  
*Alain Brauman (IRD, président de l'AFES)*
- 09:30** Pour une approche sensible de la santé des sols  
*Lola RICHELLE (IRD)*
- 09:50** Bocages sahéliens et haies vives : clés pour renforcer la santé des sols en Afrique de l'Ouest  
*Nanawendin Yameogo (Université JOSEPH KI-ZERBO)*
- 10:10** Mieux connaître la biodiversité des sols urbains: retour d'expériences en France  
*Jérôme CORTET (Université Montpellier 3)*
- 10:30** Diagnostiquer la qualité microbiologique des sols pour évaluer l'impact des usages urbains et agricoles sur la santé des sols  
*Lionel RANJARD (INRAE)*
- 10:50** La restitution des résidus d'abattage favorise la restauration rapide de la santé des sols dans les replantations d'hévéas en Côte d'Ivoire  
*Kouakou Kouakou Aymard (Université NANGUI ABROGOUA)*
- 11:10** Fin de la session

Inscrivez-vous dans le formulaire Google <https://forms.gle/Y6Lm7pS4UFnTMAMq6>



## SESSION 4

# Monitored Natural Attenuation (MNA)

TUESDAY 17 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** Fundamentals of the MNA conceptual site model, *James Rayner (Geosyntec, CL:AIRE)*
- 09:30** The Power of CSIA for Remediation Monitoring and Source Forensics, *Kevin Kuntze (Isodetect)*
- 10:00** The Power of Molecular Biological Tools in MNA, *Phil Dennis (SiREM)*
- 10:30** MNA in the lifecycle of a remediation project, *James Rayner (Geosyntec, CL:AIRE)*
- 10:50** Closing questions & discussion, *Nicola Harries (CL:AIRE)*
- 11:00** *End of the Training*

Register yourself in the Google form <https://forms.gle/txxdkSxvREu5FMfE6>

MNA can be a sustainable risk management strategy for a wide range of groundwater contaminants, where environmental data are collected and assessed that demonstrate natural attenuation will protect receptors from pollution or harm. Natural attenuation refers to naturally occurring processes to reduce contaminant concentrations, flux or toxicity in groundwater. MNA has a long track record of applications globally, either as the sole remediation strategy, or the final stage following transition from active remediation.

Significant advances have been made in understanding contaminant behaviour in the subsurface, alongside ongoing developments in site characterisation, monitoring and predictive modelling for MNA, that are captured in recently published guidance by CL:AIRE (download for free here <https://claire.co.uk/component/phocadownload/category/22-important-industry-documents?download=993:mna-guidance>).

This training will introduce the new guidance and explain the role of assessing and implementing MNA in closing corrective actions. Particular focus will be given to applications of molecular biological tools (MBTs) and compound specific isotope analysis (CSIA) that enhance contaminant and process-specific understanding, required to address complexities and uncertainties that were previously challenging to deal with.



**James Rayner** is a Principal at Geosyntec Consultants who specialises in developing advanced conceptual site models to support management of land contamination in challenging environments. He has expertise with pioneering data analysis and modelling techniques to assess contaminant fate and transport, and to appraise the feasibility and performance of monitored natural attenuation (MNA), natural source zone depletion (NSZD) and remedial alternatives, and published technical guidance on these topics with CL:AIRE.



**Phil Dennis** is a Senior Principal Scientist at SiREM in Guelph, Canada where he has worked for over 22 years. Phil holds a Master of Applied Science in Civil Engineering from the University of Toronto, and an Honours Bachelor of Science in Molecular Biology and Genetics from the University of Guelph. Phil currently directs molecular genetic testing services and is innovation lead for SiREM's research and development program.



**Kevin Kuntze** is CEO of Isodetect GmbH, Germany. He received his Ph.D. in Biochemistry from the University of Leipzig (Germany) in the research field of anaerobic biodegradation of groundwater contaminants. In the past 16 years Isodetect has developed many innovative tools in the area of molecular biology and compound-specific isotope analysis: Compound-specific Stable Isotope Analysis (CSIA), Stable Isotope Probing (SIP), in situ microcosms (BACTRAPs®), laboratory microcosm studies, metabolite analysis, molecular genetic techniques (qPCR) and GC-MS screening.

## SESSION 5

# Natural Source Zone Depletion (NSZD)

TUESDAY 17 SEPTEMBER

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

**ONLINE**

- 11:30** Introduction from the Chairs, *Nicola Harries (CL:AIRE) & Marco Falconi (Remtech Europe)*
- 11:40** Why NSZD is important in remediation site lifecycle, *James Rayner (Geosyntec, CL:AIRE)*
- 12:00** Monitoring expressions of NSZD, *James Rayner (Geosyntec, CL:AIRE)*
- 12:40** Developing the LNAPL CSM with NSZD, *James Rayner (Geosyntec, CL:AIRE)*
- 13:10** Panel discussion, stakeholders' questions and wrap up, *Nicola Harries (CL:AIRE)*
- 13:30** *End of the Training*

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NSZD is a relatively new term that extends concepts underpinning monitored natural attenuation (MNA) to source zones to manage liabilities involving petroleum hydrocarbons in many environments. This method is rapidly evolving and is receiving increasing attention globally as stakeholders seek sustainable ways to remediate contaminated sites while meeting key performance indicators. NSZD refers to naturally occurring processes that act together to reduce light non-aqueous phase liquid (LNAPL) mass. Recent research and industry experience have demonstrated that mass depletion occurs at much higher rates than were previously understood, such that natural depletion of LNAPL is a viable alternative to, or can be a significant component of, active remediation. The April 2024 CL:AIRE Guidance on NSZD (<https://claire.co.uk/component/phocadownload/category/22-important-industry-documents?download=992:nszd-guidance>) compiles the latest information and practical considerations to create a holistic, up-to-date resource to help practitioners, regulators, and liability owners manage land impacted by LNAPLs.

This training will introduce the new guidance, which includes a 3-stage decision making framework to assess NSZD and advance corrective actions to closure, and describe the state of practice, including biogeochemical processes, monitoring technologies and the role of NSZD in the remediation project life cycle. Developing an LNAPL conceptual site model that considers NSZD is fundamental to achieving remediation objectives at petroleum hydrocarbon impacted sites. The training will explain aspects of LNAPL site characterisation to achieve data quality objectives, assessing risk regarding LNAPL and its gas-, vapour-, and dissolved-phase plumes and predicting mass depletion rates at increasing levels of complexity and confidence.



**James Rayner** is a Principal at Geosyntec Consultants who specialises in developing advanced conceptual site models to guide more sustainable management of environmental liabilities involving non-aqueous phase liquids (NAPL). He has expertise with multiphase contaminant fate and transport, appraising the occurrence of and monitoring natural source zone depletion (NSZD), and co-authored the recent CL:AIRE technical guidance on MNA and NSZD.



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## SESSION 6

# PFAS in Consumer Products Stakeholder Engagement

TUESDAY 17 SEPTEMBER

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

ONLINE

### Opening

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

### Presentations

**14:40** PFAS in Consumer Products  
*Rock Vitale (Environmental Standards, Montrose Environmental Group, ASTM International)*

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

**15:30** End of the training



Rock Vitale

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High-performance liquid chromatography coupled with tandem mass spectrometry (LC/MS/MS) has the capability of identifying and quantitating analytes at sub-parts per trillion (ppt) levels in clean matrices such as drinking water. With the various definitions of per- and polyfluoroalkyl substances (PFAS) evolving, we are at the point where over 7 million compounds (by one definition) are now being called PFAS. While there is the availability of domestic and international published/consensus methods to test drinking water, non-potable water, soil/sediment, tissue, and other environmental matrices, there is a lack of consensus and/or published test methods that can be used to identify and quantify PFAS in Consumer and Related Articles. This continues to be important as there are questions concerning the presence of PFAS in, and potential exposure to PFAS from, a variety of consumer products.

Compounding this method problem, even with sophisticated LC/MS/MS instrumentation available for speciated PFAS analysis, there are only a small number of target analyte compounds that have reliable reference standards to enable quantitative analysis. Therefore, every PFAS compound or precursor compound (e.g., total oxidizable precursors [TOPs]) for which there is no reference standard represents a potential interference when analyzing PFAS target analytes. Because of the significant number of non-target PFAS, proxy organic fluorine methods (e.g., combustion ion chromatography [CIC]) have been developed that are intended to represent “total PFAS.”

This training will include an overview of PFAS, definitions, history of use, and analysis in environmental media, as well as the formation, members, and current status of ASTM F15.81 – PFAS in Consumer Products. Also included will be an overview of the ASTM subcommittee, the work items in progress, why to test/why not to test for PFAS, how to test, and recommended best practices.





