

Nesreen Ghaddar

Professor

farah@aub.edu.lb

<http://website.aub.edu.lb/fea/publicprofile/Pages/profile.aspx?MemberId=farah>

Department of Mechanical Engineering

Nesreen Ghaddar is Qatar Chair of Energy Studies, and professor of mechanical engineering at the American University of Beirut. She is also the Director of the Munib and Angela Masri Institute of Energy and Natural Resources at AUB. She joined the University in 1991, and subsequently served as Chair of the Mechanical Engineering Department (2001-2007), coordinator of the Chemical Engineering program and Acting Associate Provost (2008-09), before being appointed Associate Provost in 2009. Dr. Ghaddar's first academic appointment was as an assistant professor at Kuwait University (1985-90). She obtained her BE (1980) from Kuwait University; and her Master's (1982) and PhD (1985) in Mechanical Engineering from the Massachusetts Institute of Technology. The focus of Dr. Ghaddar's research is computational and experimental heat transfer enhancement for efficient cooling, solar energy applications, energy conversion, personalized ventilation and localized cooling systems, indoor air quality, modeling of moisture and heat transport processes for clothed humans and thermal comfort. Dr. Ghaddar was named a Fellow of the Islamic World Academy of Sciences in 2007 and was elected to the Lebanese Academy of Science in 2009. In 2012 she received the Distinguished Scholar Medal and Certificate for Research Excellence from the Lebanese Council.

Research Interests

Computational Fluid Dynamics and Heat Transfer, Energy studies, Heat and Moisture transfer models of clothed humans; Bioheat Modeling, Energy Efficiency of HVAC and dehumidification systems.

Teaching Interests

Heat Transfer, Thermodynamics, Energy Efficient Buildings with Good Air Quality, HVAC and Refrigeration Lab, Design of Thermal Systems, Advanced Fluid Dynamics, Thermal comfort and Bioheat Modeling

Expertise

Thermal Fluid Sciences, Performance of Energy Systems, Human Thermal Response