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Firenze — 23 - 26 Giugno 2026

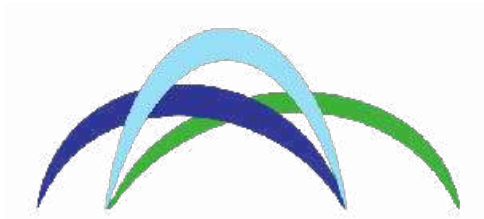
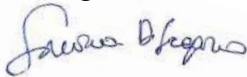


The Scientific Committee of the Congress is composed of a prestigious group of internationally renowned academics and researchers from leading universities, research institutions, and innovation centres worldwide. Bringing together a wide range of scientific expertise and perspectives, the Committee ensures the academic strength, quality, and international scope of the Bioremid.

Through their knowledge, experience, and commitment, the members of the Scientific Committee contribute significantly to the development of a high-level scientific programme, encouraging interdisciplinary exchange, research excellence, and collaboration among the international scientific community.

Their presence reflects the Congress's commitment to promoting innovation, advancing knowledge, and fostering dialogue on the most relevant challenges and opportunities within the field.

Simona Di Gregorio
on behalf of the Organising Committee



23rd June

Palazzo Vecchio, Salone dei 500

15:30
Registration of Participants

16:15
Institutional Greetings
David Barontini, Councillor for the Environment, Tuscany Region
Cosimo Guccione, President of the Municipal Council
Elisa Giuliani, Vice-Rector for Sustainability, University of Pisa
Antonella Del Corso, Director of the Department of Biology, University of Pisa
Silvia Paparella, General Manager of RemTech Expo
Nino Tarantino, Extraordinary Commissioner of the Presidency of the Council of Ministers
Ilaria Fontana, Formerly Undersecretary at the Ministry of the Environment
Alfonso Pecoraro Scanio, Formerly Ministry of the Environment

Chairs: **Conception Calvo** & **Elisabet Aranda**

17:00
Planary Lecture
Environmental biotechnology: challenges and opportunities
Teresa Lettieri, *Europen Commission Joint Research Centre*

30'

17:30
Planary Lecture
A decade from spill to clean-up: LNAPL (bio)remediation in a complex coastal aquifer
Alfredo Pérez de Mora, *Tauw GmbH, DE*

30'

24th June

Auditorium Sant'Apollonia

The contribution of environmental bioremediation to the Clean Industrial Deal in Europe

Morning session: BIOSYSMO, NYMPHE and SYMBIOREM Joint Final Event

09:00 Welcome by *Leticia Landa, Project Adviser, European Research Executive Agency & Simona di Gregorio, University of Pisa, Bioremid 2026 Organising Committee* 5'

09:05 Flash Project introductions by:
BIOSYSMO, *Sara Gil, Project Coordinator*
NYMPHE, *Giulio Zanaroli, Project Coordinator*
SYMBIOREM, *Leire Ruiz Rubio, Project Coordinator* 30'



09:35 A computational framework supporting biosystem design 15'
Lila Otero, IDENER

09:50 Soil phytoremediation from lab to field 15'
Michel Chalot, UMLP

10:05 Scaling-up of BES for groundwater bioremediation 15'
Eduard Borras, LEITAT



10:20 AI-Reprogrammed Biological Systems for the Degradation of Recalcitrant Pollutants (Microplastics) 15'
Manuel Ferrer, ICP-CSIC

10:35 Tuning an electric plastic breakdown symphony: The Fenton Overture, the Microbe Finale 15'
Luis Bañeras Vives, University of Girona

10:50 Eco-Boost: Accelerating River Sediment Purification from Pharmaceuticals with Bioaugmentation 15'
Marcus Horn, Leibniz University Hannover

11:05 Coffee break



11:30 Smart Ecobiopile: A Sustainable and Effective Strategy for the Remediation of Heavy Metals and PAHs 15'
Leire Ruiz Rubio, University of the Basque Country

11:45 Assisted soil remediation - challenges in the remediation of multi-contaminated soils 15'
Agnieszka Medyńska-Juraszek, Wrocław University of Environmental and Life Sciences

12:00 Floating Treatment Wetlands as a Nature-Based Solution for water treatment 15'
Katarzyna Pawęska, Wrocław University of Environmental and Life Sciences

12:15 45'
Round table with representative of the three projects moderated by *Concepción Calvo* and *Elisabet Aranda*, University of Granada, Bioremid 2026 Organising Committee