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## SESSION 7

# Assessment of NAPL Ebullition in Sediments with a Flux Chamber

TUESDAY 17 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** Assessment of NAPL Ebullition in Sediments with a Flux Chamber  
*Amy Corp (Anchor QEA), Raja Kaliappan (Jacobs)*

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

**16:30** End of the training

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Amy Corp



Raja Kaliappan



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## SESSION 8

# Toxicity Testing with the Mayfly

TUESDAY 17 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** Toxicity Testing with the Mayfly  
*David J. Soucek (U.S. Geological Survey, ASTM International)*

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

**17:30** End of the training

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David J. Soucek



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## SESSION 9

# A Combination of Three Standards on Storage Tanks

TUESDAY 17 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** A Combination of Three Standards on Storage Tanks  
*Pat Rounds (PMMIC Insurance, 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/i7FX6Q9yF1vmRTDs5>



Pat Rounds



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## SESSION 10 Stakeholder Engagement

TUESDAY 17 SEPTEMBER

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

ONLINE

### Opening

**18:30** Welcome from ASTM International and Remtech Europe

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

### Presentations

**18:35** Stakeholder Engagement

*Paul Sonnerfeld (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/wtoDetdzdj22TMRP8>



Paul  
Sonnerfeld





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## SESSION 11

# Drone Technology for Site Assessment

TUESDAY 17 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** Drone Technology for Site Assessment  
*Jim Bartlett (Bureau Veritas, ASTM International), Mike Sowinski (Terradex, ASTM International)*

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

**22:00** End of the training

Register yourself in the Google form  
<https://forms.gle/CUycbSZWZLnCMY6N9>



Jim Bartlett



Mike Sowinski

## **SESSION 12**

### **Risk Assessment**

**WEDNESDAY 18 SEPTEMBER**

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

**ONLINE**

#### **Opening**

**09:00** Welcome from ALGA and Remtech Europe

*Vicki Pearce (Ventia, ALGA), Matthew Potter (ALGA), Marco Falconi (ISPRA, Remtech Europe)*

#### **Presentations**

**09:10** Introduction to human health risk assessment (HHRA) of contaminated sites

- Background, concepts
- Conceptual site models
- Terminology

*Victoria Lazenby (Terravale, ALGA)*

**09:40** International guidance and available resources to support HHRA

- Available screening criteria
- How screening criteria are derived
- Exposure parameters and toxicity values

*Victoria Lazenby (Terravale, ALGA), Carolyn Brumley (Senversa, ALGA)*

**10:30** Worked example from a contaminated site

- Consideration of exposure pathways
- Comparison of site data with criteria
- How criteria can be adjusted to be more site specific

*Carolyn Brumley (Senversa, ALGA)*

**10:50** Questions and Answers

*Vicki Pearce (Ventia, ALGA), Matthew Potter (ALGA), Marco Falconi (ISPRA, Remtech Europe)*

**11:00** End of the training

Register yourself in the Google form <https://forms.gle/xkWLb1A435WZZAiZ8>

## SESSION 13

### PFAS risk assessment and management

WEDNESDAY 18 SEPTEMBER

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

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

#### Opening

**09:00** Welcome from *Dietmar Müller-Grabherr (COMMON FORUM)*, *Nicola Harries (CL:AIRE)*, *Julie Lions (BRGM)*

#### Presentations

- 09:05** The "Forever Pollution" database (le Monde): the presence of perfluoroalkyl substances (PFAS) in Italian groundwater and surface water and the use of concentration ratios as tracers of their origin  
*Stefano Fabiano (University of Venice Ca Foscari)*, *Maurizio Guerra*, *Marco Falconi (ISPRA)*
- 09:20** Managing PFAS Contaminated Land/Sites – strategic approach in Austria  
*Gernot Döberl*, *Martin Weisgram (Environment Agency Austria (EAA))*
- 09:35** Mapping and investigation of PFAS suspected sites in Flanders  
*Johan Ceenaeme (OVAM (Public Waste Agency of Flanders))*
- 09:50** Biological aspects of PFAS contamination and remediation  
*Emilio Brivio Sforza*, *Valeria Tatangelo*, *Sara Villa*, *Andrea Franzetti*, *Valeria Mezzanotte (University Milano Bicocca)*
- 10:05** Summary of a comparative study of PFAS contaminated soil management  
*Katrine Smith (WSP for Danish EPA)*
- 10:20** Properly assessing PFAS risk: the SGS PFASafe® 2.0 approach  
*Luca Fagioli*, *Pieter Joos*, *Luc de Ren (SGS Group)*
- 10:35** Effective and sustainable PFAS treatment for aggressive landfill leachates using Foam fractionation  
*Robin Axelson*, *Helena Hinrichsen (Envytech)*
- 10:50** Panel discussion moderated by chairs
- 11:10** End of the session

Register yourself in the Google form <https://forms.gle/D9L8D3RdvLccWdhM6>



## SESSION 14

### Biochar and soil amendments

WEDNESDAY 18 SEPTEMBER

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

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

#### Opening

**09:00** Welcome from *Piotr Wojda (JRC-EC)*, *Elena Stefanoni (UNEP)*, *Nazaré Couto (CENSE,PT)*, *Mentore Vaccari (University of Brescia)*

#### Presentations

- 09:05** Application of Multiyear Miscanthus Phytotechnology Supported by Soil Amendments to the Post-Military/Post-Mining Land: case of Chomutov, Czech Republic  
*Robert Ato Newton, Valentina Pidlisnyuk (Purkyně University), Sergey Ust'ak, Vojtech Vana (Crop Research Institute) Aigerim Mamirova (Al-Farabi Kazakh National University)*
- 09:20** Simultaneous removal of Cd(II) and As(V) by ferrihydrite-biochar composite: Enhanced effects of As(V) on Cd(II) adsorption  
*Changxun Dong (Nanjing Agricultural University)*
- 09:35** Application of ash as a soil amendment in phytoremediation  
*Abdulmannan Rouhani, Valentina Pidlisnyuk, Karim Suhail Al Souki (Purkyně University)*
- 09:50** Pyrolysis temperature effects on wood-derived biochar and its potential for organic pollutant removal from water  
*Tamara Apostolović, Nina Đukanović, Tajana Simetić, Jasmina Anojčić, Sanja Mutić, Snežana Maletić, Jelena Beljin (University of Novi Sad)*
- 10:05** A nature-based approach to enhance the recovery potential of a spontaneous ecosystem developed on an urban contaminated site  
*Laura Passatore, Paolo Sconocchia, Massimo Zacchini (IRET-CNR), Gianluca Rapaccini, Stefano Zoli (Terrapreta), Massimiliano Baric, Tatiana Stella (M3R-Monitoring and Management of Microbial Resources)*
- 10:20** Remediation approaches for degraded military-polluted lands: case of Ukraine  
*Valentina Pidlisnyuk (Purkyně University), Larry Erickson, Ganga Hettiarachichi (Kansas State University), Tatyana Stefanovska (University of Life and Environmental Sciences of Kyiv), Sergey Ust'ak (Crop Research Institute), Pavlo Shapoval (Lviv Polytechnic National University)*
- 10:35** Panel discussion moderated by chairs
- 11:00** End of the session

Register yourself in the Google form <https://forms.gle/xyy4khAfRRyPwZgbA>





## SESSION 15

### Drones, artificial intelligence and new frontiers in characterization

WEDNESDAY 18 SEPTEMBER

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

White Room  
1° floor

#### Opening

**11:30** Welcome from *Pavlos Tyrologou (EFG)*, *Laurent Thannberger (RNEST)* *Erika von Zuben (AESAS)*

#### Presentations

**11:35** Real-time groundwater sensor networks for sustainable land and water use in changing conditions

*Marjan Joris, Jeroen November, Niels Van Putte, Goedele Verreydt (iFLUX)*

**11:50** UVOST® technology and laboratory analysis, a combined approach for a reliable environmental investigation

*Claudio Carusi, Luca Moresi, Federica De Santis (Mares), Marcello Pianu, Fabio Allegrini (ENI), Eugen Martac (Fugro)*

**12:05** Drone applications in situ characterization/remediation

*Jasper Schmeits (TAUW), Bob van der Meij, Jasper Mink (GeoZICHT)*

**12:20** Navigating New Frontiers: The Role of Artificial Intelligence (AI) in Environmental Innovation

*B.J. Min (TRIUM Environmental/ecoAI innovates)*

**12:35** Collection of High-Definition Screening Data to Streamline the Evaluation of Subslab Conditions at Vapor Intrusion Sites – A Case Study

*Craig Cox (Cox-Colvin & Associates)*

**12:50** GroundWater Spatiotemporal Data Analysis Tool

*Wayne Jones, Luc Rock (Shell)*

**13:05** Use of smart wells in the execution of DPE and P&T remediation pilot tests

*Pedro Rosado, André Souza, André Pozzetti, Majhal Pinheiro (CETREL)*

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

**13:45** End of the session

Register yourself in the Google form <https://forms.gle/W3U9XddmzDKFEuHf8>



## Healthy soil and the Soil Monitoring Law

WEDNESDAY 18 SEPTEMBER

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

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

### Opening

**11:30** Welcome from *Dietmar Müller-Grabherr (COMMON FORUM), Antonella Vecchio (ISPRA), Elena Stefanoni (UNEP)*

### Presentations

**11:35** Soil Pollution in the European Union

*Diana Vieira, Felipe Yunta, Panos Panagos, Arwyn Jones, Piotr Wojda (JRC European Commission)*

**11:50** A European approach for Healthy soils - a reflection from Germany

*Jörg Frauenstein (Umweltbundesamt (Germany))*

**12:05** The EU soil directive: a reflection from Italy

*Francesca Assennato (ISPRA, Italy)*

**12:20** Towards a EU Soil Monitoring Law and comprehensively managing contaminated land

*Dietmar Müller-Grabherr (COMMON FORUM on Contaminated Land in Europe, Environment Agency Austria (EAA))*

**12:35** The EU soil directive: a reflection from the Belgium

*Johan Ceenaeme (OVAM)*

**12:50** Contaminated sites management in the Western Balkans (with a focus on Bosnia and Herzegovina and Serbia)

*Aleksandra Šiljić Tomić (UNEP Serbia), Matea Grabovac (UNEP Bosnia Herzegovina)*

