

# SETAC ITALIAN LANGUAGE BRANCH 4<sup>th</sup> Workshop Naples, 13-14 October 2025

**Hosted by** 



Complesso dei SS. Marcellino e Festo Largo S. Marcellino 10 – Napoli

**In-person Workshop** 

#### 13th October

9.30-10.00 Registration

10.00-10.15 Welcome greetings from Prof. Matteo Lorito, Rector of the University of Naples Federico II (or Prof. Gionata De Vico/Marco Guida (Director/ViceDirector of the Department of Biology),

#### and

# Prof. Susana Loureiro, President of SETAC Europe. (to be confirmed) Opening of the workshop

Dr. Stefania Marcheggiani, President of SETAC Italian Language Branch (ISS), and Prof. Giovanni Libralato (University of Naples Federico II, local committee and Vice President SETAC ILB).

#### 10.15-12.15

#### **SESSION A Effects of plastics and additives**

Chairs: Giuseppe De Marco (UNIME) +Francesca Biandolino (CNR)

- 10.15-10.30 Teresa **Balbi** (UNIGE), Effects of bioplastic leachates on early larval stages and adult mussels: responses at cellular, biochemical and physiological levels.
- 10.30-10.45 Laura **Ciaralli** (ISPRA), Tracing the plastic footprint: site-specific microplastic ingestion and phthalate exposure in *Parapenaeus longirostris*.
- 10.45-11.00 Alexandra **Dal Lago**, (CREA), Microplastic pollution and its interaction with wild bees: a case study.
- 11.00-11.15 Ilaria Savino (CNR), Plastic Nets as a Source of Reproductive Stress in Mytilus galloprovincialis.
- 11.15-11.30 Antonietta **Siciliano** (UNINA) Exploring the dual faces of lanthanum and gadolinium toxicity in Hydra vulgaris.
- 11.30-11.45 Angela **Maione** (UNINA), Polystyrene Microplastics promote fungal pathogenicity: an in vitro and in vivo assessment of *Candida albicans* infection.
- 11.45.12.00 Sara **Accardo** (ENEA), Chronic exposure to polyethylene microplastics and pharmaceuticals can negatively impact freshwater ecosystems, particularly *Daphnia magna*.
- 12.00-12.15 Annalisa **Zaccaroni** (UNIBO), Quantification of microplastics in stomach contents of sea swallow (*Hirundichthys rondeletii*, Valenciennes, 1847).

#### 12.15-13.00

**SESSION: Best Young Italian Scientist Award** 

Chair: Claudia Vaj (Corteva Agriscience) + Marco Evangelista (UNINSUBRIA))

**Teresa Chianese** (UNINA), How a short-term exposure to polystyrene microplastic beads impair gonadal condition in the mussel *Mytilus galloprovincialis*: histological and molecular evidence

Alessandra D'Arelli (UNITS), Optimization of the Neuro-2a assay to detect the marine toxin tetrodotoxin

**Lorenzo Federico** (UNIMIB), Linking Behavioural Bioassays and Soil Biodiversity as an Integrated Strategy for Environmental Quality Assessment

Marianna Imparato (UNINA), The Effect of post-biotics-Enriched Diet on the Antioxidant Capacity in Mytilus galloprovincialis Exposed to Cu<sub>2</sub>O

**Laura Piredda** (UNIBO), Trace elements in the brain of the Rabbitfish (*Chimaera monstrosa*, Linnaeus, 1758) from the Strait of Sicily

**Marisa Spampinato** (UNINA), Do environmental concentrations of rare earth elements pose a risk to mussel embryos?

**Sara Trabucco** (UNIVE), Implementing Safe and Sustainable-by-Design Strategy in the Development of TiO<sub>2</sub>@SS for Cosmetic Application

13.00-14.15 **LUNCH TIME**.

