

# Water Academies 2021

Finding innovative solutions  
for water scarcity  
in Southern Europe.



**October 27th**    **November 3rd**    **November 4th**



Funded by the  
European Union



October 27th, 2021

## Workshop for Agri-food Sector

**9:30-9:45 CEST**

### **Water Academy**

#### **Agri-food Workshop Kick-off (A0)**

EIT Manufacturing: a new Innovation Community.



**Antoni Pijoan**

Managing Director EIT Manufacturing West.

**9:45 - 10:30 CEST**

#### **Water Scarcity and Agri-food Sector: Economic and Business Implications (A1)**

How social responsibility can increase revenue and sales - quantifying and showcasing environmental impact. The interconnection between water scarcity, food waste, and UN Sustainable Development Goals. And also, how to teach consumers on reducing food waste - implement marketing grounded in science.



**Prof. Dubravka Skunca**

LCA Leader at EU Project GreenProtein, university professor, SMEs consultant and representative at European Commission Environmental Footprint Board.

**10:30 - 11:30 CEST**

#### **Digital Twin and IoT for Water Management in Agri-food sector (A2)**

The utilization of digital technologies enabled by sensors, IoT and AI is becoming a key aspect in all circular economy and sustainability aspects of manufacturing and service sectors. The new paradigm of the digital twin of a product, service or process is demonstrating its flexibility and powerlessness to help water managers in collecting detailed and useful data on water usage, recycling, waste and reuse and verify compliances against regulations and sustainability goals. The session will cover the major aspects of the application of digital twins and IoT to the water management processes in Agri-food sector.



**Mr. Maurizio Griva**

Senior Innovation Manager leading sustainable digital solution developments enabled by IoT.

**13:00 - 13:45 CEST**

#### **Emerging technologies for managing water use in agriculture (A3)**

Session delivered by EIT Body of Knowledge Expert on how emerging technologies may revolutionize the way water is managed in agriculture.



**Mrs. Gaëtane Suzenet**

Expert in investment and innovation in the water sector.

**Water Academies 2021**

October 27th, 2021

## Workshop for Agri-food Sector

**13:45 - 14:15 CEST**

### **The risks to sustainable agriculture & the solutions for water recycling (A4)**

Overuse of pesticides requires excessive water treatment due to high recalcitrance which leads to higher TOTEX.



#### **Msc. Dimitra Aravani**

Product manager in Tertiary treatment and water specialist.

**13:45 - 14:15 CEST**

### **HORIZON EUROPE: a new challenge to become more competitive at world level (A5)**

A deep overview on the next research and innovation program funded by the EU to increase the competitiveness of the SMEs at world level and define innovative approach to the circular economy.



#### **Dr. Marco de la Feld**

EU project manager - Innovation Manager.

**15:15 - 15:45 CEST**

### **Managing water footprints of agri-food production under water scarcity (A6)**

How to achieve water sustainability under a changing climate. Water footprints of agri-food production tells us our dependency to water and related risks to drought and water scarcity. This session will explain how to develop strategies for mitigating water risk and give real-case examples from large agri-food producers in the world.



#### **Dr. Ertug Ercin**

Senior Expert on water, climate risk and sustainability.

**15:45 - 16:15 CEST**

### **Biotechnological treatment & valorization of food & beverage industry wastewater(A7)**

Innovative (bio)technological solutions stimulate circular water use and cross sectoral water exchange in the water intensive food & beverage industry. Water security is production security! Find out how the food and beverage industry leads the way towards sustainable industrial water management.



#### **Dr. ir. Tom Vandekerckhove**

Managing Director at Water Experts.

**16:15 - 17:15 CEST**

### **Debrief and Q&A (A8)**

A session to deepen knowledge and discussions with speakers (in English)\*

\*No simultaneous interpretation in Greek, Italian and Spanish.

**Water  
Academies 2021**

November 3rd, 2021

## Workshop for Water Utilities, Municipalities & Tourism sector

**9:30 – 9:45 CET**

### Water Academy Workshop for Water Utilities, Municipalities & Tourism sector Kick-off (B0)

EIT Manufacturing: a new Innovation Community.



**Antoni Pijoan**

Managing Director EIT Manufacturing West.

**9:45 – 10:30 CET**

### How to understand your future water risk and potential business implications (B1)

Join to gain insights on how to do a quick high level – but holistic - assessment of your water risk exposure and potential financial impact.



**Jennifer Moeller-Gulland**

Water Risk and Economics Expert, leading water risk assessments for World Bank, MNcs etc.

**10:30 – 11:30 CET**

### Digital Twins and IoT for Water Management in Water Utilities (B2)

A digital twin in the water sector provides utilities with the best physical models, real-time updates of sensor devices, historical data, artificial intelligence, etc., while replicating the behavior of its real-world twin. There are many applications of implementing digital twinning within the water industry. Incorporating a digital twin in the water industry enables utilities to perform events like equipment downtime, pipe failure, contamination, pipeline temperature, etc., to assess the risks that might occur in the future.



**Mr. Maurizio Griva**

Senior Innovation Manager leading sustainable digital solution developments enabled by IoT.

**13:00 – 13:45 CET**

### Design and operation of the water distribution network (B3)

The integration of technology and management methods allows to better design and operate water networks. Join the session to learn which data can be integrated for better management of water distribution network.