13:00 Lunch break

Afternoon Session:  ALL4BIOREM Cluster Session
Alliance for Environmental Bioremediation

14:00 5'
Welcoming and introduction by *Akanksha Mishra, pHYBi project*

Block#1: Innovations in bioremediation technologies 14:05 → 14:45 40'

Potential of microbiome-based bioremediation
Thomas Reichenauer (AIT); project: MIBIREM

Innovative approaches in bioremediation
Nazaré Couto (NOVA University Lisbon); project: ISLANDR

Block#2: Addressing barriers: Bioremediation from lab to field 14:45 → 15:25 40'

Advancing bioremediation of TPH-contaminated soils towards real-scale implementation
Carme Bosch, Eurecat - project: InBioSoil

Understanding Plant–Microbe–Soil Interactions for Effective Bioremediation
Rocio Barros Garcia (UBU); project: BIOREM

15:25 Coffee break

Block#2: Addressing barriers: Bioremediation from lab to field 16:00 → 16:20 20'

Curing contaminated and saline land with industrial crops for bio-based products
Maurizio Cocchi (eta-Florence); project IASIS

Block#3: Expanding the applications of bioremediation: Bio-based materials 16:20 → 17:00 40'

Use of lignocellulosic biomass from remediation practices in the textile industry
Tommaso Nieri, NTT - project: pHYBi

Natural-based materials as key agents to broaden the applicability of bioremediation technologies
Cynthia Alcántara (Kepler); project: BIOREM

17:00
Q&A with audience Wrap up and closing by *Akanksha Mishra, pHYBi project*

17:30
Wrap up and closing by *Akanksha Mishra, pHYBi project*

25th June

Hall 1 – Cinema Teatro La Compagnia

Opportunities and challenges related to the Soil Policy

09:00 The Water and Land Remediation project <i>Marco Falconi, ISPRA IMPEL</i>	15'
09:15 The implementation of the soil monitoring and resilience directive: challenges and opportunities <i>Bavo Peeters, European Commission - DG Environment</i>	15'
09:30 The progress in management of contaminated sites <i>Frank Swartjes, EEA-EIONET, RIVM</i>	15'
09:45 Uncertainty and the cost and benefit of the precautionary principle <i>Christian Andersen, COMMON FORUM, Danish Regioner</i>	15'
10:00 Economic impact and implications of the Soil Monitoring Law <i>Marco Frey, Scuola Superiore Sant'Anna, IT</i>	15'
10:15 Advancing soil monitoring: challenges, progress and integration with european frameworks and the Soil Monitoring Law <i>Felipe Yunta Mezquita, JRC</i>	15'
10.30 Policy and regulatory frameworks for bioremediation in Europe: barriers and opportunities <i>Anna Espinoza, Luxembourg Institute of Science and Technology, LU</i>	15'
10:45 Panel discussion	
11:00 coffee break & poster session	

25th June

Hall 2 – Auditorium Sant'Apollonia



25th June

Hall 1 – Cinema Teatro La Compagnia

11:30 Plenary Lecture 30'
Biodegradation of chiral contaminants: implications for environmental risk assessment
Rita Lado Ribeiro, University of Porto, PT

Beyond the exposome: mapping pollution to health

Chairs: *Adam Sochacki* & *Teresa Lettieri*

12:00 15'
Integrating soil health into sustainable and risk-based land management
Nazaré Couto, CENSE & CHANGE, PT

12:15 15'
Soil microbiomes as indicators of emerging contamination: early results from a European-scale survey
Lorenzo Pin, ISAFoM, CNR, IT

12:30 15'
Ecotoxicity-driven evaluation of innovative bioremediation and restoration strategies across complex environmental matrices of BIOSYSMO project
Rubén Martínez, Leitat, SP

12:45 15'
LandRisk: A GUI python based software to assess contaminated land risk using Source - Pathway - Receptor setting
Pavlos Tyrologou, CERTH & CENSE PT

13:00 15'
Multi-phase soil conditioning to decouple contaminant toxicity from plant productivity
Humberto Castillo González, UMPL, FR

13:15 5'
Resistance to antibiotics, biocides and metal(loid)s in bacteria isolated from a highly contaminated brownfield site
Alexander Prosenkov University of Oviedo, SP

