



# Science for the Planet

*II Edition*

**under the high patronage of the European  
Parliament**

**22-25 June 2025**

**Climate change and environmental and  
hydrogeological disasters**

## **Program**

## 22 June 2025

Social event on the occasion of "I Misteri" curated by Letizia Bindi and Pasquale Avino

## 23 June 2025

### Aula Magna di Ateneo, Via Cesare Gazzani

09:00 Registration of participants

*Chairperson: Antonio De Cristofaro and Pasquale Avino*

09:30 Opening session and institutional greetings

**Giuseppe Peter Vanoli**, *Rector of University of Molise*

**Ugo Della Marta**, *Ministry of Health, Directorate-General for Food Hygiene and Safety and Nutrition*

**Francesco Roberti**, *President of Molise Region*

**Antonio De Cristofaro**, *Assistant Director of the Department of Agricultural, Environmental and Food Sciences, University of Molise*

**Alberto Manfredi Selvaggi**, *General Director of ARPA Molise*

**Giovanni Villone**, *President of the Bioethics Committee of the University of Molise*

**Aldo Patriciello**, *European Parliament*

10:00 The silent and lethal pandemic: antimicrobial bioresistance

**Matteo Bassetti** (on-line Plenary)

*University of Genova*

10:40 *Coffee break*

*Chairperson: Marta Szábo and Matteo Vitali*

11:20 Critical aspects of the legal framework on climate change and governance of calamitous weather events

**Domenico Monci** (Key-note)

*University of Molise*

11:45 Airborne transmission of respiratory pathogens: from denial to opportunity in indoor environment management

**Giorgio Buonanno**

*University of Cassino and Southern Lazio*

12:00 The new European Directive on Air Quality: challenges and commitments for Italy

**Fabio Romeo**

*Ministry of the Environment and Energy Security, Rome*

12:15 From Nanograms to Population Studies: the contribution of Analytical Chemistry to Public Health

**Matteo Vitali**

*University of Rome Sapienza*

12:30 Human fertility in polluted areas of Italy: molecular analyses to detect sperm alterations undetectable by spermogram.

**Marina Piscopo**

*University of Naples Federico II*

12:45 *Poster session*

13:00 **Light Lunch**

*Chairperson: Mariasilvia D’Andrea and Corrado Ievoli*

14:30 Book presentation titled “Il Pomodoro: Storia di un Immigrato di Successo” edited by

**Luigi Frusciante** and **Nunzio D’Agostino**

*University of Naples Federico II*

15:00 Sowing the Past into the Future: Aligning Tradition and Genetic Innovation to Preserve Crop Biodiversity and Foster Sustainability

**Mario Pezzotti** (Plenary)

*University of Verona*

15:40 Green Gold from Nature: Chemical and Biological Insights into *Cannabis sativa* L. vr. *Kompolti Infusions*

**Francesca Fantasma**

*University of Molise*

15:55 Adapting to Global Warming: An Integrated Breeding Approach for the Selection of Thermotolerant Tomato Hybrids

**Salvatore Graci**

*University of Naples Federico II*

16:10 *Coffee break*

*Chairperson: Mario Pezzotti and Fabrizio Ruggieri*

16:40 Bees and climate change

**Dalila Di Criscio**

*University of Molise*

16:55 The environment, constitutionally guaranteed law, legal protection and its hermeneutic analysis through administrative discretion

**Mara Di Fabio**

*University of Molise*

17:10 Pesticides Contamination of Italian Waters and Related Public Health Concerns

**Flavia Silvia Galli and Maria Teresa Cerasa**

*Zooprophylactic Institute of Lazio and Tuscany, Rome*

17:25 Project presentation titled “Potenziamento degli Uffici per il trasferimento tecnologico delle Università italiane finanziato dal MISE/MIMIT con fondi PNRR”

**Giuseppe Centillo**

*University of Molise*

*Chairperson: Antonio De Cristofaro*

17:30 **Round Table “Plant protection products and Molise Region”**

Participants: Ministry of Health (Pasquale Cavallaro), Region of Molise, Legambiente, ARPA Molise, CIA Italian Farmers, Coldiretti, Confagricoltura, Confcooperative, Order of Agronomists.

