



**2nd International Joint Conference on
Water Distribution Systems Analysis (WDSA)
& Computing and Control in the Water Industry (CCWI)
UPV, Valencia (Spain), July 18-22, 2022**

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Water Distribution System Analysis (WDSA)
& Computing and Control in the Water Industry (CCWI)**



Links to the videos of each session

**Department of Hydraulic Engineering and Environment
Universitat Politècnica de València (Valencia Tech)
VALENCIA, SPAIN
18-22 JULY, 2022**

1. SHORT COURSES

- [The Digital Transformation and the New Perspectives for Planning and Management of Aqueducts: the role of the digital twins \(Orazio Giustolisi, Politecnico di Bari, Italy\)](#)
- [Deep Learning with PyTorch for Urban Water Networks: from Multilayer Perceptrons to Graph Neural Networks \(Riccardo Taormina, Dr. Riccardo Taormina – AldroLab, Department of Water Management, TU Delft, Netherlands\).](#)
 - [Part I](#)
 - [Part II](#)
- [Introduction to the EPANET-MATLAB Toolkit for Smart Water Networks research \(Demetrios Eliades, KIOS Research and Innovation Center of Excellence, University of Cyprus\)](#)
- [Managing Advanced Hydraulic Models with QGISRed plugin. From EPANET to Digital Twins \(Fernando Martínez, Research Institute of Water and Env. Eng., IIAMA, Univesitat Politècnica de València \(Spain\)\)](#)
- [Transient simulations in water networks \(Lina Sela, Department of Civil, Architectural, and Environmental Engineering, The University of Texas at Austin, USA\).](#)
 - [Part I](#)
 - [Part II](#)

2. PLENARY SESSIONS

- [Opening Ceremony](#)
- [Plenary Session A. Dr. Pilar Conejos \(Idrica\). *Digital Twins for Water Distribution Systems*](#)
- [Plenary Session B. Prof. Helena Ramos \(Instituto Superior Técnico—IST, Lisbon\). *Water-energy-food nexus as a management strategy in smart cities and grids*](#)
- [Plenary Session C. Dr. Carles Sanchis \(Valencian Center for Irrigation Studies\). *The end of a myth? Lights and shadows over the Valencia Water Court*](#)
- [Plenary Session D. Prof. Raziye Farmani \(University of Exeter\). *Intermittent Water Supply Systems: Challenges, Opportunities and Solutions*](#)
- [Plenary Session E. Industry Track](#)
 - [Nicolás Monterde \(Idrica\)](#)
 - [Yolanda Martínez \(Molecor\)](#)
 - [Vicente Sansaloni \(Talis, Belgicast\)](#)
 - [Fernando Bernal \(Bermad\)](#)
- [Plenary Session F. Battle of Intermittent Water Supply \(BIWS\). Prof. F. Javier Martínez Solano \(UPV\) - Awards Ceremony - Closing Ceremony](#)

3. PARALELL SESSIONS (SORTED BY SESSION NUMBER)

3.1. Parallel Sessions 1

- [1A. Drainage and Sewer Systems - I](#)
- [1B. Design of Water Distribution Systems - I](#)
- [1C. Water Quality in Water distribution systems - I](#)
- [1D. Analysis and Modeling of Water Distribution Systems - I](#)
- [1E. Demand Modeling of Water Distribution Systems - I](#)
- [1F. Industry Track I - Water Quality](#)

3.2. Parallel Sessions 2

- [2A. Drainage and Sewer Systems - II](#)
- [2B. Design of Water Distribution Systems - II](#)
- [2C. Water Quality in Water distribution systems - II](#)
- [2D. Analysis and Modeling of Water Distribution Systems - II](#)
- [2E. Demand Modeling of Water Distribution Systems - II](#)
- [2F. Industry Track II - Asset Management](#)

3.3. Parallel Sessions 3

- [3A. Drainage and Sewer Systems - III](#)
- [3B. Risk Analysis in Water distribution systems](#)
- [3C. Water Quality in Water distribution systems - III](#)
- [3D. Analysis and Modeling of Water Distribution Systems - III](#)
- [3E. Leakage Analysis and Control - I](#)
- [3F. Industry Track III - Design & Digitalization](#)

3.4. Parallel Sessions 4

- [4A. Battle of Intermittent Water Supply - I](#)
- [4B. Energy Optimization of Water Networks - I](#)
- [4C. Water Quality in Water distribution systems - IV](#)
- [4D. Analysis and Optimization of Water Distribution Networks](#)
- [4E. Leakage Analysis and Control - II](#)
- [4F. Industry Track IV - Operation of Water Networks](#)

