



UNIVERSITY OF THESSALY  
CIVIL ENGINEERING DEPARTMENT



UNIVERSITY OF NAPLES FEDERICO II  
CIVIL, ARCHITECTURAL AND  
ENVIRONMENTAL ENGINEERING  
DEPARTMENT

11 JULY 2022

NAPLES, ITALY  
«Centro Congressi»  
University of Naples Federico II  
Via Partenope, 36, 80121

email: [ewas5secretariat@unina.it](mailto:ewas5secretariat@unina.it)  
website: [www.ewas5.it](http://www.ewas5.it)

#### ORGANIZING COMMITTEE

Prof. V. KANAKOUDIS & Prof. M. GIUGNI (Chairmen)  
Assoc. Prof. E. KERAMARIS & Assoc. Prof. F. DE PAOLA (Vice-Chairmen)  
Dr. S. TSITSIFLI & Dr. F. PUGLIESE (Conference Managers & Secretary)  
Ms. A. PAPADOPOULOU & Prof. G. PERILLO (Communication Managers)

in cooperazione con:



5<sup>th</sup>

## International Conference EWAS

### OPEN ACCESS WORKSHOP

«Il Piano Nazionale di Ripresa e Resilienza (PNRR) e il ciclo integrato delle acque: interventi, innovazione tecnologica e prospettive»

«*The Recovery and Resilience Plan (PNRR) and the integrated water cycle: actions, technological innovation and prospects*»

Il Comitato Organizzatore di EWAS5 e Utilitalia sono lieti di comunicare che il giorno 11 Luglio 2022 avrà luogo un workshop ad accesso libero, rappresentativo di un momento di incontro tra istituzioni, autorità pubbliche e private, enti gestori e mondo accademico operanti nel settore della gestione della risorsa idrica per condividere opinioni, intenzioni e aspettative sugli interventi, le innovazioni tecnologiche e le prospettive del PNRR per la gestione del ciclo integrato delle acque.

Ulteriori dettagli saranno forniti in seguito.

*The EWAS5 Organizing Committee and Utilitalia are pleased to announce that on 11 July 2022 an open access workshop will take place, representing a meeting point between institutions, public and private authorities, water utilities and academic world working in the field of water resource management to share viewpoints, aims and expectations on the actions, the technological innovation and the prospects of the PNRR for the management of the integrated water cycle.  
Further details will be provided soon.*



UNIVERSITY OF THESSALY  
CIVIL ENGINEERING DEPARTMENT



UNIVERSITY OF NAPLES FEDERICO II  
CIVIL, ARCHITECTURAL AND  
ENVIRONMENTAL ENGINEERING  
DEPARTMENT

12-15 JULY 2022

NAPLES, ITALY

«Centro Congressi»

University of Naples Federico II

Via Partenope, 36, 80121

email: [ewas5secretariat@unina.it](mailto:ewas5secretariat@unina.it)

website: [www.ewas5.it](http://www.ewas5.it)

#### ORGANIZING COMMITTEE

Prof. V. KANAKOUDIS & Prof. M. GIUGNI (Chairmen)

Assoc. Prof. E. KERAMARIS & Assoc. Prof. F. DE PAOLA (Vice-Chairmen)

Dr. S. TSITSIFI & Dr. F. PUGLIESE (Conference Managers & Secretary)

Ms. A. PAPADOPOULOU & Prof. G. PERILLO (Communication Managers)

con il patrocinio di



ANCE | CAMPANIA  
CONFININDUSTRIA  
Campania



5<sup>th</sup>

# International Conference EWAS

“Water Security and Safety Management: emerging threats or new challenges?  
Moving from Therapy and Restoration to Prognosis and Prevention”

#### KEYNOTE SPEAKERS

Prof. Z. KAPELAN (TU Delft)

Prof. D. SAVIC (KWR Water Research Institute)

Prof. J.J. SANSALONE (University of Florida)

#### SPECIAL SESSIONS

S.S.1: Water supply and network design, modelling and management in a changing environment  
Chairman: Prof. M. Franchini – University of Ferrara (IT)

S.S.2: Assessing the resilience of critical water Infrastructure: planning for the unknown  
Chairman: Prof. C. Makropoulos – National Technical University of Athens (GR)

S.S.3: Impact of climate change on hydrological extremes

Chairmen: Prof. S. Manfreda & Assoc. Prof. L. Cimorelli – University of Naples Federico II (IT)

S.S.4: Technological innovation in water networks: digital water, smart control and energy efficiency  
Chairwoman: Prof. H. M. Ramos – University of Lisbon (PT)