*Closing session*

## 24 June 2025

### **Aula Franco Modigliani (160 posti), II Edificio Polifunzionale**

09:00 Registration of participants

09:20 Opening session

*Chairperson: Gaetano Settimo and Pasquale Avino*

9:30 Climate change: frontiers of knowledge and artificial intelligence models

**Antonello Pasini** (Plenary)

*National Research Council - Institute on Air Pollution, Rome*

10:10 Depuration of edible mollusks: effects on microplastics levels and characteristics

**Joaquim Rovira Solano** (Key-note)

*Rovira i Virgili University, Spain*

10:25 Effect of climate change on building systems design and operation

**Marta Szábo**

*Hungarian University of Agriculture and Life Sciences, Hungary*

10:40 *Coffee break*

*Chairperson: Joaquim Rovira Solano and Stefano Farris*

11:10 Multitechnique characterization of eco-corona formation on airborne nanoplastics

**Valentina Marassi**

*University of Bologna*

11:25 Microplastics in seawater: a study of pretreatment, separation, and recovery

**Serena Silvestri**

*Italian Health Institute, Rome*

11:40 Microplastics pollution: extraction and identification procedures from biosolids

**Luana Circelli**

*University of Molise*

11:55 Global distribution of PAHs, PBDEs, and DEHP in seawater samples under the "SeA Care" project.

**Lorenza Notargiacomo**

*Italian Health Institute, Rome*

12:10 Book presentation titled "*Microplastics in Agriculture and Food Science: Methods for Identification and Remediation*" edited by

**Pasquale Avino, Cristina Di Fiore**, *University of Molise*, e **Stefano Farris**,  
*University of Milan*

12:30 *Poster session*

13:00 **Light Lunch**

*Chairperson: Paolo Ceci and Alberto Di Ludovico*

14:30 Increasing waste: technological effectiveness and health aspects

**Gaetano Settimo** (Key-note)

*Italian Health Institute, Rome*

14:55 Role of Redox Processes in Life Sustaining on the Earth

**Olga Covaliova**

*Institute of Chemistry, Moldova State University, Moldova*

15:10 Case study of an agro-energy chain: disposal of biomass through gasification process and reuse of by-products

**Enrico Paris**

*Council for Agricultural Research and Analysis of the Agricultural Economy, Rome*

15:25 Evaluation of the Analytical Results of the Sampling of Organic Micropollutants at the Emission Points of IPPC Industries

**Mario Piccirilli**

*ARPA Molise Region*

15:40 Green sample preparation approaches in environmental analysis

**Svetlana Hrouzková**

*Slovak University of Technology in Bratislava, Slovak*

16:30 *Coffee break*

*Chairperson: Enrico Paris and Valentina Marassi*

17:00: Green public procurement: a case study on the driving force for the ecological transition in some reference markets and an example of their potential in the agri-food sector.

**Alessandra Mascioli**

*National Research Council - Institute on Air Pollution, Rome*

17:15 Chlorine gas and ultrafine particle emissions from bleach disinfection

**Luigi Fappiano**

*University of Cassino and Southern Lazio*

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17:30 High Entropy Alloys for hydrogen storage

**Annalisa Paolone**

*National Research Council - Institute for Complex Systems, Roma*

17:45 Evolution of environmental legislation in relation to the concept of integration. Lights, shadows and perspectives, focus on the textile sector (products and waste)

**Francesca Allocco**

*National Research Council - Institute on Air Pollution, Rome*

*Closing session*

*Social Dinner*

## 25 June 2025

### **Aula Franco Modigliani (160 posti), II Edificio Polifunzionale**

09:00 Registration of participants

09:20 Opening session

*Chairperson: Fausto Cavallaro and Antonio Gioiosa*

9:30 Proposals for the renovation of inland areas

**Vito Teti** (Plenary)

*University of Calabria*

10:10 Grazing Communities as Future’s Keepers Bio-Cultural Heritage and Frictions of the Anthropocene

**Letizia Bindi** (Key-note)

*University of Molise*

10:35 Rethinking Education for a Changing Planet

**Nicola Prozzo**

*University of Molise*

10:50 *Coffee break*

*Chairperson: Angelo Belliggiano and Vito Teti*

11:30 Society and climate: the different meanings of changing climate

**Dario Padovan** (Key-note)

*University of Turin*

11:55 Climate change and effects on the economic-productive system: a systematic review of approaches and models

**Fausto Cavallaro**

*University of Molise*

12:10 The Role of Nutrition in Honeybee Immune health modulation

**Gennaro Di Prisco**

*National Research Council - Institute for the Sustainable Protection of Plants, Portici*

