



**NATIONAL  
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FUTURE CENTER**



Pisa, 12/03/2025

**Second announcement: international conference SUITMA13 Pisa, Italy, 5-9 October 2025.**

The Research Institute on Terrestrial Ecosystems (IRET) of the National Research Council (CNR) on behalf of the International Union of Soil Science (IUSS), is pleased to invite colleagues from all around the world to participate in the SUITMA (Soils of Urban, Industrial, Traffic, Mining and Military Areas) 13th international conference, which will be held in Pisa, Italy, from the 5 -9 October 2025, at the CNR (Italian National Research Council) in Pisa.

The conference will focus on “SUITMA from a One Health Perspective”.

Soil is a key component of the water and nutrient cycle, and a major contributor to global carbon sequestration. Soil also provides habitats for nearly all land plants, as well as a large proportion of terrestrial fauna. Despite its global importance, it is estimated that one third of global soil is degraded. In anthropized areas, soils undergo many forms of disturbance: manipulation, compaction, and pollution which impact their quality. However, even degraded soils have the potential to alleviate environmental problems and play a vital role in supporting vegetation. Degraded soils of urban areas and other anthropogenic lands merit scientific and professional attention in order to enhance their ecosystem services and to support nature- based solutions, to tackle the urgent challenges of climate change, and for the health of all organisms and ecosystems.

Topics:

- 1) **SUITMAs as sinks and source of pollutants** - Keywords: geochemical cycles, urban food production.
- 2) **SUITMAs to conserve and improve soil quality and biodiversity** – Keywords: soil remediation, soil biology, bioindicators of biological soil quality and functionality, genomics.
- 3) **SUITMA improvers and ecosystem services** – Keywords: waste materials for soil construction, compost, rubble, mine waste, Technosols.
- 4) **SUITMA challenges for the future** - Keywords: pedology, Anthropocene, war contamination, emerging contaminants.

We are happy to present the keynote speakers:

**Paula Medejon Rodriguez:** *Soil contamination by trace elements in the food chain: experiences in different mining and urban scenarios*

Paula Madejón is a Senior Researcher at the Institute of Natural Resources and Agrobiology of Seville (IRNAS-CSIC), Spain. As a biologist specializing in soil-plant interactions in contaminated and degraded soils, her research focuses on developing sustainable strategies to restore soil health and ecosystem services. A key aspect of her work is understanding the behaviour of trace elements in soils and their impact on the food chain, particularly in plants. For over 20 years, she has been directly involved in the Guadiamar Green Corridor (created after the Aznalcóllar mine accident), a globally recognized case study in soil recovery, monitoring contamination levels in soils, plants, and animals. In collaboration with the Andalusian Regional Government, she has contributed to monitoring the rehabilitation of mining areas in the Iberian Pyrite Belt, assessing potential risks to the food web, and minimizing the visual impact of mining activities. She has also worked on industrially contaminated sites in northern England and co-led a five-year collaboration with ENRESA to evaluate soil amendments in a decommissioned uranium mine, promoting the growth of both induced and spontaneous vegetation. Currently, she is involved in the HORIZON-MISS-2022-SOIL-01-04 project, “Advanced Mapping, Risk Assessment, and Nature-Based Depollution Methods to Accelerate the Recovery of Contaminated Soils and Integrate Ecological Restoration into Mainstream Business.”



**Christina Siebe:** *Waste materials as resources for soil construction*

Christina Siebe is a senior Researcher at the Soil and Environmental Sciences Department of the Institute of Geology at the National Autonomous University of Mexico. She studied Agricultural Sciences at the University of Hohenheim in Germany, where she got her PhD in 1994. Her research interests include rates of pedogenic processes in natural ecosystems, soil degradation processes in agroecosystems reusing wastewater for irrigation and urban soils. In the Mezquital valley she installed a critical zone observatory to study the behaviour of heavy metals and emerging contaminants as well as carbon and nitrogen dynamics. Since 2013 she has been studying pharmaceuticals and antimicrobial resistance genes in collaboration within a Mexican-German research group. She is also an active participant in the SUITMA working group of the IUSS, and in 2015 organized the SUITMA conference in Mexico.