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

**13:30** End of the session

Register yourself in the Google form <https://forms.gle/YGcanHS5T3HTmTkZ6>



## SESSION 17

### 3D and High Resolution Characterization Techniques

WEDNESDAY 18 SEPTEMBER

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

White Room  
1° floor

#### Opening

**14:30** Welcome from *Piotr Wojda (JRC-EC), Laurent Thannberger (RNEST), Wouter Gevaerts (NICOLE)*

#### Presentations

**14:35** Controlling risks during industrial construction works through sustainable and data-driven groundwater management using real-time monitoring of groundwater flows  
*Marjan Joris, Timothy De Kleyn (iFLUX), Steven Van den Bussche, Karen Van Geert (Arcadis)*

**14:50** Real-Time ISCO Scaling Using HRSC  
*Elisandra Hernandez da Fonseca, Felipe Pereira de Sisto, José Eduardo Blanco Querido, Carlos Cesar Malta de Oliveira, Sandro Souto de Souto (Finkler Ambiental)*

**15:05** Three dimensional site conceptual models (3D CSM)  
*Willem J.M. Havermans (TAUW)*

**15:20** Three-dimensional contaminant modeling in thermal remediation for performance assessment  
*Marcelo Silveira, Aline Setti, Edson Arakaki, Jonas Oliveira, Isabela Lima (Worley)*

**15:35** MIP-OMS experiences after one year of deployment: On-site mass spectrometry based high-resolution characterization technology with continuous monitoring of individual contaminant species  
*Eugen Martac (Fugro), Claudio Carusi (Mares)*

**15:50** Panel discussion moderated by chairs

**16:30** End of the session

Register yourself in the Google form <https://forms.gle/76FLB8qhEYMum22j6>



# REMTECH Europe

## SESSION 18

### Sustainable remediation and national programs

WEDNESDAY 18 SEPTEMBER

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

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

#### Opening

**14:30** Welcome from Jörg Frauenstein (Umweltbundesamt), Nicola Harries (CL:AIRE), Johan Ceenaeme (OVAM)

#### Presentations

- 14:35** A circular economy case history for a quarry restoration  
*Sara Cecon, Aldo Trezzi, Mara Moggia (Ramboll), Elisa Bizzotto (Fondazione Ca' Foscari)*
- 14:50** Sustainable Remediation of Aluminium Smelter Waste – A Case Study of Hydro Aluminium Kurri Kurri Smelter  
*Kirsty Greenfield (Ramboll), Andrew Walker (Hydro Aluminium Kurri Kurri Australia)*
- 15:05** Sustainable Remediation Strategies and Community Engagements in Niger Delta Oil Spill Sites: A Path to Resolving Environmental and Socioeconomic Challenges  
*Mariam Yahaya-Shiru, Yusuf O. Rigasa, Chizoba Okorie Kama, Enogenyi Aunam (Nigerian National Oil Spill Detection And Response Agency (NOSDRA))*
- 15:20** ESG Law & Policy in 2024: climate considerations for contamination management & sustainable remediation  
*Gabrielle Guthrie (Guthrie Legal)*
- 15:35** The Austrian program for Historically Contaminated sites - new legal incentives and a paradigm shift  
*Dietmar Müller-Grabherr, Gernot Döberl (Environment Agency Austria (EAA))*
- 15:50** Understanding the synergies between Port Receiving Facilities and Contaminated Land Remediation  
*Joshua A. Kelly, Manel Fernandez (LAMOR)*
- 16:05** Contaminated land management in Türkiye  
*Burak Devci (BCA Group)*
- 16:20** Panel discussion moderated by chairs
- 16:45** End of the session

Register yourself in the Google form <https://forms.gle/DKU967HX2iSyx4Ca8>

**GUTHRIE LEGAL**  
ENVIRONMENT & PLANNING LAW



Danışmanlık & Mühendislik

**LAMOR**

**RAMBOLL**



# REMTECH Europe

## SESSION 19

### In situ thermal remediation

WEDNESDAY 18 SEPTEMBER

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

White Room  
1° floor

#### Opening

**17:00** Welcome from *Dietmar Müller-Grabherr (COMMON FORUM), Pavlos Tyrologou (EFG), Thiago Gomes (AESAS)*

#### Presentations

- 17:05** Thermal desorption of mercury: steps to full scale  
*Matthieu Sangely, Laurent Thannberger (Valgo), Pierre-Louis Guillerm (Ramboll)*
- 17:20** In-Situ Thermal and Bioremediation of a CVOC Source Zone in South America: Challenges and Findings"  
*Sadjad Mohammadian, Ralf Engelhardt (TAUW), Pedro Aquino, David Forster (EPA Engenharia de Proteção Ambiental)*
- 17:35** Thermal Conduction Heating Case Studies: Reducing Heat Losses, Groundwater Management, and Lessons Learned  
*Clayton Campbell (McMillan-McGee)*
- 17:50** In situ Conductive Heating to Enhance Long-chain LNAPL Recovery  
*Thomas Meyer, Philipp Schiphorst, Alessandro Raffaldi, Paolo Boitani (Zueblin Umwelttechnik)*
- 18:05** Optimizing data processing during thermal remediation using a POWER BI dashboard  
*Jonas Oliveira, Aline Setti, Edson Arakaki, Isabela Lima (Worley)*
- 18:20** Computational simulation of in situ Thermal Conductive Heating for soil remediation to predict process performance: preliminary results  
*Filippo Fazzino, Stefano Mauro, Federico Vagliasindi, Pietro Paolo Falciiglia (University of Catania)*
- 18:35** Panel discussion moderated by chairs
- 19:00** End of the session

Register yourself in the Google form <https://forms.gle/T6uEL5tmmoD7C3AF9>



# REMTECH Europe

## SESSION 20

### Bioremediation and nature-based solutions

WEDNESDAY 18 SEPTEMBER

17:00 – 19:10 CEST (Central European Summer Time)

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

#### Opening

**17:00** Welcome from *Johan Ceenaeme (OVAM)*, *Victoria Lazenby (ALGA)*, *Mentore Vaccari (University of Brescia)*, *Stephanie Fiorenza (ASTM International)*

#### Presentations

- 17:05** Soil bioremediation efficiency: the impact of bioaugmentation and mineral or green compost additive in PAHs and TPH contaminated soil  
*Nicolas Martin, Malgorzata Grybos, Thibaut Le-Guet, Fabrice Dupuy, Emmanuel Joussein (Université de Limoges)*
- 17:20** Microbiomes for the depletion of hexachlorocyclohexane in contaminated environments: the power of biodiversity  
*Giacomo Bernabei, Giampiero De Simone, Simone Becarelli, Riccardo Di Mambro, Simona Di Gregorio (BIOUNIPi, University of Pisa), Alessandro Gentini (Teseco Bonifiche)*
- 17:35** Laboratory degradation tests as first step for the design of a bioremediation strategy  
*Federica Brogioli, Cosimo Masini (DND Biotech)*
- 17:50** LIFE NARMENA: Nature Based Remediation Techniques for heavy metals in sediment - Constructed Wetlands – monitoring post works of the Winterbeek site  
*Axelle Mineur, Jan De Vos (ABO Group), Froukje Kuijk (OVAM), Karel Viaene (ARCHE)*
- 18:05** Comparative Analysis of Lignin Peroxidase and Laccase Activities in the Presence of Graphene-Related Nanomaterials  
*Humberto Castillo-González, Fabio Candotto-Carniel, Mario Mardirossian, Mauro Tretiach (University of Trieste)*
- 18:20** Enhanced remediation of LNAPL-contaminated soil using polymer-alcohol emulsion  
*Bexultan Sabyrbay, Fabien Lion, Dorian Davarzani, Stéfan Colombano (BRGM), Christophe Dicharry (Université de Pau et des Pays de l'Adour (UPPA)), Sagyn Omirbekov (Nazarbayev University), Mélanie Lorthioy, Mohamed Krimissa (EDF)*
- 18:35** Microbial characterization of multicontaminated marine sediments in Mar Piccolo Site (Taranto, Italy) and selection of aerobic and anaerobic hydrocarbondegrading bacteria  
*Bruna Matturro, Barbara Tonanzi, Federico Aulenta (NBFC), Maria Letizia Di Franca, Carolina CruzViggi, Magda Di Leo, Santina Giandomenico, Simona Rossetti (CNR-IRSA)*
- 18:50** Panel discussion moderated by chairs
- 19:10** End of the session

Register yourself in the Google form <https://forms.gle/KoNd4t9rM9foiXGF8>



**SESSION 21****PROMISCES: PFAS treatment technologies for  
contaminated sites : soils, sediments and  
groundwater****WEDNESDAY 18 SEPTEMBER****14:30 – 18:30 CEST (Central European Summer Time)****Blue Room  
1° floor****Opening**

**14:30** Welcome from *Marco Falconi (ISPRA)* and introduction from the Chairs, *Stéfan Colombano (BRGM)*, *Eric van Hullebusch (IPGP)*

**14:30            Session: part 1 (15 min talk + 5 min questions)**

- 1) “Mass balance: determination of "total PFAS" & sampling strategies” (speakers : Julie Lions, BRGM and Thomas J. Oudega, TU Vienna)
- 2) “Toxicity effect- based bioanalysis of PFAS in the water cycle” (speaker: Peter Behnish, BDS)
- 3) “Fate and transport of PFAS in porous media” (speakers: Annemieke Marsman, Deltares, Thomas J. Oudega, TU Vienne and Nicolas Devau, BRGM)
- 4) “Mobilization of PFAS from Heterogeneous Soils: Desorption By Alcohol/Bio-Polymer Mixture” (speaker: Ali Batikh, Colas Environnement)
- 5) “Feasibility of on-site treatment of PFAS contaminated groundwater: lessons learned” (speakers: Jéssica Meijide, Sònia Jou Claus, EURECAT)