13:20 5'
Tracking toxicity across the bioremediation timeline: Ecotoxicological evidence of hidden risks
Magdaléna Dibdiaková, Abitec S.R.O., CZ

13:25 5'
Integrated biological technologies for the remediationand requalification of an urban area contaminated by hydrocarbons
Paolo De Angelis, Università La Tuscia, IT

13:30 5'
Chiral Biotransformation Pathways in Activated Sludge: Enantioselective biodegradation of opioid tilidine, muscle relaxants baclofen and methocarbamol
Arne Krause, BfG, DE

25th June

Hall 2 – Auditorium Sant’Apollonia

Stabilize, immobilize, restore: in-situ tools for metal cleanup

Chairs: *Rafael Rivilla* & *Giulio Zanaroli*

12:15 15'
Phytoremediation, bioaugmentation, and bioelectrochemical system integration for metal(liod)s polluted groundwater remediation
Aqib Hassan Ali Khan, ICCRAM, SP

12:30 15'
Unravelling metal tolerance in poplar for enhanced phytoremediation solutions: from lab-scale transcriptomics to polluted soil mesocosms.
Arturo Redondo Lopez, CSIC, SP

12:45 15'
Bioelectrochemical reactors for heavy metal removal from acidic groundwater: performance assessment, mechanistic insights and process modelling
Eduard Borràs Camps, Leitat, SP

13:00 5'
Cascade bioleaching of ewaste using organic-acid-enriched bacterial spent media for enhanced gold recovery
Paula V. Morais, University of Coimbra, PT

13:05 5'
Remediation gradient of a mine contaminated soil using compost: effects on plant survival and physiological response
Rafael Clemente, CSIC, SP

13:10 5'
How provenance and cultivation method shape morphological and physiological traits in the nickel hyperaccumulator *Odontarrhena chalcidica*
Benedetta Montanarini, Università di Bologna, IT

13:15 5'
From waste to clean water: A low-cost strategy for bioremediation of selenium-contaminated mine waters via immobilized *Stenotrophomonas* cells
Esther Peula-Ruiz, University of Granada, SP

13:20 5'
Ex-situ evaluation of suitable NbSs for the management of heavy-metal-contaminated substrates from an urban industrial site.
Maria Luisa Antenzio, IRET-CNR, IT

25th June

Hall 1 – Cinema Teatro La Compagnia

13:35 **lunch time** & **poster session**

14:30 **Plenary Lecture**
Scaling Up Engineering Biology for Bioremediation: From Lab Innovations to Environmental Impacts
Frederic Coulon, Cranfield University, UK

30'

End to end at real scale: integrated environmental interventions

Chairs: **Hermann Heipieper** & **Marco Pietrangeli Papini**

15:00
Bioremediation as a sustainable remediation alternative: an integrated evaluation
Valérie Cappuyns, KU Leuven, BE

15'

15:15
Nitrastur Living Lgb: From site characterisation to in situ pilots for hybrid phytomanagement
Verónica Peña-Alvarez, University of Oviedo, SP

15'

15:30
Nature-Based and Electrochemical Solutions for the Integrated Remediation of a Former Gas Station Site
Federico Caldera, Mares, IT

15'

15:45
Application of Dehalococcoides bioaugmentation cultures for reductive biodegradation of chlorinated ethenes at contaminated sites in industrial scale
Stephan Huettmann, Sensatec GmbH, DE

15'

16:00
Beyond remediation: an integrated plant-microbe strategy to drive soil development in molasse-based young, reconstructed soil
Carmen Mirabelli, Yphen SAS, FR

5'

Depolymerize to detoxify: biotool for plastic and biopolymer cleanup

Chairs: **Paula Morais** & **Elena Biagi**

► 16:05
Key note lecture: Herman J. Heipieper, UFZ, DE
Biotechnological Recycling and Upcycling of Plastics for a Circular Bioeconomy

20'

16:25
Assessing the viability of a novel biotechnology to valorize used cooking oil into high-value PHA biopolymers
David Correa-Galeote, University of Granada, SP

5'

16:30
Unlocking the potential of hypersaline mixed microbial communities for polyhydroxyalkanoate production
Serena Falcioni, University of Firenze, IT

5'

25th June

Hall 2 – Auditorium Sant'Apollonia

13:35 **lunch time** & **poster session** at Hall 1 (Cinema Teatro La Compagnia)