**Dr. Jędrzej Bylka**

Assistant Professor of Poznan University of Technology & Freelance Consultant.

**Water  
Academies 2021**

November 3rd, 2021

## Workshop for Water Utilities, Municipalities & Tourism sector

**13:45 - 14:15 CET**

### Improving water efficiency (B4)

How assessing water waste in buildings can lead to a 20% reduction in water consumption.



#### I.r. Alexandre McCormack

Managing Director at Shayp, Architectural Engineer specialized in Water Consumption Analytics in Buildings.

**14:15 - 14:45 CET**

### Nature-based solutions (NBS) for sustainable wastewater management (B5)

Existing nature-based solutions for sustainable wastewater management.



#### Alexandros I. Stefanakis, M.Sc., Ph.D.

Assistant Professor at Technical University of Crete.

**15:15 - 15:45 CET**

### EU framework for water resources management (B6)

A bird's eye view of the EU Water Framework Directive, complementarities, and missing links with the UN Agenda to 2030: Your chance to grasp the implications for businesses, innovation, and sustainable development.



#### Dr. Stella Tsani

Academic with multi-sectoral networks across the knowledge triangle.

**15:15 - 15:45 CET**

### Life Cycle Assessment, Circular Economy & Water: How to Work with Small Players? (B7)

How to implement LCA principles to improve cost-efficiency. Creating environmental profile (water use), which can be integrated in business plan and attract investors. How to recognize environmental hotspots and calculate return related to going circular through the entire production process and value chain.



#### Prof. Dubravka Skunca

LCA Leader at EU Project GreenProtein, university professor, SMEs consultant and representative at European Commission Environmental Footprint Board.

**16:15 - 17:15 CET**

### Debrief and Q&A (B8)

A session to deepen knowledge and discussions with speakers (in English)\*

\*No simultaneous interpretation in Greek, Italian and Spanish.

**Water  
Academies 2021**

November 4th, 2021

## Workshop for Manufacturing Industries

**9:30 - 9:45 CEST**

### **Water Academy Workshop for Manufacturing Industries Kick-off (C0)**

EIT Manufacturing: a new Innovation Community.



#### **Antoni Pijoan**

Managing Director EIT Manufacturing West.

**9:45 - 10:30 CEST**

### **Water scarcity economic and business implications for Industry 4.0 (C1)**

Come and learn what is the role of water in the era of the 4th industrial revolution and what are the costs and opportunities for industry and innovators.



#### **Dr. Stella Tsani**

Academic with multi-sectoral networks across the knowledge triangle.

**10:30 - 11:30 CET**

### **Digital Twins and IoT for Water Management in Industrial manufacturing (C2)**

The utilization of digital technologies enabled by sensors, IoT and artificial intelligence is becoming a key aspect in all circular economy and sustainability aspects of manufacturing and service sectors. The new paradigm of the digital twin of a product, service or process is demonstrating its flexibility and powerness to help water managers in collecting detailed and useful data on water usage, recycling, waste and reuse and verify compliances against regulations and sustainability goals. The session will cover the major aspects of the application of digital twins and IoT to the water management processes in different sectors.



#### **Mr. Maurizio Griva**

Senior Innovation Manager leading sustainable digital solution developments enabled by IoT.

**13:00 - 13:25 CET**

### **A circular approach for sustainable management of industrial water pollution (C3)**

The need, benefits, and motivations for the adoption of sustainable water management solutions in the industrial sector towards a circular water economy.



#### **Alexandros I. Stefanakis, M.Sc., Ph.D.**

Assistant Professor at Technical University of Crete.

**Water  
Academies 2021**

November 4th, 2021

## Workshop for Manufacturing Industries

**13:25 – 13:45 CET**

### **Produced water management in the oil and gas industry using circular approaches and techniques (C3+)**

Case study of circular produced water management in the Oil & Gas industry using nature-based solution.



**Alexandros I. Stefanakis,  
M.Sc., Ph.D.**

Assistant Professor at Technical University of Crete.

**13:45 – 14:15 CET**

### **Current treatment technologies for textile wastewater treatment (C4)**

Membrane bioreactors, Biological processes, and Advanced oxidation processes for textile effluent treatment.



**Alexandros I. Stefanakis,  
M.Sc., Ph.D.**

Assistant Professor at Technical University of Crete.

**14:15 – 14:45 CET**

### **Water reuse- reduce and recycling for Health & Pharma (C5)**

Sustainable practices to remove harmful compounds such as medicines from the wastewater: Turning the Health & Pharma wastewater into reusable water.



**Msc. Dimitra Aravani**

Product manager in Tertiary treatment and Water specialist.

**15:15 – 15:45 CET**

### **New energy sources for the future (C6)**

New wastewater to energy approaches in the manufacturing sector - how to transform a waste into a valuable resource (hydrogen and energy storage cells).



**Mrs. Gaëtane Suzenet**

Expert in investment and innovation in the water sector.

**15:45 – 16:15 CET**

### **Water scarcity effects on energy sector and solutions available for the water shortages (C7)**

An opportunity to dive into the water-energy interactions for sustainable energy sector development.



**Dr. Stella Tsani**

Academic with multi-sectoral networks across the knowledge triangle.

**16:15 – 17:15 CET**

### **Debrief and Q&A (C8)**

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