

## ICRERA 2025

# 14th INTERNATIONAL CONFERENCE ON RENEWABLE ENERGY RESEARCH AND APPLICATIONS

### **Dr. Faegheh Moazeni**

Department of Electrical and Computer Engineering at Lehigh University, U.S.



### **Bio**

Dr. Faegheh Moazeni is the Director of the interconnected Critical infrastructure systems engineering (CONCISE) laboratory and an Assistant Professor in the Department of Civil and Environmental Engineering at Lehigh University, U.S. She holds a B.Sc. and M.Sc. in Chemical Engineering from Sharif University of Technology and a Ph.D. in Civil and Environmental Engineering from the University of Nevada, Las Vegas (UNLV). Her research focuses on cybersecurity, optimization, and control of interconnected water and energy systems, with a particular emphasis on the water-energy nexus and mathematical optimization frameworks for resilient and efficient operations. Dr. Moazeni is currently serving as the chair of Efficient Combined Operation of Water Energy Systems (ECO-WES) Task Committee under American Society of Civil Engineers (ASCE). In this tutorial, Dr. Moazeni will extend the discussion of microgrid energy management to interlinked infrastructure systems, presenting advanced modeling, co-optimization strategies, and real-world applications in water-energy microgrids.