**16:10            Coffee Break****16:40            Session: part 2 (15 min talk + 5 min questions)**

- 1) “Pilot scale evaluation of advanced technologies for PFAS removal during landfill leachate treatment” (speaker: Ali Hydar, UNIVPM)
- 2) “Effects of plasma treatment of PFAS in model liquids and in leachate of PROMISCES project” (speaker: Evgenia Benova, University of Sofia)
- 3) “Insight into PFOA degradation using DMSO/NaOH” (speaker: Stéphanie Betelu, BRGM)
- 4) “ Ultrasonic cavitation technology for on-site treatment of PFAS contaminated groundwater ” (speaker: Debabrata Panda, IPGP)
- 5) “Transfer and removal of PFAS during treatment and valorization of dredged sediments” (speaker: Massimiliano Sgroi, UNIVPM)
- 6) Wrap-up session by session chairs (speakers: Stéfan Colombano and Eric van Hullebusch) 10’

**18:30 end of the session**

Free Registration for participation online and in presence <https://forms.gle/7kbbbsKw8TpMLvsr5>



REMTECH  
Europe

## SESSION 22 LIFE MY SOIL

THURSDAY 19 SEPTEMBER

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

Blue Room  
1° floor

### Opening

**09:00** Welcome to participants

**09:10** Introduction from Marco Falconi (Remtech Europe coordinator, ISPRA)

**09:20** Session 1 “Mycoremediation”

- Mycoremediation: a 15-year long story of recalcitrant pollutants treatment by fungi (*Tatiana Stella, M3R-Monitoring and Management of Microbial Resources*)
- Microbial interactions involved in bioremediation of benzo(a)pyrene by the fungus *Talaromyces helicus* in soil (*Salomé Bertone, University of Technology of Compiègne*)
- Comparative analysis of lignin peroxidase and laccase activities in the presence of graphene-related nanomaterials (*Humberto Castillo-González, University of Trieste*)

**10:20** Round table and Q&A

**10:40** Coffee break

**11:10** Session 2 “The LIFE MySOIL project”

- Introduction to the LIFE MySOIL project (*Jofre Herrero, Eurecat*)
- LIFE MySOIL: From biotreatability test to process transferability: the Italian experience (*Fiora Bagnato, Eni Rewind; Silvia Crognale, University of Tuscia*)
- LIFE MySOIL: From biotreatability test to process transferability: the French experience (*Laurent Thannberger, VALGO; Ilaria Chicca, Novobiom*)
- LIFE MySOIL: From biotreatability test to process transferability: the Spanish experience (*Rafael Antón Herrero, Universidad Autónoma de Madrid; Jorge Miguel Diamantino, Kepler*)
- MYCOTRAP: a novel approach to assess soil mycoremediation (*Anko Fischer, Isodetect*)

**12:40** Round table and Q&A

**13:00** End of the session

Free Registration for participation online and in presence

<https://forms.gle/U6vTHViRDYekqQhH6>



# REMTECH Europe

## SESSION 23

### Groundwater remediation

THURSDAY 19 SEPTEMBER

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

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

#### Opening

**09:00** Welcome from *Dietmar Müller-Grabherr (COMMON FORUM)*, *Nicola Harries (CL:AIRE)*,  
*Robert Jelinek (Slovak State Geological Institute)*

#### Presentations

**09:05** Protection of the groundwater resource by reusing water collected in the hydraulic barrier during the industrial production cycle and cheese whey injection interventions. Case study  
*Laura Quintarelli, Riccardo Di Lorenzo, Matteo Capelli, Marco Gardini (Ramboll)*

**09:20** IEG-GCW® and C-Mix Synergy: A pioneering Approach  
*Niloufar Falakbaz, Eduard J. Alesi (IEG Technologie)*

**09:35** Application of bacterial remediation products in an oil-water interceptor at a motorway depot in the UK  
*Bastian Saputra, Cecilia MacLeod (Advanced Bacterial Sciences (ABS))*

**09:50** Electro-nanobioremediation Technology for In-situ Degradation from Low Permeable Aquifer  
*Vojtech Antos, Vaclav Sredl, Petr Kvapil (Photon Water Technology), Jaroslav Nosek, Tomas Pluhar (Technical University of Liberec), Pierre Matz, Salvador Asensio Gimenez, Jose-Javier Garrido (SOLVAY)*

**10:05** Re-purposing legacy lagoons as an engineered wetland system  
*Nicoletta Cavaleri (Jacobs)*

**10:20** New Integrated Biogeochemical /Electrochemical Method for Remediation of Contaminated Groundwater  
*Elie Elgressy, Gil Elgressy (E.Elgressy) Troy Lizer, Will Moody (Provectus)*

**10:35** Panel discussion moderated by chairs

**11:00** End of the session

Register yourself in the Google form <https://forms.gle/fNqK3Rt9LF16vram8>



# REMTECH Europe

## SESSION 24

### Heavy metals and POPs

THURSDAY 19 SEPTEMBER

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

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

#### Opening

**09:00** Welcome from *Johan Ceenaeme (OVAM)*, *Victoria Lazenby (ALGA)*, *Pavlos Tyrologou (EFG)*

#### Presentations

**09:05** Phyto-evaluation of Cd-Pb using tropical plants in hydrotoxic soil-leachate conditions  
*Chuck Chuan (Xiamen University Malaysia)*

**09:20** Potential application of phosphogypsum for sediment remediation  
*Nataša Slijepčević, Dunja Rađenović, Slaven Tenodi, Dejan Krčmar, Milena Bečelić-Tomin, Đurđa Kerkez, Dragana Tomašević Pilipović*

**09:35** Assessment of accumulation of heavy metals in soils of Europe due to diffuse pollution  
*Felipe Yunta, Diana Vieira, Elise Van Eynde, Calogero Schillaci, Panos Panagos, Arwyn Jones, Piotr Wojda (Joint Research Centre – European Commission)*

**09:50** Permeable contaminant filters for interrupting pollutant pathways in sediments and soils  
*Stefan Niewerth, Alberto Simini, James Feest (HUESKER Synthetic)*

**10:05** Update in the management and securing of mercury-polluted sites  
*Boris Devic-Bassaget (Sarpi Remediation Europe, Veolia Group)*

**10:20** Thermal Pre-Processing Techniques for Reactive Aluminum Alloy Waste Powders  
*Piero Ferrari (Brixiambiente), Mentore Vaccari, Roya Biabani (University of Brescia)*

**10:35** Portable X-Ray Fluorescence Analyzers to Characterize Heavy Metals in Soil: Persistent Arsenic from Historical Sodium Arsenite Application as Herbicide  
*Silvia Gianetti Barber (Integral Consulting)*

**10:50** Phytoremediation: a nature-based remediation technology to strengthen natural attenuation processes  
*Auroramaria Basile, Maite Tejerina Nunez, Anna De Fina, Ruggero Passaro, Nicola Bentivoglio (WSP)*

**11:05** Panel discussion moderated by chairs

**11:20** End of the session

Register yourself in the Google form <https://forms.gle/emvJTekUv1iFMTjGA>



# REMTECH Europe

## SESSION 25

### PFAS groundwater remediation

THURSDAY 19 SEPTEMBER

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

White Room  
1° floor

#### Opening

**11:30** Welcome from *Nicola Harries (CL:AIRE)*, *Jörg Frauenstein (Umweltbundesamt)*, *Victoria Lazenby (ALGA)*

#### Presentations

- 11:35** Photoelectrocatalytic advanced oxidation of PFAS in groundwater and liquid waste  
*Silvia Franz, Alessandro Pietro Tucci (Politecnico di Milano), Massimiliano Bestetti (Tomsk Polytechnic University), Paolo Ronco (Viacqua)*
- 11:50** In-situ Electrochemically Enhanced Nanoremediation for PFAS - Successful Site Trial  
*Emily Brown, Ian Phillipps, Petr Kvapil, Vaclav Sredl (Photon Water Technology), Jaroslav Nosek (Technical University of Liberec)*
- 12:05** Sustainability of PFAS-remediation: Comparison of in situ Barriers and Pump&Treat  
*Matthias Sumann, Jarno Laitinen (Ramboll), Gareth Leonard, Marcello Carboni (Regenesis)*
- 12:20** Catalytic rehabilitation of PFAS contaminated groundwater.  
*Rizwan Isap (Oxyle)*
- 12:35** Groundwater and mass FLUX for better groundwater management and tackling emerging contaminants  
*Marjan Joris, Erik Bosmans (iFLUX)*
- 12:50** Sustainable Surfactant Enhanced Hydrocarbon, Chlorinated Solvent, and PFAS Remediation Resolving Hydro-Geo-Chemical Limitations  
*George A. Ivey (Ivey International)*
- 13:05** Regenerating Ion Exchange Resins to Reduce the Life Cycle Cost of PFAS Water Treatment  
*Steven Becker, Aaron Kavanagh, John Wilson (SciDev)*
- 13:20** Panel discussion moderated by chairs
- 13:45** End of the session