Bio-based Horizons: novel pathways for aquifer remediation

Chairs: **Eduard Borrás** & **Thomas Reichenauer**

15:30
Pilot study on enhanced reductive dechlorination for groundwater remediation at the ex agricultura site, Avenza (MS), Italy
Maria Alejandra Decima, EniRewind, IT

15'

15:45
Biogeochemical technology application for the full-scale treatment of an aquifer impacted with chlorocarbons near a salt pond ecosystem in Sardinia, Italy
Alberto Leombruni, Evonik, IT

15'

16:00
Pharmaceuticals biodegradation in a membrane-aerated biofilm reactor downstream an adsorption treatment
Giulio Zanaroli, University of Bologna, IT

15'

16:15
Harnessing electro-bioremediation for efficient removal of petroleum hydrocarbons from groundwater: A multi-scale study
Diana Losantos, Leitat, SP

5'

16:20
Adaptive strategies of hydrocarbonoclastic bacteria: membrane modifications, morphology, and lifestyle shifts under petroleum hydrocarbon stress
Teresa Esparza

5'

16:25
Expedited Organo-Halide Destruction via Biostimulation Without Augmentation Supported by Introduction of Abiotic Electron Donor
Kent Armstrong, TerraStryke Products LLC, USA

5'

16:30
Enhancing Microbial Reductive Dechlorination in Complex Aquifers Using IEG-Biocirculation®
Niloufar Falakbaz, IEG Technologie GmbH, DE

5'

25th June

Hall 1 – Cinema Teatro La Compagnia

16:35 coffee break & poster session

Depolymerize to detoxify: biotool for plastic and biopolymer cleanup

Chairs: *Paula Morais* & *Elena Biagi*

17:00
► **Key note lecture:** *David Levin, University of Manitoba, CA*
Toward Engineered Solutions to Pollution

20'

17:20
Genome-scale transcriptional and metabolic profiling of *Rhodococcus opacus* R7 during polyethylene degradation
Jessica Zampolli, University of Milano-Bicocca, IT

15'

17:35
Mining plastic-fed insect guts for autochthonous probiotics enriched in plastic-associated metabolic functions
Jesús Salinas, University of Almería, SP

15'

17:50
Potentials and mechanisms of vermiremediation to enhance bioplastic mineralization
Marcus Horn, Leibniz University Hannover, DE

15'

18:05
Electro-driven bioremediation of microplastics
Lluís Bañeras Vives, University of Girona, SP

15'

18:20
Enhancement of polyethylene biodegradation by microbial consortium using co-substrates and enzyme inducers
Martín Segado-Perez, University of Almeria, SP

5'

18:25
Fungal microbiota associated with polypropylene colonization during vegetable waste composting
María Jose Estrella-González, University of Almeria, SP

5'

18:30 closure

25th June

Hall 2 – Auditorium Sant’Apollonia

16:35 coffee break & poster session

Bio-based Horizons: novel pathways for aquifer remediation

Chairs: *Bruna Matturro* & *Olga Nunes*

17:00
From Natural attenuation to pilot-scale bioremediation: managing DNAPL-impacted aquifer source zones
Jofre Herrero, University of Barcelona, SP

15'

17:15
Aerobic oxidation of chlorinated compounds in groundwater
Devaki Destri BD Biodigressioni srl, IT, Alessandro Gentini, Teseco Bonifiche IT

15'

17:30
Aerobic bioremediation of benzene and chlorobenzene in a polluted aquifer in Sabiñánigo (Spain): in-situ biostimulation pilot test and proteogenomic characterization of the involved *Pseudomonas* strain
David Fernández-Verdejo, University of Barcelona, SP

15'

17:45
Novel pseudomonads isolated from contaminated soil and groundwater samples across Europe
Joni Elsmoortel, Ghent University, BE

15'

18:00
Evaluation of in-situ biosparging as a hybrid engineering and nature-based remediation approach for mineral oil hydrocarbons at an active industrial site in Spain
Lasse Kürschner, Isodetect GmbH

15'

18:15
Integrated physicochemical and microbial analyses reveal redox-driven microbial community structure in a polycyclic aromatic hydrocarbon-polluted subsurface
Simon Vandersanden, University of Hasselt, BE

5'

18:20
Preliminary field assessment of whey-driven aquifer denitrification: an isotopic evaluation of process efficiency
Helena Escalona-Orellana, University of Barcelona, SP

5'