Chairs: Loredana Manfra (ISPRA) + Simona Schiavo (ENEA)

- 14.15-14.30 Arianna **Sgariboldi** (UnInsubria) Integration of *silico* methods into life cycle and sustainability assessments.
- 14.30-14.45 Ilaria **Capitani** (CNR), Multi-analytical strategy for PFAS-related chemical changes detection in *Cannabis sativa* L. during phytoremediation
- 14.45-15.00 Alessio **Castagnoli** (ISPRA), Innovative remediation strategies for contaminated marine sediments in Mediterranean ports: Insights from the TREASURE project
- 15.00-15.15 Veronica **Vivani** (UNIVPM), Interactive effects of AMPA exposure and salinity fluctuations on *Mytilus galloprovincialis*: an ecotoxicological assessment under climate change scenarios
- 15.15-15.30 Aldo Mileo (UNINA), The role of bisphenol a in human prostate physiology
- 15.30-15.45 Roberta **Nugnes** (CNR), Ecotoxicological Assessment of Silver Nanoparticles in the Marine Environment: A Multispecies Approach
- 15.45-16.00 Chiara **Russo** (Unicampania) Imidacloprid complexed with  $\beta$ -Cyclodextrins: ecotoxic impact in key aquatic species
- 16.00-16.15 Tiziano **Sanvito** (Eosinstruments), Calibration-free SPES/SPES² quantification and multiparametric characterisation of single particles in heterogeneous biological and environmental liquids

16.15-16.30 **COFFEE BREAK**.

### SESSION B2 Aspetti normativi della contaminazione ambientale (Regulatory aspects of environmental pollution)

Chairs: Ester Papa (UNINSUBRIA) + Marco Guida (UNINA)

- 16.30-16.45 Simone **Marzeddu (ISPRA)**, The new Science-Policy Panel on Chemicals, Waste, and Pollution: Road to Establishment and Key Policy Milestones
- 16.45-17.00 Anna **Zanfardino** (UNINA) High density polyethylene (HDPE) biodegradation by *Cladosporium* halotolerans
- 17.00-17.15 Federica **Dragone** (ARPAC), Marine Strategy Framework Directive: Tracking Anthropogenic Contaminants in Marine Biota for Ecosystem Protection
- 17.15-17.30 Flavia **Manuguerra** (ARPAC) Marine Strategy Framework Directive: analysis of PAHs in marine sediments
- 17.30-17.45 Fortunata **Barone** (ISPRA) Regulatory developments and risk management for pollutants of concern: the case of hexavalent chromium under REACH Regulation

17.45-19.00 POSTER SESSION - APERIPOSTER

#### 14<sup>th</sup> October

9.00-11.30

#### **SESSION C Exposure and effects of emerging contaminants**

Chairs: Paolo Pastorino (IZSPLVN) + Teresa Balbi (UNIGE)

- 9.00-9.15 Elena **Orlo** (UNINA), Hidden threats of UV filters: ecotoxicity of ethylhexyltriazone and its chlorinated byproducts in aquatic species
- 9.15-9.30 Luisa Albarano (UNINA), Behind the Masks: The Environmental Mysteries of Cosmetic Masks.
- 9.30-9.45 Tommaso **Campani** (UNISI), Assessing sub-lethal effects of oral exposure to different chemicals in Osmia bicornis: a multi-biomarker approach
- 9.45-10.00 Giuseppe **De Marco** (UNIME), Assessment of gadolinium impact on the digestive glands of marine mussels
- 10.00-10.15 Mariachiara **Galati** (UNIME), Gadolinium, a rare earth element (REE): A potential risk for the reproductive health of the Mediterranean mussel *Mytilus galloprovincialis*?
- 10.15-10.30 Alessandra **Narciso** (CNR), Ecotoxicological tests for evaluating combined toxicity of antibiotics and copper on ecosystems
- 10.30-10.45 Michela **Panni,** (UNIVPM), Cellular effects of environmental pharmaceuticals: mechanisms of toxicity in fish PLHC-1 and Rtgill-W1 cell lines.
- 10.45-11.00 Marisa **Spampinato** (UNINA), Do environmental concentrations of rare earth elements pose a risk to mussel embryos?
- 11.00-11.15 Maria Ludovica **Saccà** (CREA), Impact of polystyrene, polyethylene and polymethyl methacrylate microplastics on the survival and gut bacteria of Apis mellifera ligustica.
- 11.15-11.30 Marika **Mezzelani** (UNIVPM) Biological responses to pharmaceuticals in a non-target marine organism:

In vivo—ex vivo insights.

