# **UrbanWaterSECURITY**

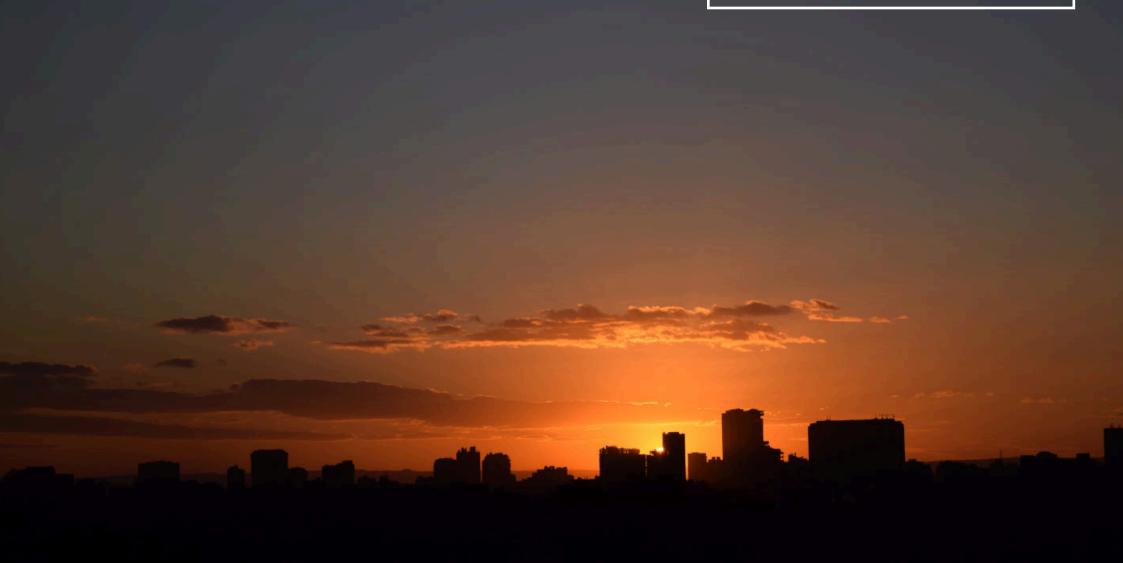
Addressing water quality in a changing environment

**REGIONAL AND GLOBAL CHALLENGES** 

 $2019^{|_{15}}_{|_{\mathtt{EL}}}$ 

**SYMPOSIUM** 15 DECEMBER **EL CAIRO, EGYPT** 

**NATIONAL RESEARCH CENTER, NEW HALL** 



# **UrbanWaterSECURITY**

### Addressing water quality in a changing environment



#### NATIONAL RESEARCH CENTER, NEW HALL

Human livelihood requires reliable water supply and protection from waterrelated hazards. Significant growth in population and anthropogenic activities along with unfolding effects of global environmental change have enormously increased the vulnerability of human systems, buildings and cultural heritage to changes in water quantity and/or quality. Addressing such vulnerabilities has high management priority in urban regions due to the concentration of population and socio-economic activities. This has resulted into emerging various discussions around the concept of "urban water security".

The Symposium provide a brief overview on the water-related threats to human society and the context of water security, with a greater goal of recognizing operational and social challenges along with science needs in urban environments. This edition is organized with the support of the Italian Embassy in Cairo and with the cooperation of National Research Center in Egypt.

UrbanWaterSECURITY will provide an international platform to share and discuss key topics for researchers working in the field to disseminate the most recent results of their activities and exchange experiences and visions, with

the aim to trigger interdisciplinary collaborations on cross-cutting issues of common interest.

This initiative is organized within the international projects n. IN17GR09/INT/ Italy/P-17/2016 (SP) and EG16MO01 funded by Italian Ministry of Foreign Affairs and International Cooperation and Italian Ministry of Environment were will be presented the main obtained results.

The patronage of the Italian Embassy in Cairo and NRC underline the relevance of the initiative.

#### 9.30 Registration

#### 10.00 Opening

Claudio Margottini, Scientific Attachè, Embassy of Italy Gianvittorio Rizzano, Director of the Department of Civil Engineering, University of Salerno, Italy Giampaolo Cantini Italian Ambassador in Egypt Mohamed M. Hashem - President of National Research Centre in Egypt

## Addressing urban water quality: emerging discussion and remaining challenges

**Chairman**: Claudio Margottini, Embassy of Italy

- **10.30** New material for a sustainable water treatment within the circular economy concept.
  - Marwa S. Shalaby, National Research Center, Egypt
- 10.45 Technological innovation in the Urban Water Security to achieve Sustainable Development Goals.
  Vincenzo Naddeo, University of Salerno, Italy
- **11.00** Membrane solutions in securing Egyptian water future. Ahmed M. Shaban, National Research Center, Egypt

#### Sustainable Cities in a changing environment

**Chairman**: Ahmed M.Shaban, Former Vice President of technical affairs and head of flat sheet membrane group, NRC, Egypt

- **11.45** From waste to sustainable construction materials. Enzo Martinelli, University Spinoff TESIS S.r.l., Italy
- **12.00** Water-Energy-Food Nexus: advanced aquaponic for a sustainable cities. *Ola M. Gomaa, Atomic Energy Authority, Egypt*
- **12.15** Smart devices for a better life in Sustainable Cities. Francesco Villecco, University of Salerno, Italy
- **12.30** Green economy to obtain sustainable development in food Industries

  Emad M. Ali, federation of Egyptian Industries, Egypt
- **12.45** Analysis of rainfall-induced natural hazards in urban areas Sabatino Cuomo, University of Salerno, Italy
- **13.00** Frac Flowback and produced water treatment and reuse. Abdelaziz Khlaifat , American University in Cairo, Egypt
- **13.15** Deep monitoring and preservation of landscape, ancient cities and cultural heritage

  Emanuela De Feo, University of Salerno, Italy

#### **13.30 CONCLUSIONS**

#### 11.15 COFFE BREAK

### **UrbanWaterSECURITY**



15 DECEMBER **CAIRO, EGYPT** 

NATIONAL RESEARCH CENTER, NEW HALL

#### Chair

Vincenzo Naddeo Marwa S. Shalaby

#### **Scientific Committee**

Vincenzo Belgiorno Salvatore Barba Sahar Saad Ali Laura Borea Ola M. Gomaa Heba Abdallah Mohamed Claudio Margottini Ayman El gendi Tiziano Zarra

#### **Venue**

The event will be organized in the new Hall of the National Research Center (NRC), El Cairo.

NRC Is the largest multidisciplinary R&D centre in Egypt devoted to basic and applied research within the major fields of interest. NRC possesses an impressive scientific & technological infrastructure and man power resources of 4735 research staff.

NRC Consists of 14 divisions and 108 departments covering the major areas of industry, health, environment, agriculture, basic sciences and engineering.

NRC Is headed by a president with ministerial status, assisted by two vice presidents, one for research and the other for technical affairs. The minister of state for Scientific Research is the higher president of NRC.

#### Info, address and contacts

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