18:25 closure

26th June

Hall 1 - Cinema Teatro La Compagnia

09:00 Plenary Lecture

The holobiont potential: exploring plant-bacteria partnership in contaminated soils

Sara Borin *Università di Milano, IT*

30'

End to end at real scale: integrated environmental interventions

Chairs: **Alfredo Perez de Mora** & **Maurizio Petruccioli**

09:30

Bioavailability at the crossroads: nature-based risk reduction of organic pollutants in soils
Jose Julio Ortega-Calvo, *Instituto de Recursos Naturales y Agrobiologia de Sevilla, SP*

15'

09:45

EUI02-130 GOCCIA – Green opportunities to clean up contaminants through an interspecies alliance: supporting nature-based solutions through hybrid DNA-based microbial quantification
Silvia Leoci, *M3R S.r.l. IT*

15'

10:00

An Integrated enhanced reductive dechlorination (ERD) program to overcome the technological asymptote of pump & treat: management of chlorinated organic compound contamination at an active chemical plant (2017–2025)
Myriam Arca, **Andrea Bortoli**, *Syensqo, IT*

15'

10:15

Enhancing reductive dechlorination in aquitards: low-pressure injection strategies for DNAPL source treatment
Alberto Millán Martos, *University of Barcelona, SP*

15'

10:30

Development of autochthonous microbial cultures for bioremediation: rethinking bioaugmentation for reliable and scalable field-scale applications
Bruna Matturo, *IRSA-CNR, IT*

15'

10:45

Field-Scale mycoremediation of hydrocarbon-contaminated soil using *Agaricus bisporus* spent mushroom substrate (SMS)
Cynthia Alcántara Pollo, *Kepler, SP*

15'

11:00 coffee break & poster session

26th June

Hall 2 - Auditorium Sant'Apollonia

Predict, deploy, degrade: data driven bio-sustainability

Chairs: **David Levin** & **Sara Gil**

09:45

► **Key note lecture: Ned Budisa**, *University of Manitoba, CA*
Beyond nature's blueprint: engineering enzymes for a circular bioeconomy

20'

10:05

A data-driven approach for the optimisation of soil bioremediation
Alessandra Suagher, *University of Milano-Bicocca, IT*

15'

10:20

Field-scale prediction of soil microbial activities and pesticide degradation potential using proximal and remote sensing technologies
Lukas Y Wick, *UFZ, DE*

15'

10:35

Combined effect of biosurfactants and plants on the bioavailability and biodegradation of PAHs in contaminated soil: an integrated chemical and microbiological approach
Davide Rossi, *Università degli Studi di Milano-Bicocca, IT*

5'

10:40

Assessing the sustainability of reclaimed asphalt in constructed soils: nitrification kinetics as a stress indicator
Elia Biagini, *Università di Firenze, IT*

5'

10:45

Developing salt-tolerant microbial inoculants to enhance *Salicornia* growth in IASIS field sites
Stéphane Pfendler, *Université Marie et Louis Pasteur, FR*

5'

10:50

Who calls granules “home”? Domain-spanning meta-analysis charting microbial ecosystems underlying aerobic granular sludge reactors
Leandro Di Gloria, *Università di Firenze, IT*

5'

10:55

Bio-based printable electrodes as sustainable platforms for environmental sensing and circular remediation technologies
Raghuraj Singh Chouhan, *JSI Institute, SVN*

5'

11:00 coffee break & poster session

26th June

Hall 1 – Cinema Teatro La Compagnia

Innovative bio-tools for emerging and legacy contaminants

Chairs: **Simona Rossetti** & **Lila Otero**

11:30 15'
Beyond microbes: integrative analysis reveals site-specific geochemical drivers of HCH bioremediation
Jose Carlos Castilla-Alcantara, ICCRAM, SP

11:45 15'
Omics reveal widespread intracellular detoxification of hexachlorocyclohexane and polychlorinated biphenyls in Cladosporium fungal species
Giampiero De Simone, University of Pisa, IT

12:00 15'
Metagenomic and metatranscriptomic approaches in the study of hexachlorocyclohexane degrading microbiomes
Giacomo Bernabei, University of Pisa, IT

12:15 15'
Surfing in the storm: How bacteria thrive under stress during biodegradation of toxic organic pollutants
Michael Seeger, Universidad Tecnica Federico Santa Maria, CL

12:30 15'
Metagenomic insights into the combined effects of temperature and sludge retention time on microbial communities during conventional activated sludge wastewater treatment
Sara Ribeirinho-Soares, University of Porto, PT