Register yourself in the Google form <https://forms.gle/m3b1ub7bGqcRUR616>



## SESSION 26

# Mining and Soil Remediation Innovations

THURSDAY 19 SEPTEMBER

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

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

### Opening

**11:45** Welcome from *Dietmar Müller-Grabherr (COMMON FORUM)*, *Johan Ceenaeme (OVAM)*,  
*Wouter Gevaerts (NICOLE)*

### Presentations

**11:50** Converting iron ore tailings into soil like growth medium for ecological rehabilitation  
*Songlin Wu (Chinese Academy of Sciences)*, *Longbin Huang (University of Queensland)*

**12:05** Enhanced Phytoremediation of Polluted Soils in Mining Areas Using Nanoscale Zero-Valent Iron  
*Salvador Sánchez, Aida González (Universidad de Oviedo)*, *Diego Baragaño (Instituto de Ciencia y Tecnología del Carbono)*

**12:20** Statistical Analysis, Bioaccessibility and Soil Amendment - Addressing Soil Lead Contamination From Mining and Smelting Sources  
*Graeme Miller, Jonathan Mann (Senversa)*

**12:35** The influence of low molecular weight organic acids on the uptake and translocation of heavy metals in plants  
*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)*

**12:50** Exploring the Potential of Reduced Graphene Oxide (rGO) to Mitigate Copper and Nickel Stress in Lemna minor plants  
*Marco D'Eugenio (Sapienza University of Rome)*, *Barbara Casentini (IRSA-CNR)*, *M. Adelaide Iannelli (IBBA-CNR)*

**13:05** OPEC-2 Case study on repurposing and refurbishing of existing buildings in the context of Circular Economy  
*Sara Cardellicchio, Federica Pancotti, Rossella Sciacqua, Maurizio Pietrobon (Sogin)*

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

**13:30** End of the session

Register yourself in the Google form <https://forms.gle/T8XMiK11hkzXDKnr8>



**In front of Pavilion 2**

**Exhibition area**

**External area**

## SESSION 27

### Live Demo

**THURSDAY 19 SEPTEMBER - 13:30 – 17:30 CEST (Central European Summer Time)**

**13:30 Meeting at Pav. 2 with the chairs: Paola Grenni, Laurent Thannberger, Alessandra Cecconi**

**13:35** The use of Vapor Pin for subslab vapor intrusion measurements  
*Craig Cox (Cox Colvin)*

**13:50** UAV systems for methane emission monitoring  
*Maurizio De Molfetta, Donatello Fosco (Laboratorio Talsef, University of Bari)*

**14:05** Groundwater Passive Sampling: Snap Sampler®  
*Andrea Campi, Claudio Sandrone (BAW)*

**14:20** SOILFLUX - Rapid measurements of CO<sub>2</sub>/CH<sub>4</sub> (N<sub>2</sub>O) fluxes from soil using the accumulation chamber method  
*Luca Berichillo (ECOSEARCH)*

**14:35** EVO droplets, the difference in size between factory and in the field created emulsions  
*Robert Wagenweld (QM Environmental)*

**14:50 Moving around the exhibition area**

**15:00** Georadar applications: dam monitoring, tunnel wall control, road and subsurface survey  
*Maurizio Porcu, Chiara Faccioli, Mara Giaconi Grassi (Codevintec)*

**15:30 Moving around the external area**

**15:40** MIP-OMS (On-site Mass Spectrometry): THE solution for VOC contaminated sites  
*Claudio Carusi (Mares), Eugen Martac (Fugro)*

**16:10** The use of drones in support to land enforcement agencies against environmental crime  
*Cap. Mario Contu (Esercito Italiano)*

**16:30** End of the session

Register yourself in the Google form <https://forms.gle/18rwbeHGzK38LZ98>





## SESSION 28

### CSIA and genetic in Soil Bioremediation

THURSDAY 19 SEPTEMBER

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

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

#### Opening

**14:30** Welcome from *Dietmar Müller-Grabherr (COMMON FORUM), Felipe Yunta (JRC-EC), Monica Crisan (IMPEL)*

#### Presentations

- 14:35** From the isolation and characterization of hydrocarbon-oxidizing bacterial strains to the assessment of their capabilities for bioremediation  
*Cristina Cavone, Antonio Bucci, Pamela Monaco, Francesca Fantasma, Gino Naclerio (University of Molise), Pietro Rizzo, Fulvio Celico (University of Parma)*
- 14:50** Synergism of Endophytic Microbiota and Plants Promotes the Removal of Polycyclic Aromatic Hydrocarbons from the Alfalfa Rhizosphere  
*Longfei Jiang, Xianghui Cheng, Chunling Luo (Chinese Academy of Sciences)*
- 15:05** Compound-Specific Isotope Analysis (CSIA) to assess bioremediation and source forensics of chlorinated solvents in groundwater: applications and field case studies  
*Sergio Gil Villalba, Orfan Shouakar-Stash (Isotope Tracer Technologies Labs), Erica Oldani, Luca Alberti (Politecnico di Milano), Massimo Marchesi (Sapienza University of Rome)*
- 15:20** Unveiling complete natural reductive dechlorination mechanisms of chlorinated ethenes in groundwater: Insights from functional gene analysis  
*Zhuanxia Zhang, Mukhtiar Ali, Zhiwen Tang, Qi Sun, Qing Wang, Xin Liu, Lipu Yin, Song Yan, Xin Song (Chinese Academy of Science), Minmin Xu (Shandong Academy of Environmental Sciences), Frederic Coulon (Cranfield University)*
- 15:35** eDNA: soil microbiome and food health. The case of water reuse  
*Federica Cattapan (Mérieux NutriSciences)*
- 15:50** Evaluation of pollutant biodegradation and its stimulation at a large-scale industrial site based on the combination of innovative monitoring methods  
*Kevin Kuntze, Anko Fischer (Isodetect) Annika Beckmann (HPC)*
- 16:05** Stimulation of electro-active bacteria to degrade petroleum hydrocarbons  
*Azariel Ruiz-Valencia, Angélique Meunier, Timothy M. Vogel (Université Claude Bernard Lyon1)*
- 16:20** Panel discussion moderated by chairs
- 16:45** End of the session

Register yourself in the Google form <https://forms.gle/6ASp1DDh4A7kZyTV6>

## SESSION 29

### Oil and petroleum hydrocarbons

THURSDAY 19 SEPTEMBER

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

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

#### Opening

**14:30** Welcome from *Piotr Wojda (JRC-EC)*, *Victoria Lazenby (ALGA)*, *Robert Jelinek (Slovak State Geological Institute)*

#### Presentations

- 14:35** Phytoremediation Potential of Native Species in Oil-Contaminated Soils of Khuzestan Province, Iran  
*Akram Bagheripour (Lorestan University)*, *Ziaedin Badehian (Fasa University, Ebrahim Adham (Yasouj Universit)*, *Mehrdad Zarafshar(Linnaeus university)*
- 14:50** Environmental lessons learned from an oil spill  
*Oscar Gómez (Tema Litoclean)*
- 15:05** Extended-Release Oxygen Source to treat Petroleum Hydrocarbon Contamination  
*Brant Smith, Alberto Leombruni (Evonik Active Oxygens)*
- 15:20** LNAPL Infiltration and Redistribution in Heterogeneous Porous Media under Water Table Fluctuations  
*Lazzat Amangaliyeva, Maxime Cochenec, Dorian Davarzani, Stéfan Colombano (BRGM)*, *Eric van Hullebusch (Université Paris Cité)*, *Nurzhaugan Omiraliyeva, Sagyn Omirbekov (Nazarbayev University, Kazakhstan)*
- 15:35** An ISCO remediation case in the mountains of colombia  
*MSc. María José Villalobos, MSc. Eglee Borregales, Alberto Uribe Jongbloed, Sebastián Castellanos (Novambientti Soluciones Ambientales)*
- 15:50** Microbial Electrochemical Snorkels to boost anaerobic oxidation of petroleum hydrocarbons  
*Gabriele Beretta, Elena Sezenna, Sabrina Saponaro (Politecnico di Milano)*
- 16:05** Not All Is As It Seems - Reinvestigating A Persistent Benzene Plume Using HRSC  
*Graeme Miller, Emma Walsh (Senversa)*
- 16:20** Panel discussion moderated by chairs
- 16:45** End of the session

Register yourself in the Google form <https://forms.gle/7WzjPyakWSkSR5Um8>



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## SESSION 30

# Light Non-Aqueous Phase Liquid site management: decision process and remedial technologies

THURSDAY 19 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

**17:05** Light, Non-Aqueous Phase Liquids (LNAPL): Using Science to Manage Sites  
*Tom Fox (Colorado Department of Public Health and Environment); Andrew Kirkman (BP); Matthew Lahvis (Shell); Lloyd Dunlap (Retired)*

**18:50** Questions and Answers  
*Claudio Sorrentino (DTSC, ITRC), Marco Falconi (ISPRA, Remtech Europe)*

**19:00** End of the training



Register yourself in the Google form <https://forms.gle/d9hwC4MbJHPjgxe78>

### BRIEF DESCRIPTION OF THE TRAINING

ITRC's LNAPLs (Light Non-Aqueous Phase Liquids) training is based on the ITRC guidance: [LNAPL Site Management: LCSM Evolution, Decision Process, and Remedial Technologies](#) (LNAPL-3, 2018) and focuses on connecting the science to managing LNAPL sites and helping you to:

- Build upon your Understanding of LNAPL Behavior in the Subsurface
- Develop your LNAPL Conceptual Site Model and LNAPL Remedial Goals
- Select/Implement LNAPL Technologies

After this training, the expectation is that you will have the skills and understanding to use ITRC science-based resources to improve decision making at your LNAPL sites. For regulators and other government agency staff, this improved understanding can hopefully be incorporated into your own LNAPL programs.

