

TORINO, 13-15 SEPTEMBER 2023

INTERNATIONAL SCHOOL ON WATER REUSE

Chemistry Department
Via Pietro Giuria, 7 - Room "Avogadro"

PROGRAM

internationalschoolwaterreuse.eu



Spoke 2
Green Technologies
and sustainable industry

Organized by



Department
Chemistry

2023 - 2027
**DEPARTMENT
OF EXCELLENCE**

Ministry of University and Research



In collaboration with



13th September

8:30 Registration

9:00 Institutional greetings

9.20 Presentation of NODES Project and Spoke2
School opening

Session I *Chair: D. Palma (University of Torino, Italy)*

9:40 Water as a non-infinite resource: human appropriation, water footprint, water scarcity (**V. Maurino**, University of Torino, Italy)

10:05 Composition of natural and treated water and its chemical and microbiological pollutants (**M. Minella**, University of Torino, Italy, **P. Roslev**, Aalborg University, Denmark, **R. Binetti**, SMAT, Torino, Italy)

10:50 COFFEE BREAK

Session II *Chair: M. Minella (University of Torino, Italy)*

11:15 The “water good” in the international regulatory framework (**A. Fusco**, University of Torino, Italy)

11:35 The management of water resources and EU legislation for its reuse (Regulation 2020/741) (**M. Ricciardo Calderaro**, University of Torino, Italy)

11:55 Water reuse practices in Europe: a focus on risk assessment and management (**R. Maffettone**, EC, JRC, Ispra, Italy)

12:25 Institutional arrangements for water reuse: assessing challenges for the transition to water circularity (**T. Fidelis**, University of Aveiro, Portugal)

12:50 LIGHT LUNCH

14:00 **ROUND TABLE: Water reuse “tips and issues”.
Hydrogeologic, agricultural, infrastructural perspectives.**

Speakers: **M. Lasagna** (University of Torino, Italy), **F. Ferrero** (University of Torino, Italy), **P. Simon** (ESAMUR, Murcia, Spain), **A. Battilani** (Irrigants d'Europe), **A. Quazzo** (SMAT, Torino, Italy)

Chair: **L. Rizzo (University of Salerno, Italy)**

Session III *Chair: T. Fidelis (University of Aveiro, Portugal)*

- 15:30 A few remarks for an informed debate on the acceptance of water reuse: attitudes, practices and behaviors (**S. Gattino, M. Martini, D. Acquadro Maran, A. Sciullo**, University of Torino, Italy, **P. Albuлесcu**, University of Timisoara, Romania)
- 17:00 Water as a New Asset Class for Paradigm Shift for Climate–Water Resilience (**A. Elmahdi**, Green Climate Fund, GCF)
- 17:40 **GET TOGETHER COCKTAIL&POSTER SESSION**

14th September

- 8:45 **MEETING AT TORINO ESPOSIZIONI (VIALE BOIARDO) TO TAKE THE PRIVATE BUS**
- 9:00 Visit to the local waste water treatment plants (**SMAT S.P.A.**, Torino)
- 12:50 **LIGHT LUNCH**
- 14:00 **ROUND TABLE. Water reuse: EU Regulation and technological challenges.**
Speakers: **L. Rizzo** (University of Salerno, Italy), **I. Oller** (Plataforma Solar de Almeria, CIEMAT, Spain), **C. Varese**, (University of Torino, Italy), **G. Cravotto** (University of Torino, Italy), **A. Tiraferri** (Polytechnic of Torino, Italy), **V. Boffa** (University of Aalborg, Denmark)
Chair: A. Arques (Polytechnic University of Valencia, Spain)
- 15:50 Analytical challenges in the water reuse scenario (**A. Bianco Prevot**, University of Torino, Italy)
- 16:10 **COFFEE BREAK**

Session IV *Chair: I. Oller (Plataforma Solar de Almeria, CIEMAT, Spain)*

- 16:30 From wastewater treatment plant to a “water-based factory”; Experience of LIFE GREEN SEWER (**X. Yang**, CETIM, Spain)
- 17:00 LCA applied to water treatments technologies for water reuse (**G. Maniakova**, Istituto Mario Negri, Milano Italy)
- 17:30 Business models for small and local loops of water reuse; Project Ô experience (M. Lai, IRIS, Italy)
- 20:30 **SOCIAL DINNER**

15th September

Session V *Chair: R. Maffettone (EC, JRC, Ispra, Italy)*

- 9:00 Water reuse in Spain: drivers and barriers in Murcia and Almeria region (**I. Oller**, Plataforma Solar de Almeria, CIEMAT, Spain and **P. Simon**, ESAMUR, Murcia, Spain)
- 9:50 The long experience of Israel in wastewater treatment and reuse: regulation policy, quantitative and qualitative aspects (**E.N. Zalcman**, Israel National Water Authority)
- 10:20 **COFFEE BREAK**

Session VI *Chair: V. Maurino (University of Torino, Italy)*

- 10:40 WATER REUSE IN AGRICULTURE: effects on soil hydro-ecological functioning (**F. Ferrero**, University of Torino, Italy), nutrients recovery (**L. Celi**, University of Torino, Italy), and technologies for fertigation (**E. Dinuccio**, University of Torino, Italy).
- 11:40 Aquaponics: a case of integrated aquaculture with total water reuse (**B. Sicuro**, University of Torino, Italy)
- 12:00 An update on Water reuse in Europe (**F. Pizza**, Eureau, MM Spa, Milano, Italy)
- 12:25 Water-Energy-Food-Climate Nexus in an integrated peri-urban wastewater treatment and reuse system (**F. Fatone**, Marche Polytechnic University, Italy)
- 12:45 **Closing remarks** (**A. Bianco Prevot**, **V. Maurino**, University of Turin, Italy)

Info & contacts

For information please refer to:
alessandra.biancoprevot@unito.it

REGISTRATION BY 30/06/2023