

## Preface

### **The 6th edition of the International Conference on GIS and Applied Computing for Water Resources (WMAD21)**

Water resources are one of the most discussed and studied topics worldwide. The efficient management and use of these resources required the adoption of technologies more advanced for ensuring the sustainable development of water resources. Computing technology and Geographic Information Science (GIS) are widely used to address specific water resource challenges and problems while also applied as an effective tool for managing and exposing spatial data related to water resources management.

The 6<sup>th</sup> edition of the International Conference on GIS and Applied Computing for Water Resources (**WMAD21**) organized by the Scientific Association for Water Information & Sustainability (SAWIS) and National School of Applied Sciences of Kenitra (ENSA KENITRA), with the partnership of Ibn Tofail University, AIH-CM and Engineering Science Laboratory at ENSA Kenitra on 24-25 September 2021 sought to promote the scientific research toward Water Resources, GIS, Remote Sensing, Applied Computing and Artificial Intelligence for Water Resources, Big Data for water resources, Statistical and Numerical Models for water resources. Thus, WMAD21 has provided an opportunity for researchers, academic faculty, students, industry leaders, and others in the fields of Water Resources to present their research results and approaches and publish original and high-quality papers related to aforementioned topics.

All speakers and participants were invited to present their research and/or experiences to the **WMAD21** according to the topics below:

#### **Water resources:**

- Desalination, Unconventional Water Resources
- Blue growth, New and renewable energies
- Integrated Water Resources Management
- Water Policy and Regulation
- Climate change
- Natural hazard related to water
- Hydrology and hydrogeology
- Hydro-geophysics
- Urban hydraulics and sanitation
- Surface and Groundwater quality
- Agriculture & Soil
- Education and Right to water

## **GIS and Applied Computing for Water resources:**

- System analysis control, Optimization, Decision Support
- ICT for monitoring
- Virtual reality
- Geomatics and Remote sensing
- Modelling, scientific computing, image processing and numerical method
- Mathematical Analysis
- Geostatistics
- Data mining, Machine learning and Deep learning
- Big-data
- Open Data, Free and Open Source Software
- Artificial intelligence, fuzzy logic and expert systems
- IoT, Mobile & Cloud Computing

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*The 6<sup>th</sup> edition of the International Conference on GIS and Applied Computing for Water Resources (WMAD21)* organized by the Scientific Association for Water Information & Sustainability (SAWIS) and National School of Applied Sciences of Kenitra (ENSA KENITRA), with the partnership of Ibn Tofail University, AIH-CM and Engineering Science Laboratory.

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