It is recommended that participants have a general understanding of hydrogeology and some familiarity with petroleum contaminated sites. The course will build on your existing LNAPL knowledge and outline the framework for making LNAPL remediation and management decisions.

## SESSION 31

### Chlorinated solvents remediation

THURSDAY 19 SEPTEMBER

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

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

**17:00** Welcome from *Nicola Harries (CL:AIRE)*, *Jörg Frauenstein (Umweltbundesamt)*, *Iason Verginelli (Tor Vergata University)*

#### Presentations

**17:05** Enhancing Reductive Dechlorination of Trichloroethylene in Bioelectrochemical Systems with Conductive Materials  
*Suhao Chen, Zhengtao Li, Heping Zhao (Zhejiang University)*

**17:20** Combined strategies for trichloroethylene-contaminated groundwater: Biological Reductive Dechlorination coupled with adsorption on biochar and supported by alternative materials from organic wastes  
*Micaela Abruzzese, Laura Lorini, Marco Petrangeli Papini (Sapienza University of Rome), Bruna Matturro (IRSA-CNR)*

**17:35** Spider chart for chlorinated solvents remediation performance assessment  
*Antonio Molinari, Luca Sacilotto, Mauro Fortugno, Roberta Sauro Graziano (Ramboll)*

**17:50** Mass of chlorobenzenes removed in in situ thermal remediation  
*Isabela Lima, Edson Arakaki, Jonas Oliveira, Aline Setti (Worley)*

**18:05** Sustainable Remediation of Chlorinated Solvent Plumes: A Hydrogeophysical–Chemical Approach  
*Giulia Felli, Paolo Ciampi, Carlo Esposito, Marco Petrangeli Papini (Sapienza University of Rome), Christian Nielsen, Laura Ledda (TAUW)*

**18:20** Assessing the Genetic Potential for Long-term Bioremediation in East Palestine, Ohio  
*Dora Taggart, Sam Rosolina (Microbial Insights), Frank Loeffler, Gao Chen (University of Tennessee)*

**18:35** Panel discussion moderated by chairs

**19:00** End of the session

Register yourself in the Google form <https://forms.gle/oeogN4KvyPDBUoyZ9>



## SESSION 32

### Wastewater and sewage sludge

THURSDAY 19 SEPTEMBER

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

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

#### Opening

**17:00** Welcome from *Dietmar Müller-Grabherr (COMMON FORUM)*, *Pavlos Tyrologou (EFG)*,  
*Monica Crisan (IMPEL)*

#### Presentations

- 17:05** Assessment of the Potential Application of Sewage Sludge and Compost Derived from Sewage Sludge as Organic Soil Amendments  
*Marijana Kragulj Isakovski, Jelena Beljin, Nina Đukanović, Marko Šolić, Tamara Apostolović, Srđan Rončević, Snežana Maletić (University of Novi Sad)*
- 17:20** Identification of soils exceeding heavy metal concentrations in Europe by using the limit values from Sewage Sludge Directive  
*Felipe Yunta, Diana Vieira, Elise Van Eynde, Calogero Schillaci, Panos Panagos, Arwyn Jones, Piotr Wojda (JRC European Commission)*
- 17:35** Modified natural zeolites: innovative solutions for the removal of hexavalent chromium from contaminated waters  
*Francesco Panattoni, Marianna Tardani, Bruno de Azevedo, Cosimo Masini (Zeocel Italia by DND Biotech))*
- 17:50** INTECH4WATER: contaminant removal using microalgae towards an integrated wastewater treatment approach  
*M. Melis, C. Baldisserotto, T. Chenet, L. Ferroni (University of Ferrara), M. Blosi, A. Costa (National Research Council), B. Esposito, L. Sciubba, R. Guzzinati, S. Busi (ENEA), E. Carfagna (University of Bologna), S. Pancaldi (Terra&Acqua Tech Laboratory).*
- 18:05** Enhancement of the properties of municipal sewage sludge for sustainable utilization  
*Nataša Slijepčević, Dragana Tomašević Pilipović, Anita Leovac Maćerak, Nataša Duduković, Milena Bečelić-Tomin, Đurđa Kerkez (University of Novi Sad), Milomirka Obrenović (University of East Sarajevo)*
- 18:20** Panel discussion moderated by chairs
- 19:00** End of the session

Register yourself in the Google form <https://forms.gle/Pv8eiZP6r7UZxmm49>





## SESSION 33

# Sediment Cap Chemical Isolation

THURSDAY 19 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

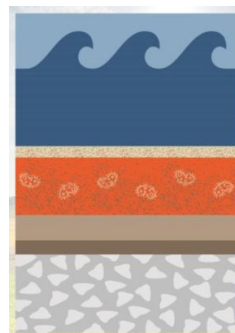
**20:10** Sediment Cap Chemical Isolation training

*Wes Thomas, Oregon Department of Environmental Quality; Wardah Azhar, Parsons; Bhawana Sharma, Jacobs; Deirdre Reidy, Anchor QEA; Danny Reible, Texas Tech University; Todd Cridge, Haley & Aldrich; Tamara Sorell, Brown & Caldwell*

**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/72utRdxGZG1iJLDm7>

### BRIEF DESCRIPTION OF THE TRAINING

The [ITRC Sediment Cap Chemical Isolation Guidance](#) provides a framework for the design, construction, and long-term monitoring of the chemical isolation function of sediment caps. The framework consists of an iterative design process informed by site-specific data that balances achievement of chemical design criteria, physical design constraints, constructability and permitting requirements. In addition, the guidance summarizes key construction considerations and presents a recommended approach for monitoring and evaluating long-term chemical isolation performance.

The Sediment Cap Chemical Isolation Training will cover several key elements of the recommended framework, including:

- A capping overview that summarizes objectives of capping, role of the chemical isolation layer, and generic cap types and compositions.
- A discussion of performance objectives and design concepts that includes the selection of chemical isolation performance targets criteria and development of design criteria while considering the site setting and conceptual site model elements.
- An overview of chemical isolation layer modeling tools and discussion of their applicability to support chemical isolation design, important model input parameters, and the impact of uncertainty and sensitivity of modeling results.
- A summary of chemical isolation construction considerations, including an overview of available construction methods and tolerances and quality assurance and quality control measures.
- A discussion of cap performance monitoring and maintenance objectives and approaches that include developing monitoring objectives to assess chemical isolation performance and methods for guiding long-term maintenance decisions.

## SESSION 34

# The management of contaminated sites in Africa: Challenges and Solutions

FRIDAY 20 SEPTEMBER

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

**ONLINE**

### Opening

**09:00** Welcome, introduction to the panel members, Chair: *Dr Heidi Snyman (Network of Industrially Contaminated Land in Africa)* Co-Chair: *Dr Inga Jacobs-Mata (IWMI/CGIAR Director: Water, Growth and Inclusion)*

### Presentations

**09:10** Keynote Context: A helicopter view of water and soil quality challenges on the African Continent  
*Dr Inga Jacobs-Mata (IWMI/CGIAR Director: Water, Growth and Inclusion)*

**09:30** A regulator's perspective on the challenges and management of contaminated land in Southern Africa – A viewpoint from South Africa  
*Dr Mpho Tshitangoni (Department of Forestry, Fisheries and Environment; South Africa)*

**09:45** A service provider's perspective on the challenges and management of contaminated land in East Africa  
*Ms Lucy Thomas, RSK Group; Dar es Salaam, Tanzania*

**10:00** The role of directed research and development in advancing the management of contaminated sites in West Africa  
*Dr Ebenezer Ashun; University of Mines and Technology, Ghana*

**10:15** The benefits and challenges of using 1st world country standards for the investigation and management of contaminated sites in Africa, using Nigeria as a case study  
*Dr Patricia Uchenna-Okeke, University of Benin Benin City, Edo State, Nigeria*

**10:30** Panel discussion facilitated by *Dr Heidi Snyman (Network of Industrially Contaminated Land in Africa)* and *Dr Inga Jacobs-Mata (IWMI/CGIAR Director: Water, Growth and Inclusion)*

**10:50** Panel discussion moderated by chairs

**11:00** End of the session

Register yourself in the Google form <https://forms.gle/9qscrJ7rdNMUG1qZA>



## SESSION 35

# BAT in the wastewater treatment

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

FRIDAY 20 SEPTEMBER

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

### Opening

**09:00** Welcome from the chairs *Monica Crisan (National Environment Guard, Romania)* and *Genève Farabegoli (ISPRA, Italy)* - IMPEL ET Water & Land Leader and Deputy

### Presentations

**09:10** The Role of Soil Health in Sustainable Wastewater and Water Reuse Practices  
*Nazaré Couto (CENSE, NOVA School of Science and Technology, Portugal)*

**09:30** Best Available Technologies in water reuse ensure management of health and environmental risks  
*Roberta Maffettone (Joint Research Center – European Commission)*

**09:50** Questions and answers  
*Monica Crisan (National Environment Guard, Romania)* and *Genève Farabegoli (ISPRA, Italy)*

**10:00** Best Available Technologies to remove micropollutants from urban wastewater  
*Nathan Obermaier (German Environment Agency)*

**10:20** Best Available Technologies approach for wastewater epidemiological surveillance to protect human health  
*Ana Allende (CEBAS-CSIC, Spain)*

**10:40** Questions and answers  
*Monica Crisan (National Environment Guard, Romania)* and *Genève Farabegoli (ISPRA, Italy)*