12:25 *Poster session*

13:00 **Light Lunch**

**14:30 Poster award ceremony for Young Researchers under 35**



*Chairperson: Maria Giovanna Chini and Dario Padovan*

15:00 Cultural Heritage in a Changing Climate: From Risk to Resilience

**Gabriele Favero** (Plenary)

*University of Rome Sapienza*

15:40 Hypogeum and Catacomb Environments: Potential Control

**Giancarlo Ranalli** (Key-note)

*University of Molise*

16:05 Monitoring strategies for chemical pollutants in indoor environments

**Giuseppe Ianiri**

*Italian Health Institute, Rome*

16:20 A Nature-based Solution for Conservation of Cultural Heritage

**Gianmaria Oliva**

*University of Salerno*

16:35 *Coffee break*

*Chairperson: Gabriele Favero and Giancarlo Ranalli*

17:00 Anthropogenic Forcing and Emerging Diseases

**Bartolomeo Terzano**

*Italian Association of Doctors for the Environment, Campobasso*

17:15 Biosocial Agriculture under Climate Pressure: toxicity, Policy and Peasant Agency in the Ebro Lands

**Elena Fusar Poli**

*University of Gastronomic Sciences of Pollenzo*

17:30 DALIA database. Ecology and distribution of woody plants in small Mediterranean city (Campobasso - Italy)

**Maria Carla de Francesco**

*University of Molise*

*Closing session*

## Poster

**Accili Mariagiovanna**, *University of Aquila*

Optimization of Tip-Based Microextraction of Cobalt Using MFI Zeolites by Experimental Design

**Ajdini Behixhe**, *Polytechnic University of Marche*

Monitoring coastal contamination through elemental analysis of *Gongolaria barbata* in the framework of the Interregg BRIGANTINE project

**Antenucci Emanuele**, *University of Molise*

The FishVision Project: An Integrated Digital System for Precision Mariculture and Climate Adapted Farm Management

**Barrientos-Riosalido Andrea**, *University Rovira i Virgili, Spain*

Unseen Contaminants: Microplastics Found in Water, Sodas, and Alcoholic Drinks

**Campanale Claudia**, *Italian Health Institute, Roma*

High-Sensitivity Fluorescence Microscopy Workflow for Airborne Microplastics Detection

**Carriera Fabiana**, *University of Molise*

Airborne Microplastics in Enclosed Spaces: Emission Sources, Detection Methods, and Potential Health Risks

**Carullo Daniele**, *University of Milan*

Valorization of agri-food wastes and plant residues through a soft-chemical cellulose extraction process

**Casalena Milena**, *University of Aquila*

Optimization of Headspace Extraction Conditions for Volatile Hydrocarbons from Aqueous Matrices Using Experimental Design Approaches

**Castellani Federica**, *University of Rome Sapienza*

Determination of new and legacy PFASs in a water catchment area of central Italy: temporal variation and risk assessment for human and environmental health

**Colombo Claudio**, *University of Molise*

Soil quality indicators in Agrivoltaic Systems: insights from degraded soil in Southern Italy

**Cofone Luigi**, *University of Rome Sapienza*

Per- and Polyfluoroalkyl Substances in Drinking Water: Early Stage of a Systematic Review

**Cofone Luigi**, *University of Rome Sapienza*

Assessment of the Influence of Environmental and Occupational Pollution on Male Fertility: a pilot study

**Coppola Francesca**, *University of Naples Federico II*

Antimicrobial Perspectives in Times of Climate Change: A Focus on *Rosaceae* Honeys

**Di Cintio Riccardo**, *University of Tuscia*

Forest functions: declaration of intent or an effective tool for sustainable forest management?

**Di Fiore Cristina**, *University of Molise*

The Role of Microplastics as Organic and Inorganic Compounds Vector: An Overview on their Trojan Horse Effect

**Di Iorio Erika**, *University of Molise*

Assessment of microplastics extraction from sandy soils in southern Italy using ATR-spectroscopy and SEM analysis

**Di Sessa Martina**, *University of Camerino*

New pigments from cold adapted Antarctic marine microorganisms: characterization and application

**Emili Lorenza**, *National Research Council - Institute on Air Pollution, Rome*

The Extensive Producer's Responsibility Scheme for the textile sector in Italy, an explorative analysis.

