



The American University in Cairo

Center of Excellence for Water

# CALL FOR APPLICATION WATER-ENERGY-FOOD NEXUS SCHOOL 2023 5 AUGUST – 2 SEPTEMBER 2023

Call Launch Date: June 22, 2023

Submission Deadline: 2 July 2023 -11:55 pm (Cairo Local Time)

Exchange, Training, and Scholarships Pillar activities are implemented in cooperation with:





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# <u>Call for Application for Water-Energy-Food Nexus School 2023</u> <u>5 August – 2 September 2023</u>

The Center of Excellence for Water (COE-Water) is established through a grant funded by the United States Agency for International Development (USAID) in Alexandria University, addressing water challenges for Egypt to help Egypt to achieve its Vision 2030. The goal of the grant, coordinated and managed by the American University in Cairo (AUC), is to catalyze long-term improvement in Egyptian water resources management by developing its innovative applied research and education enterprise through the creation of the COE-Water at Alexandria University – Egypt, in cooperation with several academic and non-academic partners and stakeholders in Egypt and the United States. The COE for Water is comprised of five components; Governance, Curriculum, Research, Exchange, and Sustainability, where US and Egyptian universities are chairing and co-chairing each component, in close cooperation with the project partners and stakeholders. The duration of the project is 5 years, beginning February 20<sup>th</sup>, 2019.

Given that Egypt critically needs to improve its ability to meet current and projected water demands, our goal is to catalyze long-term improvement in Egyptian water resources management by improving its innovative applied research and education enterprise through the creation of the Center of Excellence for Water (COE). The COE for Water is not only a modern applied research center, but it will also function as an imperative mechanism for Egypt to achieve Egypt Vision 2030 and contribute to achieving the Global Sustainable Development Goals in the water sector. In this regard and built on our commitment to serve the needs of the Egyptian people and economy, including industry, and support the government to face water challenges, the COE research program will provide funding opportunities for a number of applied water research capacity improvements.

#### Background

Demand for water, energy and food is increasing, driven by a rising global population, rapid urbanization, changing diets and economic growth. Agriculture consumes about 70% of the world's freshwater resources, and more than one-quarter of the energy used globally is expended on food production and supply as concluded by the UN Water. Around a seventh of the world's population – the so called 'bottom billion' – does not have a secure food supply and has only limited access to clean water, sanitation, or modern sources of energy. Resources must be managed in a more and more integrated manner to avoid over exploitation of natural resources and to provide a more inclusive access for all. Therefore, the interrelationship between water, energy and food requires an integrated management approach to secure their availability for the growing population.

Egypt with over 100 million inhabitants is facing significant economic and environmental challenges related to water scarcity, energy demand and food security, which are not only related, but also interconnected aspects essential for sustainable development. Approaching each problem individually will not provide a sustainable solution given their interconnectedness.







Therefore, Egypt in its Vision towards 2030 is adopting a WEF Nexus (Water, Energy and Food) that addresses the deep-rooted research and innovation vacuum. In line with Egypt Vision, the COE for Water is introducing its third WEF School as one of the main capacity building activities of the COE for Water focusing on the next generation of professors and academicians.

#### Aim and Scope

The WEF Nexus School is focused on sharing comprehensive understanding of the interrelation existing among WEF Nexus, with the aim at educating junior researchers towards new thinking over sustainable solutions. The project partners have strong backgrounds in both research and practice fields - making each contribution vital to the progression of COE for Water project. The school will:

- Provide the applicants with the "know-how" and support them with the latest practices and technologies in the area of Water, Energy and Food.
- Give special attention to hands-on project activities that enable the participants to implement the theories they gain and foster team and interdisciplinary cooperation between people from different backgrounds.

The WEF Nexus School content is designed by Professors and experts from the Egyptian and US partner institutions in the field of Water, Energy and Food.

#### Duration: 4 weeks.

#### Number of participants: 30.

#### Method

- <u>First week:</u> The applicants will attend number of **online introductory sessions** related to the WEF Nexus area via Zoom.
- <u>Second Week</u>: These sessions will be followed by **technical sessions** in different areas related to WEF Nexus, such as desalination, sustainable farming, etc.)
- <u>Third Week</u>: **Field visits** to different WEF demonstrations and sites will take place.
- Fourth Week: Then the participants will be working on group projects, where the applicants will be divided into teams and work closely to provide sustainable solutions relevant to the WEF. The output of these group projects will be presented as "Integrated Module" during WEF closing Event. The best three projects will be receiving the COE WEF Nexus 2023 Award.

#### Working schedule

The face-to-face days will be every **Saturday**, **Sunday and Monday** and the online day will be **Wednesday from 10 am to 2 pm**.

#### **Eligibility Criteria**

**Participants** will be selected based on the following eligibility criteria:







- Junior faculty, MSc and PhD students in any of WEF (Water/Energy/Food) related field enrolled at any of the Center of Excellence for Water Egyptian Partner Universities: Ain Shams, Alexandria, Aswan, Beni Suef and Zagazig.
- Motivation to engage with integrated approaches and system thinking.
- Excellent communications skills.
- Ability to understand English effectively and to communicate clearly and accurately in spoken and written English.
- Applicant should demonstrate full commitment in attending the school and actively working with the others in the group project. When the candidate selection process is finished, the selected candidates should send a final confirmation for participation at the school.

# Certification

Participants will receive a certificate from the Center of Excellence for Water at the end of the school stating their participation.

To receive this certificate, participants must be present in all sessions over the entire period (face to face, field visits, online sessions).

### Logistics & Finance:

Travel and accommodation costs for the selected candidates during field visits will be arranged and covered by the Center of Excellence for Water.

# Application

# Deadline for submission of applications 2 July 2023 at 11:55 PM

# Register and fill in the online application form on : <u>https://bit.ly/3CUFxnV</u>

(Click on: Workshops Calls for Water Engineering: Water-Energy-Food Nexus School 2023); Please register as: Faculty Staff Member (MSc/PhD).

#### Need Help?

- Email: <u>info@egyptcoewater.eg</u>
- Facebook page of the project at: <a href="https://bit.ly/3mcHiZx">https://bit.ly/3mcHiZx</a>

# Center of Excellence for Water Partners:

