

Program at a Glance

May 28th, 2026

10:30-11:00	Registration
11:00-12:00	Addresses

12:00-12:30	Break
-------------	-------

Session 1: Emergent Topics

Chair: Michael G. Skarpetis

12:30-12:50	<i>Supervisor Control of Water Distribution Network Actuators under Partial Observation</i> Fotis N. Koumboulis, Dimitrios G. Fragkoulis, Maria P. Tzamtzi and Nikolaos D. Kouvakas
12:50-13:10	<i>A Power-Efficient Analog Hardware Type-2 Fuzzy Classifier Architecture for Water Potability</i> Vagelis Asitzoglou, Daniela Papa, Vassilis Alimisis and Paul P. Sotiriadis
13:10-13:30	<i>Discrete Time Soft Sensor Design for Water Distribution Networks via Metaheuristic Parameter Optimization</i> Nikolaos D. Kouvakas, Fotis N. Koumboulis, Maria P. Tzamtzi and Dimitrios G. Fragkoulis
13:30-13:50	<i>Securing the Water Commons: A Holistic Resilience-Based Approach to a Strategic Resource</i> Klimis Katsiavrias

13:50-14:50	Break
-------------	-------

Session 2: Computational Aspects

Chair: Dimitrios G. Fragkoulis

14:50-15:10	<i>DES Supervisor realization of the Safe Switching Mechanism of Soft-Sensors</i> Maria P. Tzamtzi, Fotis N. Koumboulis, Nikolaos D. Kouvakas, and Dimitrios G. Fragkoulis
15:10-15:30	<i>An Integrated MATLAB Graphical User Interface for Hydraulic and Water Quality Modelling and Analysis in Water Distribution Networks</i> Michael Skarpetis, Fotis N. Koumboulis, Nikolaos D. Kouvakas and Maria P. Tzamtzi
15:30-15:50	<i>Neural State Estimation for a Water Distribution Network: An Ablation Study and Gradient-Based Explainability</i> Anastasios Arsenos
15:50-16:10	<i>Performance Quantitative Assessment of Linear and Discrete Time Approximants for Dynamic Water Distribution Network Models</i> Tatiana Drosou, Nikolaos D. Kouvakas, Fotis N. Koumboulis, Maria P. Tzamtzi, Dimitrios G. Fragkoulis and George Chamilothis

16:10-16:40	Closing of the first day of the Conference
-------------	--

May 29th, 2026

11:00-11:30	Registration
-------------	--------------

Plenary Session 1

Chair: Dimitrios G. Fragkoulis

11:30-12:00	<i>Soft Sensors for Water Quality Monitoring – A New Tool</i> Fotis N. Koumboulis
-------------	--

12:00-12:30	Break
-------------	-------

Session 3: Innovative Solutions

Chair: Nikolaos D. Kouvakas

12:30-12:50	<i>Implementing a Modular Low-Cost Sensor Network for Water Level Observation and Machine Learning Prediction</i> Evangelos Alvanitopoulos, Marios Anagnostou, Ioannis Vlachos and Markos Avlonitis
12:50-13:10	<i>Automatic Voronoi-Based Meshing for CFD Analysis of Passive Flow Control in Diode Pipes</i> Johannes Lawen, Vincenzo Gallelli, Christos Liosis, Ioannis Sarris and Sofia Peppas
13:10-13:30	<i>IoT Enabled Data Monitoring and Visualization System using Raspberry Pi Pico W with MQTT Protocol</i> Ashwinee Barbadekar, Samruddhi Sangole, Prathamesh Murkute and Jayshri Rajput, Vallabh Sangvikar
13:30-13:50	<i>Nonlinear optimal control of overhead cranes for installing sea-submerged water-supply tubes</i> Gerasimos Rigatos, Gennaro Cuccurullo, Krishna Busawon, Masoud Abbaszadeh, Pierluigi Siano and Farouk Zouari

13:50-14:50	Break
-------------	-------

Plenary Session 2

Chair: Fotis N. Koumboulis

14:50-15:20	<i>Techno-Economic Challenges in Modern Water Distribution Networks</i> Dimitrios G. Fragkoulis
-------------	--

15:20-15:50	Break
-------------	-------

Session 4: Decision Support and Management Systems

Chair: Michael G. Skarpelis

15:50-16:10	<i>Urban hydrological change and green roofs as source-control measures for stormwater management</i> Jozef Olašák and Milan Palko
16:10-16:30	<i>Innovative Water Management Approaches for Sustainable Agricultural Development in the Aral Sea Region</i> Bakht Mambetnazarov, Anvar Azamov, Bayram Genjemuratov, Alima Shamuratova, Uktam Sitmuratov, Bakhtigul Aydanliyazova, Dilfuza Turenliyazova and Yusup Tursinbayev
16:30-16:50	<i>Analysis of the Impact Coefficients of Leakage Management Criteria in Water Distribution Networks Using the DEMATEL Method</i> Halil Eren, Cansu Bozkurt and Mahmut Firat
16:50-17:10	<i>A Decision Support System Architecture for Quality in Water Distribution Networks</i> Fotis N. Koumboulis, Maria P. Tzamtzi, Nikolaos D. Kouvakas, Dimitrios G. Fragkoulis, Konstantinos S. Katsiavrias and Klimis K. Katsiavrias

17:10-18:00	Closing of the Conference
-------------	---------------------------

- As the conference will be conducted in a hybrid format, authors may present either in person or remotely via Webex. The Webex Meeting Link for Remote Presentation is:
<https://uoa.webex.com/uoa/j.php?MTID=m7fceeddde90c99776f67aa7732bcf279>
- All times listed in the program refer to the local time in Athens, Greece.
- Each conference presentation is scheduled for 20 minutes, including Q&A. Presenters are expected to adhere to the allotted time.
- Remote attendance at the conference will be available via the Webex link provided above.