**Fachin Andrea**, *University of Turin*

Insect-Derived Chitosan Films for Eco-Friendly Food Packaging Solutions

**Gioiosa Antonio**, *University of Molise*

Radon-222 in the spring waters of the Pesche (IS) - Miranda (IS) mountain complex

**Giorgione Siria**, *University of Molise*

Plant-based alternatives for healthy and environmentally sustainable fermented foods

**Guerriero Ettore**, *National Research Council - Institute on Air Pollution, Rome*

Sampling of Fine and Ultrafine Particulate Matter in Industrial Emissions with an Innovative Double Dehumidification System for Analyte Preservation

**Iannone Alessia**, *University of Molise*

Advancements in Analytical and Extraction Methodologies for PFAS identification in Agri-Food Sector

**Lettieri Gennaro**, *University of Naples Federico II*

Environmental impact on male fertility: a multilevel molecular analysis of spermatozoa from areas of high and low environmental impact

**Maio Monica**, *University of Molise*

Climate Change and Soil Health: Seasonal Variability of Heavy Metals in Urban Areas of Molise

**Mataj Elida**, *Albanian University, Albanian*

Assessment of hygiene and sanitation indicators in some schools in some cities

**Matteo Melisi**, *Experimental Zooprophyllactic Institute of Southern Italy, Portici*

Occurrence Of Bisphenol-A And Related Compounds in The Groundwater Of Buffalo Farms In Campania Region, Southern Italy

**Menichino Martina**, *Italian Health Institute, Rome*

An Integrated Approach to Microplastic Analysis: Identification, Characterization and Plasticsphere Assessment in a Marine Environment a pilot study

**Mignogna Debora**, *University of Molise*

Biomass and bioenergy as drivers of environmental sustainability

**Muratore Anna**, *Italian Health Institute, Rome*

Global investigation on the occurrence of alkylphenols in offshore seawater samples within the Sea Care Project

**Muratore Anna**, *Italian Health Institute, Rome*

Navigating the complexities of offshore environmental data collection: the Sea Care project and the Planetary Health Challenge

**Notardonato Ivan**, *University of Molise*

Evidence Driven Indoor Air Quality Improvement (EDIAQI): a Horizon Project for the Characterization of Indoor Air Quality

**Notargiacomo Lorenza**, *Italian Health Institute, Rome*

Develop and validation of novel methods for the analysis of bisphenol A and alkylphenols in artificial seawaters based on MicroNIR technology

**Palumbo Lorenzo**, *Italian Health Institute, Rome*

First Investigations of Airborne Microplastics in Italian Plastic Processing Facilities

**Passarella Sergio**, *University of Molise*

Investigation of persistent pollutants in the karst water system feeding the springs of the Biferno River in the Matese National Park and assessment of downstream anthropogenic pressures on the quality of surface water flow.

**Paris Enrico**, *Council for Agricultural Research and Analysis of the Agricultural Economy, Rome*

Pollution of microplastics in air: study of PM analysis system for the detection of characteristic patterns

**Pietrodangelo Adriana**, *National Research Council - Institute on Air Pollution, Rome*

The INAIL BRiC CELLOPHAN project: Characterization of Emissions in Workplaces of Airborne Microplastics and Nanoplastics

**Pepe Angela**, *Experimental Zooprophyllactic Institute of Southern Italy, Portici*

Climate change and new opportunities for the use of loggerhead sea turtles as environmental sentinels: the “TurtHea” project

**Petti Beatrice**, *University of Molise*

Outbreaks of *Pityokteines curvidens* (Germar, 1823) (Curculionidae: Scolytinae) in Silver Fir Forests of Molise

**Remia Lorenzo**, *University of Camerino*

Carbon capture and storage as gas hydrates: characterization and optimization of CO<sub>2</sub>-hydrates formation

**Rosati Sebastiano**, *University of Molise*

Microplastics in Food: Unexpected Carriers of Foodborne Pathogens and Antimicrobial Resistance

**Samukha Vadym**, *University of Molise*

Recovery of phytochemicals from plant waste reduces food industry pollution: the case study of apple by-products

**Senczuk Gabriele**, *University of Molise*

Multi-omic Responses to Changing Environmental Conditions in Livestock: the COMETA Project

**Stillittano Virgilio**, *Experimental Zooprophyllactic Institute of Lazio and Tuscany, Rome*

Low-risk and basic active substances of plant protection products as alternatives to synthetic molecules traditionally used in agriculture: an overview of the EU trend approvals and discussion on categories

**Szarka Agneša**, *Slovak University of Technology in Bratislava, Slovak*

Sustainable industrial wastewater treatment methods for the elimination of micropollutants

Congresso Internazionale "Science for the Planet"

Campobasso, 22-25 giugno 2025

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## Patrocini



Sotto l'alto patrocinio  
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