**Carlos Garcia Izquierdo:** *Effects of climate change on soil biodiversity*

Carlos Garcia Izquierdo has been a research professor of the Spanish National Research Council since 2003 and is currently at the Centre for Soil Science and Applied Biology of the Segura (CEBAS-CSIC) of Murcia (Spain). He has belonged to the Department of Soil and Water Conservation and Organic Waste Management since 1989. His scientific work is focused on the problem of highly degraded semiarid soils and strategies for their protection and rehabilitation and the search for new sources of organic matter. He has extensive experience in scientific management, having served as director of CEBAS-CSIC, Scientific Coordinator of the CSIC Agricultural Science Area, and as a partner in national and regional research programs. He has been the leader of national projects funded by the Spanish government as well as of several regional projects. His research group was selected as a Research Group of Excellence of the Region of Murcia (Seneca Foundation). Dr Garcia has been the Spanish leader in 14 European projects (Framework Programs and LIFE projects) and directed 16 PhD theses and published over 242 scientific papers in SCI journals of high impact. He is editor of four scientific books and has written numerous book chapters.

**Giacomo Certini:** *The shocking impact of warfare on the soil*

Giacomo Certini is a full professor of pedology at the University of Florence, Italy. His main research topics are soil formation and degradation, soil carbon sequestration, the impact of fires and human activities on soil, and soil desealing. He has authored over 100 papers in peer-reviewed international journals (including one in Science) and overall has been cited over 5600 times (Scopus data source). He is co-editor of the book “Soils. Basic Concepts and Future Challenges”, published by Cambridge University Press and with chapters from 23 outstanding scholars from all over the world. He has been on the "World’s Top 2% Scientists" list drawn up by Stanford University, since its first version (2020) to today in both the “Single-Year” and “Career-Long” categories. Currently he teaches “Pedology”, “Sustainable soil management”, and “Forest soils”.

**VENUE**

The Research Area of Pisa is the largest research area of CNR. It spans over 10 hectares and hosts 13 CNR Institutes, including a medical centre specializing in cardiology and respiratory medicine. The site also accommodates university and private companies which share central technical, logistic, communication technology and security services. Over 1500 people are employed and are involved in research activities related to the Environment and Green Chemistry, Life Science, and Information and Communication Technology.

Address: CNR Research Area, via G. Moruzzi 1 56124 Pisa, Italy

**TIMELINES**

Call for abstract and registration - opening	3 March 2025
Abstract submission deadline	2 May 2025
Abstract acceptance	31 May 2025
Deadline for early bird registration	10 June 2025



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## REGISTRATION FEES

Role	Early Bird	Registration after 10 June
Delegate	450 €	600 €
Student*	180 €	200 €
Accompanying Person	150 €	200 €
Soil and Art seminar (to be confirmed)	-	25€
Visit day one/ Visit day two	-	80 €/120 € approximate price

\* Students enrolled in Master, Bachelor's Degree or PhD –certification must be provided

The fee includes conference participation, social dinner, coffee breaks and lunches during sessions.

The fee includes two abstracts per person.

Confirmation of visits depends on the number of participants.

## PROGRAM (under definition)

DAY	ACTIVITY	LOCATION/DETAILS
Sunday 5 <sup>th</sup>	h 15.00 Soil&Art field seminar by Gerd Wessolek -about 20 participants (to be confirmed) h 18.00 Registration and Ice breaker	Cittadella Galileiana (Pisa)
Monday 6 <sup>th</sup>	h 9.00-17.30 Conference h 18.00 Guided tour (to be confirmed)	CNR, Pisa
Tuesday 7 <sup>th</sup>	h 9.00-17.30 Conference h 19.30 Social dinner	CNR, Pisa (Location to be defined)
Wednesday 8 <sup>th</sup>	One day visit Calci (Pisa)	Azienda San Vito, wine producer partner of the Recrop project "Bioinocula and CROPPing systems: an integrated biotechnological approach for improving crop yield, biodiversity and RESilience of Mediterranean agro-ecosystems"; visit to the Carthusian Monastery in Calci which also hosts a Natural History Museum, Tasting of local products (wine and olive oil).
Thursday 9 <sup>th</sup>	One day visit Prato	The project "Cost-effective solutions in Urban Soil Management" focuses on mitigating the environmental impact of soil sealing by repurposing the recovered asphalt into desealed urban soils, aimed at reducing desealing costs and enhancing green space creation. <a href="#">Prato Urban Jungle</a> , project in collaboration with the city council.

Post-conference trip 10 -12 October (tentative program Southern Tuscany: Merse-Montieri mining area, Pitigliano-Europomice Extraction of tephra, Campiglia Marittima –geo-mining park) (to be confirmed depending on the number of participants).

All information regarding the conference at [www.suitma13.it](http://www.suitma13.it)

Contacts [suitma13@cnr.it](mailto:suitma13@cnr.it)

The co-chairs of the conference

Francesca Bretzel

Grazia Masciandaro

Francesca Vannucchi