



**Spoke 2**  
Green Technologies and sustainable industry

# INTERNATIONAL SCHOOL ON WATER REUSE

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**TORINO | 9 - 11 SEPTEMBER 2024**

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*Molecular Biotechnology Center - University of Torino*  
*Via Nizza, 52 - Room Keplero*

**PROGRAM**

[ecs-nodes.eu](https://ecs-nodes.eu)

Organized by



Department  
Chemistry

2023 - 2027  
DEPARTMENT  
OF EXCELLENCE

Ministero dell'Università e della Ricerca



in collaboration with



**Butterfly Area**  
INNOVATIVE SYNERGY

## DAY 1: 9<sup>th</sup> SEPTEMBER

### 8:30 REGISTRATION

### 9:00 INSTITUTIONAL GREETINGS and SCHOOL OPENING

9:30 Climate change and water scarcity: a quantitative evaluation of the water sources  
(**S. Stevenazzi**, University Federico II of Napoli)

### 10:30 COFFEE BREAK

10:50 Composition of natural and treated water. Chemical and microbiological pollutants  
(**M. Minella**, University of Torino; **A. Di Cesare**, CNR-IRSA, Verbania)

12:00 Limits and perspectives of established technologies for urban wastewater treatment  
(**M. Bruzzoniti**, University of Torino; **M. Del Bubba**, University of Firenze)

### 13:00 LUNCH

14:00 Disinfection of wastewater: fundamentals and process control  
(**K. Manoli**, Lambton College, Canada)

14:50 Advanced wastewater treatments for micropollutant removal: trends and challenges  
(**V. Maurino**, University of Torino; **L. Santos-Juanes**, Universidad Politecnica de Valencia)

### 16:00 COFFEE BREAK

16:20 Consolidated vs. innovative tertiary and quaternary urban wastewater treatments. Issues and challenges in light of the new European regulatory framework  
(**L. Rizzo**, University of Salerno)

17:10 Solar-based technologies and scale-up of innovative wastewater § treatments for water reuse  
(**S. Malato**, Plataforma Solar de Almeria)

### 18:00 QUESTION TIME WITH THE SPEAKERS

### 18:30 Welcome cocktail and Poster Session

## DAY 2: 10<sup>th</sup> SEPTEMBER

9:00 WATER REUSE IN AGRICULTURE: water use efficiency indicators and management practices, effects on soil hydro-ecological functioning and on plant health, nutrients recovery and technologies for fertigation  
(**F. Ferrero, M. Pugliese**, University of Torino)

### 10:20 COFFEE BREAK

10:40 Aquaponics: a case of integrated aquaculture with total water reuse  
(**B. Sicuro**, University of Torino)

11:20 Unconventional water sources: rainwater harvesting, storage and reuse  
(**I. Butera**, Polytechnic of Torino)

12:10 Reuse and recycle of industrial wastewater  
(**V. Boffa**, Aalborg University)

### 13:00 LUNCH

14:00 An update on water reuse practices in Europe: a focus on legislation framework and risk management  
(**R. Maffettone**, Joint Research Centre, European Commission)

15:10 Water reuse deployment: the case study on risk management for the Park of Lisbon  
(**A. Franco**, Portuguese Environment Office)

### 16:00 COFFEE BREAK

16:20 Institutional arrangements for water reuse and stakeholder attitudes: opportunities and challenges for the transition to water circularity  
(**T. Fidelis**, University of Aveiro)

17:10 Economic aspects around the concept of wastewater reuse: a methodological framework for cost-benefit analyses  
(**E. Vallino**, University of Torino)

### 18:00 QUESTION TIME WITH THE SPEAKERS

### 20:00 SOCIAL DINNER

## DAY 3: 11<sup>th</sup> SEPTEMBER

- 9:00 Multipurpose Water Reuse. The case study of Madrid  
(**M. Casanova Sanjuan**, Canal de Isabel II)
- 9:40 The water reuse in place. Aretusa. Water-smart urban Industrial Symbiosis for wastewater reuse: 15 years of successful implementation in Rosignano (Italy)  
(**C. Palermo, C. Cusenza**, ARETUSA, Italy)
- 10:20 The water reuse in place. The case study of Barcellona-El Prat de Llobregat reuse project  
(**J. Santos Ramírez**, Agua España, AGBAR – Grupo VEOLIA)
- 11:00 COFFEE BREAK**
- 11:20 ROUND TABLE**  
Water reuse in the frame of sustainability: multidisciplinary challenge  
(ISWR Speakers, IRIS, Hydroaid, UniToGO, SMAT, ProjectHub,...)
- 12:40 Closing remarks and future perspective (University of Torino)
- 13:00 LIGHT LUNCH**
- 13:45 TRANSFER TO SMAT PLAN**
- 14:00 Visit to the local Po river potabilization plants and Water Research Center  
(SMAT S.P.A., Torino)



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## Info & contacts

*For information please refer to:*  
[alessandra.biancoprevot@unito.it](mailto:alessandra.biancoprevot@unito.it)

**REGISTRATION BY 24/07/2024**  
[www.internationalschoolwaterreuse.eu/register/](http://www.internationalschoolwaterreuse.eu/register/)

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DI TORINO

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Project Ô  
Innovative circular water systems

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