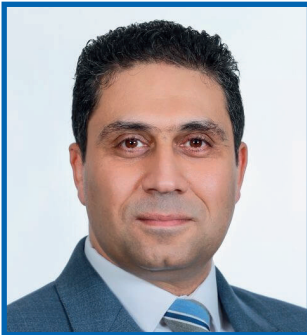


Abstract

With the recent advancements in space technologies alongside with the substantial increase in the number of satellite deployments and space missions, it is clear that we are witnessing the dawn of the second space age. In this webinar, Dr. Firas Jarrar will be briefly discussing the significance of the current achievements in space technologies. In addition, he will be addressing the opportunities and ways of involvement available for mechanical engineers in this exciting field. In particular, Dr. Firas will talk about the structural and thermal design and analysis of spacecraft, power budget calculations, and spacecraft dynamics.

Speakers Bio



Dr. Firas Jarrar is currently an Assistant Professor at Khalifa University. He joined the Petroleum Institute (which later became part of KU) in 2013. Before that, he worked as an Assistant Professor at the University of Jordan. He received his PhD degree with honors in Mechanical Engineering from the University of Kentucky in 2009.

His research experience is related to advanced techniques

for fabricating lightweight components mainly for the automotive and aerospace industries, analysis of nanosatellites, and nonlinear dynamics. In addition, Dr. Firas is currently involved in designing and building small satellites in two ongoing satellite projects at the YahSat Space lab at KU. His industrial experience includes working for the Jordan Petroleum Refinery Co. as a mechanical engineer for three years. Dr. Firas has published more than thirty papers in various international journals and peer-reviewed conference proceedings. In 2017, he was awarded the Dean of the College of Engineering Teaching Award at the Petroleum Institute. In addition, Dr. Firas is the lead developer of the CubeSat Wizard.