11.30-11.45 - Award ceremony for the Best Young Italian Scientist

11.45-13.00

#### **SESSION D New Challenges for Environment and Human Health**

**Chairs:** Ermelinda Prato (CNR) + Valeria Di Onofrio (Uniparthenope)

- 11.45-12.00 Roberta De Angelis (ISPRA), Bathing area management: first results of the aces project
- 12.00-12.15 Roberta Pedrazzani (UNIBS), The role of bioassays in Water Safety Plans
- 12.15- 12.30 Michela **Carlin** (UNITS), In vitro characterization of pro-inflammatory of potential algal toxin at the skin level
- 12.30-12.45 Emanuela Pace (ISPRA), PFAS pesticides monitoring in waters
- 12.45-13.00 Ifra **Ferheen** and Maria Rosa **Loffredo** (ISS), Climate Change and the Spread of Vibrio Species in Transitional Waters: A Combined In-Field and Microcosm Investigation
- 13.00-13.15 Stefania **Boccia** (UNINA), Unraveling cocaine's impact on cb1 receptor function and intestinal integrity
- **13.15-13.30** Annalisa **Bonanno** (UNINA), Evaluating Sphaeropsidin A as a Novel Disinfectant Against Candida auris: Antibiofilm and Functional Characterization

13.30-14.30 Free Lunch

14.30-17.00

## **SESSION D1 New Challenges for Environment and Human**

**Chairs:** Giulia Maisto (UNINA) + Valerio Zupo (SZN)

- 14.30-14.45 Chiara **De Carolis** (IRSA CNR), Effectiveness of Compost in mitigating drought stress in *Rosmarinus* officinalis and its impact on soil microbial communities
- 14.45-15.00 Giovanni **Cilia** (CREA GOV), Exploring the role of *Apis mellifera* as monitoring tools for Antimicrobial Resistance Genes: A case study in Bozen (South Tyrol, Italy)

- 15.00-15.15 Lorella **Pascolo** (UNITS), Tracing Environmental Pollutants: Synchrotron micro-XRF Analysis of Metals in Plastics and Human Tissues
- 15.15-15.30 Federica **Cacciatore** (ISPRA), Salinization in transitional ecosystems: potential impacts on macrozoobenthic biodiversity
- 15.30-15.45 Lorenzo **Saviano** (UNINA), Biogenic selenium nanoparticles: new frontiers for food safety protection
- 15.45-16.00 Claudio **Fenizia** (UNIMI), Micro- and Nanoplastics induce dysregulation in human monocytes: insights into autophagy and inflammation
- 16.00-16.15 Edith Padilla **Suarez** (UNINA) Tiny Crustaceans, Big Warnings: Antibiotic Stress in a Changing Climate
- 16.15-16.30 Simone **Marzeddu** (ISPRA) Possible Integrations of REACH Regulation and Life Cycle Assessment Methodology
- 16.30-16.45 Gianluca Maschio (ISPRA), Pesticides in surface and groundwater Italian monitoring data 2021

#### **16.45-17.00 Closing ceremony**

Wrap up and closing remarks from Prof. Giovanni Libralato (University of Naples Federico II) and Dr. Stefania Marcheggiani (President of SETAC ILB, ISS).

#### **Scientific and Organizing Committee**

#### **SETAC ILB Council**

Stefania Marcheggiani
President
Giovanni Libralato
Vice- President
Ilaria Corsi
Past President SETAC ILB

Claudia Vaj and Paola Grenni,

**External advisors** 

Federica Cacciatore, Mario Carere, Tiziana Cappello, Elena Romano, Silvia Franzellitti, Maria Maisano, Sonia Manzo, Ginevra Moltedo, Ester Papa, Camilla Puccinelli,
Sara Villa, Camilla Della Torre

Members

Federica Carraturo, Antonietta Siciliano, Anna Zanfardino,

**University of Naples Federico II** 

Melissa Barra, Antonio Morgillo
PhD student SETAC ILB

Marco Evangelista
UNINSUBRIA

Local Organising Committee University of Naples Federico II

Luisa Albarano, Lorenzo Saviano, Michela Salamone, Antonio Nappo, Marisa Spampinato, Teresa Pannullo, Francesca Esposito

#### Platforms and posters guidelines

**Oral presentations**: 12 min (+ 3 min for Q/A) (either in Italian or in English). Allowed file formats are ppt or pdf.

**Best Young Scientist Award**: an interactive pitch (5 min) during the workshop (3 slides, pdf or ppt). Pitches should be presented preferably in Italian with slides in English.

**Posters**: max dimensions 84.1 cm x 118.9 cm (33 x 47 inches), **portrait layout**. English language. Posters will be displayed on stands outside the congress room in Complesso dei SS. Marcellino e Festo Largo S. Marcellino 10 – Napoli.

Info Web site: italianbranch.setac.org; e-mail: <a href="mailto:setac.ilb.2025@gmail.com">setac.ilb.2025@gmail.com</a>