12:45 5'
Bridging infrastructure and nature: integrated monitoring and biodiversity for sustainable roads
Giulia Ceribelli, Anas S.p.A., IT

12:50 5'
Assembly of autochthonous microbial communities for the biodegradation of mixed hydrocarbons in industrially contaminated soil
Elena Biagi, University of Bologna, IT

12:55 5'
The phyllosphere as a non-conventional matrix for bioremediation: Simazine degradation by bacteria on avocado leaves
Michael Seeger, Universidad Tecnica Federico Santa Maria, CL

13:00 5'
Effect of bioaugmentation seeding ratios of ccs-immobilized microbial isolates and activated sludge on the aerobic treatment of model poultry wastewater
Reuben Dasaj P. Lingating Jr., University of the Philippines Diliman, PH

13:05 **lunch time** & **poster session**

26th June

Hall 2 – Auditorium Sant’Apollonia

Innovative bio-tools for emerging and legacy contaminants

Chairs: **Frederic Coulon** & **Rocio Barros**

11:30 5'
MOF-biochar composites for the removal of emerging contaminants
Majid Sedighi, The University of Manchester, UK

11:35 5'
REMEDYOS:
integrated bioremediation platform for sustainable remediation of PFAS contaminated ecosystems
Maria J. Lopez, University of Almería, SP

11:40 5'
Detoxification monitoring of 5- hydroxymethylfurfural (HMF) by *Ectopseudomonas oleovorans* CECT 5344 using benchtop NMR
Mar Gómez Ortega, University of Extremadura, SP

11:45 15'
Multi-integrated biomonitoring for site remediation: insights from case studies TRIREME
Bruna Matturro, Trireme srl., IT

12:00 15'
ERT-monitored irrigation and bio-based soil amendments for enhanced remediation of contaminated soils
Mojtaba Ostovar,UPV/EHU, SP

12:15 15'
Synergistic phytoremediation of PAHs via µLUME-isolated consortia and patent-pending hydrophobic alginate bacterial carriers
Dmitrii Deev, JSI Institute, SVN

12:30 15'
3D-bioprinting of bacterial biofilms for complete removal of pharmaceuticals in nitrifying steps of regenerative life support
Cristina Zimmardi, Fachhochschule Nordwestschweiz, CH

12:45 15'
Testing plant-bacteria systems for bioremediation in estuarine mixed-contaminant microcosms
Margarida Pereira, CIIMAR,PT

13:00 **lunch time** & **poster session** at Hall 1 (Cinema Teatro La Compagnia)

26th June

Hall 1 – Cinema Teatro La Compagnia

Innovative bio-tools for emerging and legacy contaminants

Chairs: **Carme Bosh** & **Michael Seeger**

14:00 15'
Process performances and metagenomic insights of a large scale pilot for the bioremediation of hydrocarbon contaminated soil via mycoaugmentation
Andrea Firrincieli, Università la Tuscia, IT

14:15 15'
Towards engineering plant–microbe interfaces for targeted environmental pollutant transformation
Tomaz Rijavec, JSI Institute, SVN

14:30 15'
Engineering microbial communities: a toolbox for the isolation, assembly, and deployment of functional consortia
Ales Lapanje, JSI Institute, SVN

14:45 5'
Exploring the genomic basis of contaminant degradation by two *Clonostachys rosea* strains
Giampiero De Simone, University of Pisa, IT

14:50 5'
Application of saprophytic fungi as a bio-tool for remediation of herbicides in soil and plant health enhancement
Mario Paniagua López, EEZ-CSIC, SP

14:55 5'
Engineering electrogenic biofilms on Carbon-Based Electrodes assisted by modification of surface by polypyrrole polymerisation
Tayebeh Sharifi, JSI Institute, SVN

15:00 5'
Potential of multimetal-tolerant *Stenotrophomonas bentonitica* EPS in selenium transformation: insights from genomic analyses and biochemical characterization.
Eduardo Perez-Muelas, University of Granada, SP

15:05 5'
Thermophilic compost bacteria as a promising approach for removal of diclofenac and related pharmaceuticals from wastewater
Francesca Demaria, Fachhochschule Nordwestschweiz, CH

15:10 5'
Archaeal ALDH platform: a new frontier in robust and eco-friendly aldehyde bioremediation
Giulia Ferrara, Università del Piemonte Orientale, IT

