MECHANICAL ENGINEERING **SEMINAR** SERIES



Renewable energy and energy efficiency measures to foster the energy transition and decarbonisation

Abstract: The growing awareness to limit the negative impact of the climate change has conducted the scientific community to develop suitable solutions to foster energy transition and accelerate the decarbonisation of the industrial sector. Therefore, the utilization of renewable energy resources, the deployment of energy efficiency measures, the optimization of existing energy conversions systems as well as the development of new concepts are considered as main key actions to reduce the greenhouse gas emissions and limit the global warming. In this context, Dr Semmari will present in the seminar examples of research projects in which he was involved. This concerns the development of a new thermodynamic cycle and its implementation for Ocean Thermal Energy Conversion, the solar cooling by absorption as well as waste heat recovery for electricity production with direct application for cement plant and flare gas systems. Dr Semmari will also talk about his research activities related to geothermal valorization which are conducted in the framework of the UNESCO-IGCP 636 project.

Short Biography: Dr. Hamza Semmari is a Professor of Mechanical Engineering at the National Polytechnic School of Constantine- Algeria. He earned his Ph.D. degree from the University of Perpignan Via Domitia- France in 2012. He is managing several industrial projects dealing with the valorization of renewable energy and implementation of energy efficiency solutions.

Dr. Hamza Semmari is a certified energy transformation expert, PV professional and a former Energy management professional.

Dr. Hamza Semmari

Mechanical Engineering Department National Polytechnic School of Constantine- Algeria WEDNESDAY, OCTOBER 30, 2024 12:15 PM – 1:15 PM MEC. ENGINEERING MEETING ROOM, 2C 68