**10:50** Wrap-up

**11:00** End of the session

Register yourself in the Google form <https://forms.gle/DxwpqUpqM83hbtEx9>

# REMTECH Europe

## SESSION 36

### Innovative PFAS soil remediation

FRIDAY 20 SEPTEMBER

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

White Room  
1° floor

#### Opening

**09:00** Welcome from *Jörg Frauenstein (Umweltbundesamt)*, *Johan Ceenaeme (OVAM)*, *Edith Martinez-Guerra (US Army Corps of Engineers)*

**09:05** Presentation of other conferences on contaminated sites: dates, location, topics, deadlines, call for abstracts - *ALGA (Matthew Potter)*, *Nicola Africa (Heidi Snyman)*, *Aquaconsoil (Frederic Coulon)* and others, coordination of *Marco Falconi (ISPRA)*

#### Presentations

**09:20** Microbial defluorination of TFA, PFOA, and HFPO-DA by a native microbial consortium under anoxic conditions  
*Zhiwen Tang, Qing Wang, Changlong Wei, Mukhtiar Ali, Xin Song (Chinese Academy of Sciences)*, *Timothy M. Vogel (Université Claude Bernard Lyon 1)*

**09:35** PFAS source zone stabilization: a zero-waste solution to a global problem  
*Marcello Carboni, Gareth Leonard (Regenesis)*

**09:50** A holistic nature based solution for PFAS pollution in soil and groundwater  
*Luca Faggioli, Luc de Ren (SGS)*, *Erik De Bruyn (C-Biotech)*

**10:05** Enhanced PFAS Mass Removal From Soil and Groundwater Via Novel Surfactant Flushing Column Study  
*George A. Ivey (Ivey International)*, *David Holmes (Geosyntec)*, *Cecilia Macleod, Reshmi Prakash (University of Greenwich)*

**10:20** PFAS Soil Treatment Processes – A Review of Operating Ranges and Constraints (Concawe Report No.8/24)  
*Jake Hurst, Sara Hale Jonathan Miles, Emilie Dal, Wouter Gevaerts, Jeffrey Burdick (Arcadis)*, *Eleni Vaiopoulou, Markus Hjort (Concawe)*

**10:35** PFAS-contaminated soils and the possibilities for washing  
*Martin Bunzel (Schauenburg MAB)*

**10:50** Panel discussion moderated by chairs

**11:10** End of the session

Register yourself in the Google form <https://forms.gle/xe5Wt3iiqmfXDx6F8>



## Risk assessment and F&T models

FRIDAY 20 SEPTEMBER

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

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

### Opening

**11:30** Welcome from *Antonella Vecchio (ISPRA), Laurent Thannberger (RNEST), Piotr Wojda (JRC-EC)*

### Presentations

- 11:35** Environmental Modelling and Simulation for Decision-Making in Health Risk Mitigation: A Case Study on Dengue  
*Ferdinando Spagnolo (Centro Alti Studi della Difesa), Alberto Autore, Florigio Lista (Istituto di Scienze Biomediche della Difesa) Claudia Curcio (Università di Torino)*
- 11:50** Microplastics as Vectors for Metals in Polluted Soils: Interactions Within Complex Mixtures of Pollutants  
*Diego Baragaño, E. Rodríguez, M.A. López-Antón (Instituto de Ciencia y Tecnología del Carbono), S. Alcorta (Czech University of Life Sciences, CZU), E. Berrezueta (Instituto Geológico y Minero de España)*
- 12:05** Large scale risk assessment methodologies for potentially contaminated sites and diffuse contamination  
*Giulia Minolfi (Ca' Foscari University Venice), Elisa Giubilato, Alex Zabeo, Lisa Pizzol (GreenDecision) Elena Semenzin (Ca' Foscari University Venice)*
- 12:20** We Can't Stop Breathing – Why Assessing Vapor Intrusion is so Important  
*Laurie Chilcote, Craig A. Cox (Cox-Colvin & Associates)*
- 12:35** Development of a QGIS toolbox for the assessment of emissions of volatile organic compounds (VOCS) from the subsoil  
*Marco Pitardi, Sofia Costanzini, Sergio Teggi (University of Modena e Reggio Emilia), Nicolò Tonolo, Alessandra Cecconi, Iason Verginelli (University 'Tor Vergata'), Simona Berardi (INAIL)*
- 12:50** Simulation of the release and dispersion of hazardous substances following an industrial accident  
*Deborah Panepinto, Marco Ravina, Marta Brignone, Federico Urbinati, Mariachiara Zanetti (Politecnico di Torino)*
- 13:05** Evaluation of Passive Sampling Methods for Monitoring Volatile Organic Compounds in Soil Gas at Contaminated Sites  
*Raffaella Borrelli, Alessandro Oldani (ENI), Alessandra Cecconi, Iason Verginelli, Renato Baciocchi (Univ. Tor Vergata), Federico Fuin (ARPAV), Renata Emiliani, Fabrizio Cacciari (ARPAE), Antonella Vecchio (ISPRA), Camilla Lanari, Federico Villani, Guido Bonfedi (ENI Rewind), Donatella Giacometti (UNEM)*
- 13:20** Panel discussion moderated by chairs
- 13:45** End of the session

Register yourself in the Google form <https://forms.gle/TdBFaND3DVzr2HSSA>



# REMTECH Europe

## SESSION 38

### Test and full scale in-situ soil remediation

FRIDAY 20 SEPTEMBER

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

White Room  
1° floor

#### Opening

**11:30** Welcome from *Dietmar Müller-Grabherr (COMMON FORUM), Pavlos Tyrologou (EFG), Erika von Zuben (AESAS)*

#### Presentations

**11:35** Surfactant foam injection for enhanced in-situ remediation of hydrocarbon polluted soil  
*Adil Baigadilov, Stéfan Colombano, Maxime Cochenec, Dorian Davarzani, Fabien Lion (BRGM), Laurent Oxarango, Hugues Bodiguel (Univ. Grenoble Alpes), Sagyn Omirbekov (Nazarbayev University, Kazakhstan)*

**11:50** Pilot test of injection: design and mistakes  
*Jeroen Vandenbruwane, Lionel Counet, Bram Vandekerhove (Injectis)*

**12:05** Soil washing case studies within the remediation sector  
*Andrew Wilson, Amy Conway, Michael Nesbitt (CDE Group)*

**12:20** High Chain Hydrocarbon Soil Remediation with Advanced Oxidation T.E.S.T Technology Case Study  
*Jamie Davidson, Remy Kalai (Amerapex)*

**12:35** Fungal-assisted bioremediation for the treatment of TPH contaminated soil - a case study  
*Ilaria Chicca, Maxime Dessily, Caroline Zaoui (Novobiom), Johan Deroover (Sarpis Veolia)*

**12:50** Modeling Study of Vapor Recovery Flow Requirements for High-Temperature Thermal Remediation  
*David A. Rountree (McMillan-McGee)*

**13:05** Enhancing Sustainability: Solar Energy Management via Soil Storage for Zero-Carbon Solutions  
*Jan Haemers, Hatem Saadaoui, Aline Jordens, Aurelien Vandekerckhove (Haemers Technologies)*

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

**13:45** End of the session

Register yourself in the Google form <https://forms.gle/bExyjoxtVoTcRN6b7>



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## SESSION 39

# Advances in Ecotoxicology and Ecosystem evaluation

FRIDAY 20 SEPTEMBER

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

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

### Opening

**14:30** Welcome from *Felipe Yunta (JRC-EC), Pavlos Tyrologou (EFG)*

### Presentations

- 14:35** Bioplastic-degrading microbiome associated to the marine zooplankton: case study of the degradation of a polyester bioplastic  
*Luca Niccolini, Maurizia Seggiani, Giovanna Strangis, Nicoletta Barbani, Giulio Petroni, Simona Di Gregorio (University of Pisa), Valentina Vitiello, Isabella Buttino (ISPRA), Xiaojun Yan (Zhejiang Ocean University)*
- 14:55** Assessment of pesticides residues in European agricultural soils  
*Diana Vieira, Antonio Franco, Felipe Yunta, Arwyn Jones, Piotr Wojda (JRC European Commission)*
- 15:15** Microplastics associated with shoreline marine organisms at the Eastern Cape in South Africa  
*Cornel-Mari van der Merwe, Carlos Bezuidenhout, Hindrik Bouwman, Rialet Pieters (North-West University, South Africa)*
- 15:35** Pre-Remediation Characterization of petroleum Fractions and Ecotoxicity at the Heating Plant Site  
*Mila Ilic, Jelena Avdalovic, Nenad Marić, Gordana Devic, Jelena Milic (University of Belgrade)*
- 15:55** Panel discussion moderated by chairs
- 16:30** End of the session
- Register yourself in the Google form <https://forms.gle/K5sZUYpFeQZhgsEs9>



# REMTECH Europe

## SESSION 40

### AFFF and PFAS impacted sites

FRIDAY 20 SEPTEMBER

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

White Room  
1° floor

#### Opening

**14:30** Welcome from *Johan Ceenaeme (OVAM)*

#### Presentations

**14:35** AFFF Fire Suppression Systems Equipment PFAS Decontamination Via Heated Pressurized Surfactant Flushing Decontamination

*George A. Ivey (Ivey International), Scott Poynor (Geologic Science and Technology)*

**14:50** PFAS removal by activated carbon: adsorption and thermal reactivation

*Rachel Houssiere, Francesco Crescenti, Timothy Mosselmans, Mauro Magi (Chemviron)*