3.5. Parallel Sessions 5

- [5A. Intermittent Supply of Water Distribution Networks - I](#)
- [5B. Energy Optimization of Water Networks - I](#)
- [5C. Water Quality in Water distribution systems - V](#)
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- [5E. Leakage Analysis and Control - III](#)
- [5F. Industry Track V - Demands in Water Distribution Networks](#)

3.6. Parallel Sessions 6

- [6A. Intermittent Supply of Water Distribution Networks - II](#)
- [6B. Battle of the Leakage Detection and Isolation Methods \(BattLeDIM, 2020\)](#)
- [6C. Water Quality in Water distribution systems - VI](#)
- [6D. Operation and Control of Water Distribution Networks - II](#)
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- [6F. Industry Track VI - Leakage Control and Network Operation in Water Distribution Systems](#)

3.7. Parallel Sessions 7

- [7A. Battle of Intermittent Water Supply - II](#)
- [7B. Asset Management](#)

- [7C. Water Quality in Water distribution systems - VII](#)
- [7D. Sensor Placement and Sectorization](#)
- [7E. Leakage Analysis and Control - V](#)
- [7F. Smart Solutions for Water Systems - I](#)

3.8. Parallel Sessions 8

- [8A. Battle of Intermittent Water Supply - III](#)
- [8C. Hydraulic Transients in Water Distribution Systems](#)
- [8D. Water Distribution Network Planning](#)
- [8E. Wastewater and Water Treatment Plants](#)
- [8F. Smart Solutions for Water Systems - II](#)

4. PARALELL SESSIONS (SORTED BY TOPIC)

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- [1C. Water Quality in Water distribution systems - I](#)
- [2C. Water Quality in Water distribution systems - II](#)
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- [5C. Water Quality in Water distribution systems - V](#)
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4.2. Industry Track

- [1F. Industry Track I - Water Quality](#)
- [2F. Industry Track II - Asset Management](#)
- [3F. Industry Track III - Design & Digitalization](#)
- [4F. Industry Track IV - Operation of Water Networks](#)
- [5F. Industry Track V - Demands in Water Distribution Networks](#)
- [6F. Industry Track VI - Leakage Control and Network Operation in Water Distribution Systems](#)

4.3. Leakage Analysis and Control

- [3E. Leakage Analysis and Control - I](#)
- [4E. Leakage Analysis and Control - II](#)
- [5E. Leakage Analysis and Control - III](#)
- [6E. Leakage Analysis and Control - IV](#)
- [7E. Leakage Analysis and Control - V](#)

4.4. Battle of Intermittent Water Supply

- [4A. Battle of Intermittent Water Supply - I](#)
- [7A. Battle of Intermittent Water Supply - II](#)
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4.5. Drainage and Sewer Systems

- [1A. Drainage and Sewer Systems - I](#)
- [2A. Drainage and Sewer Systems - II](#)
- [3A. Drainage and Sewer Systems - III](#)

4.6. Analysis and Modeling of Water Distribution Systems

- [1D. Analysis and Modeling of Water Distribution Systems - I](#)
- [2D. Analysis and Modeling of Water Distribution Systems - II](#)
- [3D. Analysis and Modeling of Water Distribution Systems - III](#)

4.7. Design of Water Distribution Systems

- [1B. Design of Water Distribution Systems - I](#)
- [2B. Design of Water Distribution Systems - II](#)

4.8. Demand Modeling of Water Distribution Systems

- [1E. Demand Modeling of Water Distribution Systems - I](#)
- [2E. Demand Modeling of Water Distribution Systems - II](#)

4.9. Intermittent Supply of Water Distribution Networks

- [5A. Intermittent Supply of Water Distribution Networks - I](#)
- [6A. Intermittent Supply of Water Distribution Networks - II](#)

4.10. Energy Optimization of Water Networks

- [4B. Energy Optimization of Water Networks - I](#)
- [5B. Energy Optimization of Water Networks - II](#)

4.11. Operation and Control of Water Distribution Networks

- [5D. Operation and Control of Water Distribution Networks - I](#)
- [6D. Operation and Control of Water Distribution Networks - II](#)

4.12. Smart Solutions for Water Systems

- [7F. Smart Solutions for Water Systems - I](#)
- [8F. Smart Solutions for Water Systems - II](#)

4.13. Other topics

- [3B. Risk Analysis in Water distribution systems](#)
- [4D. Analysis and Optimization of Water Distribution Networks](#)
- [6B. Battle of the Leakage Detection and Isolation Methods \(BattLeDIM, 2020\)](#)
- [7B. Asset Management](#)
- [7D. Sensor Placement and Sectorization](#)
- [8C. Hydraulic Transients in Water Distribution Systems](#)
- [8D. Water Distribution Network Planning](#)
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