S.S.5: Novel technologies and approaches for water and wastewater treatment  
and monitoring: from ideas to results

Chairman: Prof. G. V. Korshin – University of Washington (USA)

**IMPORTANT DATES**

<b>Abstract Submission Deadline:</b>	November 15 <sup>th</sup> , 2021	January 10 <sup>th</sup> , 2022	
<b>Notification of Abstract Acceptance:</b>	November 30 <sup>th</sup> , 2021	January 25 <sup>th</sup> , 2022	
<b>Full Paper Submission:</b>	January 31 <sup>st</sup> , 2022	February 28 <sup>th</sup> , 2022	

**REGISTRATION FEES**

	<b>EARLY BIRD (till 28/02/2022)</b>	<b>LATE BIRD (till 31/03/2022)</b>	<b>AFTER 31/03/2022 &amp; ON SITE</b>
<b>Standard*</b>	350 €	450 €	600 €
<b>Student**</b>	190 €	240 €	300 €
<b>1-Day Participation***</b>	140 €	140 €	140 €
<b>Accompanying Person****</b>	150 €	150 €	150 €

*Please note:* to submit a full paper (oral or poster) a registration fee must be paid until 31st of March 2022. In case a second paper by the same presenting author is submitted, an extra fee of 80 € is applicable. Also, for the third paper (maximum submission for the same author) an extra fee of 80 € is applicable.

\*Standard fee includes admittance at the welcome/ice-breaker reception, five coffee breaks, one lunch, the official Gala dinner. It also includes the Conference E-Proceedings.

\*\*Student fee includes admittance at the welcome/ice-breaker reception and all five coffee breaks. It also includes the Conference E-Proceedings.

\*\*\*1-Day Participation applies to only those attending the conference and not to the authors. It includes admittance at two coffee breaks and the official Gala dinner.

\*\*\*\*Accompanying Person fee includes admittance at the welcome/ice-breaker reception, one lunch and the official Gala dinner.

**ABSTRACT SUBMISSION**

Abstracts should be submitted at <https://easychair.org/conferences/?conf=ewas5>. The abstracts should include the title of the paper, the names and full affiliation(s) of the author(s), the respective keywords (max. 5) and the Conference's specific theme and topic the paper fits in. The length of the text should not exceed 300 words. For the preparation of your abstract please download the Abstract Template and use it in preparing your contribution.

**VENUE** The Conference will take place at the "Centro Congressi" of the University of Naples Federico II (Naples, Italy).

**THEMES & TOPICS**

- A. WATER SECURITY AND SAFETY FOSTERING WATER RESILIENCE
- B. SUSTAINABLE WATER MANAGEMENT IN CIRCULAR ECONOMY
- C. WATER – ENERGY – FOOD NEXUS
- D. INTERNET OF THINGS (IoT) SOLUTIONS AIDING WATER MANAGEMENT
- E. INNOVATIVE METHODS FOR URBAN WATER CYCLE MANAGEMENT
- F. WASTEWATER TREATMENT AND WATER RESOURCE RECOVERY FACILITIES
- G. NON-CONVENTIONAL WATER RESOURCES
- H. EXPERIMENTAL AND COMPUTATIONAL METHODS IN HYDRAULIC ENGINEERING
- I. RIVERINE AND COASTAL ENGINEERING
- J. HYDROLOGICAL RESPONSE TO CLIMATE CHANGE
- K. ENVIRONMENTAL CRISIS AND HAZARDS
- L. GROUNDWATER MODELLING