**15:05** PFAS Source Differentiation at Airports

*Janet Anderson (GSI Environmental), Dan Schneider, Mat Knutson (Terracon), Zachary Puchacz (Mead & Hunt)*

**15:20** Application of biosorption technology for PFAS removal in water

*Marta Senofonte, Giulia Simonetti, Stefano Parisi, Marco Petrangeli Papini (Sapienza University of Rome), Carmela Riccardi (National Institute for Insurance against Accidents at Work (INAIL))*

**15:35** Bench Scale Trial to Evaluate removal efficiencies for short and long chain PFAS using Surface Active Foam Fractionation in combination with additives

*Helena Hinrichsen, Robin Axelson (Envytech Solutions)*

**15:50** Technology Selection under U.S. EPA Guidance on the Destruction and Disposal of PFAS

*Cindy Frinkle (USEPA)*

**16:05** Panel discussion moderated by chairs

**16:30** End of the session

Register yourself in the Google form <https://forms.gle/qcAxr5hDrBfxtPzQ9>





## SESSION 41

### Vapour intrusion

FRIDAY 20 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 (Soldi Ambiental, AESAS), Thiago L. Gomes (Doxor, AESAS)*

#### Presentations

**14:40** Vapour intrusion

*Rafael Sato (AESAS)*

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

**16:30** End of the session

Register yourself in the Google form <https://forms.gle/bK2ik2hkCpVDWFYm8>



Rafael Sato - AESAS

#### DESCRIPTION OF THE TRAINING

The vapor intrusion course will cover basic concepts as well as topics such as sampling, analysis, and risk assessment of inhalation due to environmental contamination. Additionally, it will present how the topic is addressed in Brazil compared to the reality in the USA.

SESSION 42

Climate change and environmental challenges

FRIDAY 20 SEPTEMBER

16:45 – 19:30 CEST (Central European Summer Time)

White Room  
1° floor

**Opening**

**16:45** Welcome from Pavlos Tyrologou (EFG), Ludovica Bellani (Polytechnic University of Turin)

**Presentations**

- 16:50** Enhancing Sustainable Growth through Energy Management in the Municipality of Quezon, Bukidnon, Philippines  
*John Michael Villardo (Pollution Control Association of the Philippine)*
- 17:05** High concentration of odor waste gas was important for the maintenance of a deodorant microbial community of Biological trickling deodorant tower  
*QiuLi Wang (Aquatic Technology Center, China)*
- 17:20** Harmony and Hazard on the Plate: Unraveling Endocrine Disruptors in Global Diets  
*Prachi Gupta (Independent researcher)*
- 17:35** Direct spectrofluorimetric method for analysis of phenothrin and permethrin insecticides in Senegalese surface and groundwater  
*Thiaré Diène Diégane, Astou Ndiaye, Atanasse Coly (Université Cheikh Anta Diop, Sénégal) Philippe Giamarchi (Université de Bretagne Occidentale (UBO))*
- 17:50** A Global Assessment of Climate Change Education and Education For Sustainable Development  
*Hacer Aksungur Zengin, Emine Didem Evci Kiraz, Belgin Yildirim (Adnan Menderes University)*
- 18:05** Study and optimization of continuous regeneration of the catalyst CR-401 for catalytic reforming  
*Ould Brahim Insaf, Merdas Mohamed El Amine, Belkhen Islem (USTHB)*
- 18:20** Microalgae biorefinery for a greener economy  
*Pierluigi Giacò, Costanza Baldisserotto, Natasha Damiana Spadafora (University of Ferrara), Luisa Pasti Simonetta Pancaldi (Terra&Acqua Tech Laboratory), Sara Amadori, Ilaria Zanoni, Magda Blosi (National Research Council)*
- 18:35** Circular economy: challenging lessons  
*Daniela Lud (Rhein-Waal University)*
- 18:50** SMART4ENV Project: Enhancing the Scientific Capacity of TUBITAK MAM in the Field of Smart Environmental Technologies For Climate Change Challenges  
*Selda Hocaoglu, Burcu Kiran, Sebnem Aynur (TUBITAK Marmara Research Center), Francesco Fatone (Marche Politechnical University), Salas, S.P. (Fundacio Universitaria Balmes), Maletsky, Z. (Norges Miljo-Og Biovitenskaplige Universitet), Piccinetti, L (Sustainable Innovation Technology Services)*
- 19:05** Green Gutter as a Nature-Based Solution for Mitigation and Adaptation Strategy in Urban Environments  
*Ludovica Bellani, Fulvio Boano (Polytechnic University of Turin), Ole Schultz, Lineker Max Goulart Coelho (Technical University of Denmark)*
- 19:20** Panel discussion moderated by chairs
- 19:30** End of the session
- Register yourself in the Google form <https://forms.gle/iyxZob2YHCUvDLYU6>



## SESSION 43 LA FRESQUE DU SOL

FRIDAY 20 SEPTEMBER

16:30 – 19:00 CEST (Central European Summer Time)

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

**An interactive workshop to discover the soil's complexity and propose actions**

For the first time in Italy and in an international congress, you're invited to participate in the up-to-date French interactive tool to promote soil's knowledge. 8 "players" around a table and a virgin sheet of paper will built their vision of soil's properties, functions, environmental services, etc. A supervisor will rule the sequence and manage time slots.

### Discover the project

- A serious game
- Simple, reflecting the complexity of the soil with a systemic vision
- To raise awareness of the issues at stake
- To make participants want to act
- **Scientific rigor**: based on the contribution from a group of 38 experts in soil sciences



<https://fresquedusol.com/>

Register yourself in the Google form

<https://forms.gle/Jhzz1154uRHj8Emq7>



## SESSION 44

# Bioremediation Techniques Used in Brazil

FRIDAY 20 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 (Soldi Ambiental, AESAS), Thiago L. Gomes (Doxor, AESAS)*

### Presentations

**16:40** Bioremediation Techniques Used in Brazil

*Raoni Azevedo (AESAS)*

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

**18:30** End of the session

Register yourself in the Google form <https://forms.gle/QrpC6sJ3DE3mu3R39>



Raoni Azevedo Zeitune -  
AESAS

### DESCRIPTION OF THE TRAINING

The course will cover some characteristics of the Brazilian underground environment, the basic concepts of biostimulation techniques, and the main preliminary tests necessary for the design of a full-scale bioremediation project. Additionally, the training will provide some cases of bioremediation projects in Brazil along with the main challenges faced.

## SESSION 45

# SUSTAINATHON



## Sustainability the road to global value

24-25 SEPTEMBER 2024

From 14:00 (24 September) to 14:00 (25 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

Sustainathon Secretariat: Clementine Py – [sustainathon2024@gmail.com](mailto:sustainathon2024@gmail.com)

Registration form: <https://forms.gle/tVtr3Y9ekpQ3y3Fu9>

## Some of the confirmed speakers

<p>Abe Sharman (AUS)</p> 	<p>Reinhold Mangundu (NB)</p> 	<p>Koffi Valentin Mawounigan (TG)</p> 	<p>Sher Shah Khan (PK)</p> 
<p>Randy H. Adams (MX)</p> 	<p>Daisuke Yamasaki (JP)</p> 	<p>Hao-Chun Hung Hung (TW)</p> 	<p>Sarah Whiteley (AUS)</p> 
<p>Amaru Aragon (PE)</p> 	<p>Ange Dorine Irakoze (BI)</p> 	<p>Balmeo Marylin (PH)</p> 	<p>Juan Ignacio Tuccillo (AR)</p> 
<p>Oo cheng Keat (MY)</p> 	<p>Terry Long (CA)</p> 	<p>Gopal Mahadev (OM)</p> 	<p>Verónica Isidra Domínguez Rodríguez (MX)</p> 
<p>Dyana Sari (ID)</p> 	<p>Venerando Gambuzza (IT)</p> 	<p>Nina Koele (NZ)</p> 	<p>Diana Gutierrez</p> 
<p>Kwasi Samuel Benefito (GH)</p> 	<p>Lucila Martelli (AR)</p> 	<p>Thomas Jacob (IN)</p> 	<p>Suna Julia Park (UZ)</p> 
<p>Soinato Leboo (KE)</p> 	<p>Margot De Cleen (NL)</p> 	<p>Scott Warner (US)</p> 	<p>Elena Stefanoni (UN)</p> 
<p>Gareth Hughes (NZ)</p> 	<p><b>SUSTAINATHON</b></p>  <p>Sustainability the road to global value</p>	<p><b>SUSTAINATHON</b></p>  <p>Sustainability the road to global value</p>	<p><b>SUSTAINATHON</b></p>  <p>Sustainability the road to global value</p>



## Remtech Europe Scientific Committee

Marco Falconi	ISPRA, Italy
Christian Andersen	Danish Regions, Denmark
Diego Angotti	Italian Ministry for Ecological Transition
Thomas Aspray	Scottish Contaminated Land Forum, United Kingdom
Patrizia Bianconi	RemTech Expo, Italy
Iustina Boaja Popescu	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
Johan Ceenaeme	OVAM, Belgium
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
Wouter Gevaerts	NICOLE - Network of Industrial Contaminated Land in Europe
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
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
Vicki Pearce	Australasian Land and Groundwater Association, Australia
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
Heidi Snyman	NICOLA Africa, South Africa
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
Antonella Vecchio	ISPRA, Italy
Erika von Zuben	Associação Brasileira das Empresas de Consultoria e Engenharia Ambiental, Brasil
Piotr Wojda	JRC - European Commission





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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
Clementine Py	ALGA

REMTECH EUROPE AMBASSADORS



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