

LABORATORY OF ENVIRONMENTAL ENGINEERING AND MANAGEMENT

PRESS RELEASE

Laboratory of Environmental Engineering and Management School of Chemical and Environmental Engineering Technical University of Crete

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PROFESSOR OF THE TECHNICAL UNIVERSITY OF CRETE ALEXANDROS STEFANAKIS ELECTED PRESIDENT OF THE INTERNATIONAL ECOLOGICAL ENGINEERING SOCIETY

For the first time, a Greek Scientist heads this international society

Assistant Professor Alexandros Stefanakis is the newly elected President of the International Ecological Engineering Society – IEES (https://iees.ch). Prof Stefanakis is a staff member of the School of Chemical and Environmental Engineering at the Technical University of Crete and Director of the Laboratory of Environmental Engineering and Management. This international distinction is the result of the electoral process among the members of this International Society, which lists hundreds of members in more than 50 countries.

This is an honorary distinction as it is the first time that a Greek Scientist has been elected to the board of this international organization, which celebrates 30 years since its foundation in 1993. The election of Dr Stefanakis, who originates from Crete, is also a recognition of his outstanding contribution to the science of ecological engineering with studies, pioneering projects, and cutting-edge environmental research around the world, in a branch of engineering that is currently in focus of many international organizations and bodies such as the European Union and the United Nations. It is also a recognition of the scientific excellence and the high level of research carried out at the School of Chemical and Environmental Engineering and the Technical University of Crete. It is also fortunate that his election coincides with the organization of the IEES conference this October in Chania by Dr. Stefanakis (www.iees.tuc.gr).

The International Ecological Engineering Society advocates a new design paradigm for ecologically inspired engineering to provide answers to contemporary global challenges and to support the internationally recognized necessity of transitioning to a truly sustainable society. Ecological engineering integrates ecological principles, processes, and organisms into existing engineering practice, forming a new, holistic approach to problem-solving. The science of ecological engineering looks to nature as an inspiration and model for developing and expanding the nature-based toolbox, using ecosystem services, systems-thinking and renewable resources and adopting circularity in its problem-solving methodology.

Short CV

Alexandros Stefanakis is an Assistant Professor at the School of Chemical and Environmental Engineering of the Technical University of Crete since 2019 and Director of the Laboratory of Environmental

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Engineering and Management. He holds a diploma in Environmental Engineering and a PhD from the Department of the Environmental Engineering, Democritus University of Thrace, with an M.Sc. from the Department of Civil Engineering.

He is the elected President of the International Ecological Engineering Society, as well as the elected Regional Coordinator for Africa and the Middle East for the 'Wetlands for Water Pollution Control' Group of the International Water Association. He is Editor-in-Chief of the Springer journal 'Circular Economy and Sustainability', and Associate Editor of other journal (Ecological Engineering, Environmental Science and Pollution Research, Nature-Based Solutions). He has been appointed European Ambassador of the European Climate Pact by the European Commission in order to promote the message and coordinate actions for adaptation to climate change. He is also listed in Stanford University's Top 2% of Worldwide Scientists.

In the past, he worked as a Lecturer and Researcher at the School of Environment and Technology, University of Brighton in the United Kingdom, as a Researcher at the Helmholtz Center for Environmental Research - UFZ in Germany and at the University of Beira Interior in Portugal. He has been employed by the multinational group Bauer Resources GmbH as a Tender Manager and Wetlands Specialist based in the Middle East. He has been a scholarship holder of the Greek State Scholarship Foundation in the IKY – Siemens Excellence Program.

As an Engineer and Researcher, he focuses on water and wastewater engineering, specifically on nature-based and eco-engineering solutions for sustainable water and wastewater management under climate change conditions. He deals with the content and principles of the circular economy, particularly in water and waste management, in the context of the green transition towards a sustainable society. He is an internationally recognized expert in sustainable and decentralized water and wastewater treatment systems such as Constructed Wetlands. He has designed numerous such facilities around the world.

His professional portfolio includes the design and operation of the world's largest industrial Constructed Wetland plant (175,000 m³/day) for oilfield produced water management in Oman, which has been awarded by former UN Secretary General Kofi Annan for its environmental performance (99% reduction of greenhouse gases). He has also designed the world's largest Constructed Wetland plant for municipal wastewater treatment (16,000 m³/day) in Saudi Arabia (Red Sea Project), as well as one of the world's largest Constructed Wetland system for mine drainage treatment in Brazil (45,000 m³/day). He has numerous papers in peer-reviewed international journals, books, book chapters and conference proceedings and has given many invited talks. He participates in various national and international research programs in many countries around the world.



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