**SCIENTIFIC COMMITTEE**

ALVÁREZ ALVÁREZ E. (Univ. Oviedo, ES)	CLAPS P. (Polytechnic Univ. Turin, IT)	GRECO M. (Univ. Naples Federico II, IT)	MASSARUTTO A. (Univ. Udine, IT)	PRINOS P. (Aristotle Univ. Thessaloniki, GR)
ALVISI S. (Univ. Ferrara, IT)	CUBILLO F. (Canal de Isabel II, ES)	HRISSANTHOU V. (Democritus Univ. Thrace, GR)	MATHIOULAKIS D. (National Technical Univ. Athens, GR)	PSILOVIKOS A. (Univ. Thessaly, GR)
ANAGNOSTOPOULOS P. (Aristotle Univ. Thessaloniki, GR)	DE MARINIS G. (Univ. Cassino & Southern Lazio, IT)	KANAKOUDIS V. (Univ. Thessaly, GR)	MAZZOLA M.R. (Univ. Palermo, IT)	SALANDIN P. (Univ. Padua, IT)
ANGELIDIS P. (Democritus Univ. Thrace, GR)	DEIDDA R. (Univ. Cagliari, IT)	KARAKASIDIS T. (Univ. Thessaly, GR)	MENDICINO G. (Univ. Calabria, IT)	SAMARAS P. (International Hellenic Univ., GR)
ARMANINI A. (Univ. Trento, IT)	DEL GIUDICE G. (Univ. Naples Federico II, IT)	KARAMANOS S. (Univ. Thessaly, GR)	MITRAKAS M. (Aristotle Univ. Thessaloniki, GR)	SAVIDIS I. (International Hellenic Univ., GR)
ARMENIO V. (Univ. Trieste, IT)	DELLA MORTE R. (Univ. Naples Parthenope, IT)	KARAMBAS T. (Aristotle Univ. Thessaloniki, GR)	MONTANARI A. (Alma Mater Studiorum. Univ. Bologna, IT)	SOULIS I. (Democritus Univ. of Thrace, GR)
BALLIO F. (Polytechnic Univ. Milan, IT)	DI FEDERICO V. (Alma Mater Studiorum. Univ. Bologna, IT)	KARATZAS G. (Technical Univ. Crete, GR)	MOSSA M. (Polytechnic Univ. Bari, IT)	SPILIOOTIS M. (Democritus Univ. of Thrace, GR)
BALTAS E. (National Technical Univ. Athens, GR)	DIMITRAKOPOULOS A. (Univ. Patras, GR)	KARLEUSA B. (Univ. Rijeka, HR)	MUHAMMETOGLU A. (Akdeniz Univ, TR)	TSAKIRIS G. (National Technical Univ. Athens, GR)
BELGIORNO V. (Univ. Salerno, IT)	DOKOU ZOI (Univ. Connecticut, USA)	KATSIFARAKIS K. (Aristotle Univ. Thessaloniki, GR)	MUHAMMETOGLU K. (Akdeniz Univ, TR)	TSIHINTZIS V. (Democritus Univ. of Thrace, GR)
BRATH A. (Alma Mater Studiorum. Univ. Bologna, IT)	ERPICUM S. (Univ. Liège, BE)	KOUTSOYANNIS D. (National Technical Univ. Athens, GR)	NAPOLITANO F. (Univ. La Sapienza Rome, IT)	TUCCIARELLI T. (Univ. Palermo, IT)
BRUNONE B. (Univ. Perugia, IT)	FERNÁNDEZ FRANCOS J. (Univ. Oviedo, ES)	KUNGOLOS A. (Aristotle Univ. Thessaloniki, GR)	PANIDIS T. (Univ. Patras, GR)	VACCA A. (Univ. Naples Federico II, IT)
CABRERA E. Sr. (Polytechnic Univ. Valencia, ES)	FIORENTINO M. (Univ. Basilicata, IT)	LASPIDIOU C. (Univ. Thessaly, GR)	PAPAKONSTANTIS I. (National Technical Univ. Athens, GR)	VAFEIADIS M. (Aristotle Univ. Thessaloniki, GR)
CABRERA E. Jr. (Polytechnic Univ. Valencia, ES)	FONTANA N. (Univ. Sannio, IT)	LATINOPoulos P. (Aristotle Univ. Thessaloniki, GR)	PAPANICOLAU P. (National Technical Univ. Athens, GR)	VIVIANI G. (Univ. Palermo, IT)
CALABRESE M. (Univ. Naples Federico II, IT)	FRATINO U. (Polytechnic Univ. Bari, IT)	LEKKAS T.D. (Univ. Aegean, GR)	PECHLIVANIDIS G. (International Hellenic Univ., GR)	YANNOPOULOS P. (Univ. Patras, GR)
CARRAVETTA A. (Univ. Naples Federico II, IT)	GISONNI C. (Univ. Campania Luigi Vanvitelli, IT)	LIAKOPOULOS A. (Univ. Thessaly, GR)	PIANESE D. (Univ. Naples Federico II, IT)	YANNOPOULOS S. (Aristotle Univ. Thessaloniki, GR)
CASTELLARIN A. (Alma Mater Studiorum. Univ. Bologna, IT)	GIUGNI M. (Univ. Naples Federico II, IT)	LYBERATOS G. (National Technical Univ. Athens, GR)	PIRO P. (Univ. Calabria, IT)	ZOBOULIS A. (Aristotle Univ. Thessaloniki, GR)
CHRISTODOULOU S. (Univ. Cyprus, CY)	GIUSTOLISI O. (Polytechnic Univ. Bari, IT)	MALAVASI S. (Polytechnic Univ. Milan, IT)	PIROZZI F. (Univ. Naples Federico II, IT)	