15:15 5'
Beyond state-of-the-art: hydrophobic alginate-biochar carriers for the remediation of petroleum hydrocarbons remaining after conventional treatment
Maja Zupan, JSI Institute, SVN

26th June

Hall 2 – Auditorium Sant’Apollonia

Innovative bio-tools for emerging and legacy contaminants

Chairs: **Araceli Pérez Sanz** & **Maria Lopez**

14:00 15'
Bioremediation of TPHs in soil. From the design of a synthetic community (SynCom) to field scale biopiles
Rafael Rivilla, Universidad Autónoma de Madrid, SP

14:15 5'
Sporosarcina pasteurii urease gene expression regulation mechanism to overcome urease inhibition by hydrocarbons
Carla Comadran Casas, University of Glasgow, UK

14:20 5'
Microbially driven technetium-99 immobilization by *Pseudodesulfovibrio aespoeensis*: safety implications for high-level radioactive waste disposal
Marcos F. Martínez Moreno, Helmholtz-Zentrum Dresden-Rossendorf, DE

14:25 5'
Removal of pharmaceuticals in a full-scale constructed wetland system and its on-site intensified physical models
Adam Sochacki, Czech University of Life Sciences, CZ

14:30 5'
Bioaugmented phytoremediation of cadmium and ketoprofen in estuarine sediments: from microcosm to mesocosm assemblages
Rafaela Perdigão, CIIMAR, PT

14:35 5'
Treatment of poultry processing wastewater containing 17- β estradiol via anaerobic, aerobic and anoxic bioprocesses using carbonized materials as microbial immobilization matrix
Analiza Rollon, University of the Philippines, PH

26th June

Hall 1 – Cinema Teatro La Compagnia

15:20 **coffee break & poster session**

Innovative bio-tools for emerging and legacy contaminants

Chairs: **Jofre Herrero & Ales Lapanje**

16:00 15'
Coupled nano-bio processes for the effective removal of complex mixtures of persistent pollutants from groundwater
Iris Barbero, Politecnico di Torino, IT

16:15 15'
Genfade: a high-performance vaterite-based assay for real-time monitoring of strain-specific contaminant degradation
Kristjan Gašpirc, JSI, SVN

16:30 15'
Colonization and enrichment of sulfur oxidizing bacteria in exogenous granular biomass: a novel technology for biogas treatment
Cecilia Polizzi, Università di Firenze, IT

17:00 **Awards and Greetings**

17:30 **Final Toast**

26th June

Hall 2 – Auditorium Sant’Apollonia

Turning the contaminated sea and sediments into blu assets

Chairs: **Conception Calvo & Renata Denaro**

14:45 15'
Submarine capping, an in-situ technology for securing contaminated sediments. The test at the Bagnoli-Coroglio (NA)
Mattia Mannocci, Ambiente srl, IT

15:00 5'
Turning contaminated fresh water and sediments into blue assets – spotlight on the hyporheic zone
Paridhi Soni, Leibniz University Hannover, DE

15:05 5'
Prospects of restoration in coastal marine ecosystems by genome-scale models
Simona Rossetti, CNR-IRSA, IT

15:10 5'
Bio-electrokinetic Remediation of low-permeable contaminated port sediments: preliminary outcomes of the TREASURE project
Alessio Castagnoli, ISPRA, IT

15:15 5'
Assessing LDPE degradation by marine bacteria in long-term microcosms
Rafaela Perdigão, CIIMAR, PT

15:20 5'
CIIMAR microbial culture collection (CM2C): a biobank resource for microbial-based bioremediation
Joana Fernandes, CIIMAR, PT

15:25 **coffee break & poster session**

15:55 15'
From metabarcoding-guided selection to bioaugmentation: native microbial consortia for crude oil and maritime fuels bioremediation in the port of Leixões
André Ferreira, CIIMAR, PT

16:10 15'
PBSA-degrading microbiome from the marine copepod *Acartia tonsa*
Luca Niccolini, OGS, IT

16:25 15'
Biodegradation and microbial colonization of different bioplastics at the seawater-sediment interface
Eliana Musmeci, University of Bologna, IT

16:40 15'
AQuaBioS: an Interreg Italy-France Maritime project for a more sustainable, innovative and resilient aquaculture
Elisa Carta, ISPRA, IT

17:00 **Awards and Greetings** at Hall 1 (Cinema Teatro La Compagnia)

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