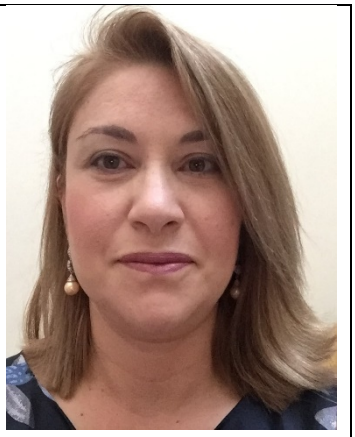
#	**Irene Koronaki** Dr. Mechanical Engineer	

Title:	Associate Professor, Thermal Section, School of Mechanical Engineering, National Technical University of Athens, Zografou, Attiki, Greece
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Presentation title:	**Experimental Performance Evaluation of an Integrated Solar System in Terms of Thermal Storage and Cooling Capacity**

Heat driven coolers offer a reliable and environmentally benign alternative to traditional vapor compression chillers. Their main advantage is that they can be powered by heat sources of low enthalpy. A solar system is installed at the school of Mechanical Engineering of National Technical University of Athens in order to examine the potential of thermal storage and solar cooling under Athens climatic conditions. The cooling effect is produced using a single-stage, two-bed, zeolite/water adsorption chiller with cooling capacity of 10 kW at its nominal conditions of operation. Both vacuum tube collectors and hybrid photovoltaic thermal collectors are installed in order to supply the system with heat. The system is evaluated in terms of solar collectors' useful energy production, heat stored in the intermediate buffer and cooling system's performance. It is observed that the cooling system operates satisfactorily under Athens climatic conditions achieving a maximum cooling capacity of 3.7 kW and an average COP around 0.5.

CV:

Dr. Irene Koronaki is an Associate Professor at the National Technical University of Athens (NTUA), Mechanical Engineering Dept., Thermal Engineering Section and Director of Applied Thermodynamics Laboratory. She is teaching undergraduate courses in Thermodynamics, Thermodynamics Software and postgraduate courses in Energy Saving in Buildings, Thermodynamics - Heat Transfer and Clean technologies. She has experience in the field of Energy Efficiency in the building sector, regarding both building shell and services. She has participated in several research EU projects during her collaboration with the University of Athens, Department of Physics, as also as a collaborator of CRES. She has been involved in several European Projects during the last years, Intelligent Energy, FP6, FP7, Horizon2020 the most relative of which are RealSkillsEurope, NRG4CAST and recently SolBioREV. She is a member of ASME (American Society of Mechanical Engineers) and ASHRAE (American Society of Heating Refrigerating and Air-Conditioning Engineers) and a registered engineer (Technical Chamber of Greece).

She has participated in 38 research projects, from which she has coordinated 8. She is the supervisor of 68 completed undergraduate theses, 15 completed master theses, 3 completed doctoral theses and 3 on-going doctoral.