

ISWR PROGRAM

INTERNATIONAL SCHOOL ON WATER REUSE (ISWR) – 4th EDITION

University of Torino

15-17th, SEPTEMBER 2025

DAY 1

8.30-9.00 REGISTRATION

9.00-9.30 INSTITUTIONAL GREETINGS and SCHOOL OPENING

9.30-10.20 Climate change and water scarcity: quantitative evaluation of the water sources and future perspectives ([M. Lasagna](#), University of Torino, Italy)

10.20-10.45 COFFEE BREAK

Chair: [L. Rizzo](#), University of Salerno, Italy

10.45-11.35 Composition of natural and treated water. Chemical and microbiological pollutants ([M. Minella](#), University of Torino, Italy; [A. Di Cesare](#), CNR-IRSA Verbania, Italy)

11.35-12.20 Established technologies for urban wastewater treatment ([M. Bruzzoniti](#), University of Torino, Italy; [M. Del Bubba](#), University of Firenze, Italy)

12.20-13.00 Analytical control and data quality in wastewater treatment processes: challenges and opportunities ([V. Maurino](#), University of Torino, Italy)

13.00-14.00 LUNCH

Chair: [M. Bruzzoniti](#), University of Torino, Italy

14.00-14.45 Disinfection of wastewater: fundamentals and process control ([K. Manoli](#), Lambton College, Canada)

14.45-15.30 Antibiotic resistant gene (ARG) and antibiotic resistant bacteria (ARB): are they threatening the water reuse deployment? ([I. Berruti](#), Plataforma Solar de Almería, Spain)

15.30-16.15 Wastewater treatment and reuse in the EU: tertiary/quaternary treatment vs. energy neutrality ([L. Rizzo](#), University of Salerno, Italy)

16.15-16.35 COFFEE BREAK

Chair: [V. Maurino](#), University of Torino, Italy

16.35-17.10 Application and scale-up of (photo)Fenton/Fenton like processes for the removal of micropollutants ([L. Santos-Juanes Jordá](#), Polytechnic University of Valencia, Spain)

17.10-17.55 Understanding the connections between basic, applied and innovative science in polluted water treatment ([S. Malato](#), Plataforma Solar de Almería, Spain)

17.55-18.30 Water reuse in a wider perspective: unconventional water sources and fit-for-purpose approach ([A. Bianco Prevot](#), University of Torino, Italy)

18.30-19.30 Poster Session and Welcome cocktail – Best poster award

DAY 2

Chair: [A. Bianco Prevot](#), University of Torino, Italy

9.00-9.45 Promoting equitable access to water and sanitation: an integrated and resilient approach through water reuse and complementary measures ([S. Murtas](#), Istituto Superiore di Sanità, Italy)

9.45-10.20 Economic aspects around the concept of wastewater reuse: the cost-benefit analyses ([E. Vallino](#), University of Torino, Italy)

10.20-10.40 COFFEE BREAK

Chair: [S. Murtas](#), *Istituto Superiore di Sanità, Italy*

10.40-11.30 Water reuse in the EU: regulatory framework, current status, and risk management approaches ([R. Maffettone](#), Joint Research Centre, European Commission)

11.30-12.15 Implementing EU water reuse rules in Spain: risk management tools and the multi-barrier approach ([I. León Martín](#), CEDEX, Spain)

12.15-13.00 Envisioning future systems for water reuse, an exploratory project from the EU Policy Lab ([O. Arrigoni](#), Joint Research Centre, European Commission)

13.00-14.10 LUNCH

Chair: [M. Minella](#), *University of Torino, Italy*

14.10-15.10 Water reuse in agriculture: resilience to water scarcity, nutrient availability, agronomic challenges ([F. Ferrero](#) and [E. Padoan](#), University of Torino, Italy)

15.10-15.40 Water reuse in soilless cultivation: opportunities and constraints for plant health ([M. Pugliese](#), University of Torino, Italy)

15.40-16.10 Aquaponics: a case of integrated aquaculture with total water reuse ([B. Sicuro](#), University of Torino, Italy)

16.10-16.30 COFFEE BREAK

16.30- 18.40 Water reuse quest: a role-play game on risk management plans ([R. Maffettone](#), Joint Research Centre, European Commission, [P. Allgaier](#), University of Oxford, UK)

20.00 Social Dinner

DAY 3

Chair: [R. Maffettone](#), Joint Research Centre, European Commission

9.00-9.30 Role play game reflections: outcomes of water reuse risk management in a real case study ([I. León Martín](#), CEDEX, Spain)

9.30-10.00 Managing wastewater treatment plants and reclaimed water: governance strategies and economics ([C. Cusenza](#), Consorzio Aretusa, Livorno, Italy)

10.00-10.30 Landscape and recreational activities irrigation: the portuguese experience. ([A. Rebelo](#), Portuguese Environmental Agency, Portugal)

10.30-10.50 COFFEE BREAK

Chair: [A. Bianco Prevot](#), University of Torino, Italy

10.50-11.30 Urban uses of water reuse in the Community of Madrid, Spain. ([J. Caneda](#), [A. Ariza](#), Canal de Isabel II, Madrid, Spain)

11.30-12.40 ROUND TABLE (Chair. [A. Tiraferri](#), Polytechnic of Torino, Italy).

Future scenario and challenges for water reuse: AI, climate emergency, material recovery, equitable access to water, one health approach

([R. Maffettone](#), Joint Research Centre, European Commission; [A. Quazzo](#), SMAT Torino, Italy; [E. Alladio](#), University of Torino, Italy; [E. Chiavazzo](#), Clean Water Center, Polytechnic of Torino, Italy)

12.40-13.00 Closing remarks and future perspective (University of Torino, Italy)

13.00-13.50 *LIGHT LUNCH*

14.00 TRANSFER TO SMAT PLANT IN COLLEGNO

14.30-17.00 Visit to SMAT wastewater treatment plant for industrial water reuse