

PRESS RELEASE

Athens 11/9/2019

ORC 2019 5th International Seminar on ORC Power Systems

The National Technical University of Athens (NTUA), and in particular Professors Sotirios Karellas and Emmanuel Kakaras of the School of Mechanical Engineering, organized with great success ORC2019, the 5th International Seminar on ORC Power Systems.

The ORC is a rapidly developing technology for the production of electricity from low-temperature heat sources and is a very attractive solution for the exploitation of waste heat (for example from industrial processes) as well as renewable energy sources such as geothermal, biomass and solar radiation. Furthermore, the ORC technology can be implemented in small-scale or domestic highly efficient systems for cogeneration of heat and power and trigeneration of heat, power and cooling. At the same time, it can be used in stand-alone applications to meet energy needs in isolated or non-electrified areas (such as in mountainous and island regions) and ensure their self-sufficiency while improving the quality of life of their residents. Considering the above, the ORC can significantly contribute to increase energy savings and reduce fossil fuel consumption and CO₂ emissions into the atmosphere, hence playing a great role in mitigating climate change and environmental pollution.

The Seminar was held in Athens from 9 to 11 September 2019 at the Royal Olympic Hotel and was organized under the auspices of the Knowledge Center on Organic Rankine Cycle (KCORC), a scientific knowledge dissemination platform on issues concerning ORC technology.

The conference was attended by members of the ORC scientific community from all over the world, including distinguished researchers from leading research institutes, as well as young researchers taking their first steps in the field. In addition, representatives from the industry followed and enriched the discussions with their experience. The event provided to the participants a unique opportunity to exchange views, discuss theoretical ideas and share practical know-how, being a springboard for the further development of ORC technology through the conception and practical implementation of innovative concepts. More specifically, during the conference, over 124 presentations took place over three days in four parallel sessions attended by 270 delegates from 33 countries around the world. In addition, a highly interesting Poster Session was held, featuring 40 scientific studies. The seminar encouraged and promoted interaction between the participants, with the aim of establishing academic and personal relationships between them, expressing the Organizing Committee's core belief that cooperation is essential for scientific advancement and the successful dissemination of the technology.

The Seminar included a tour of the participants at the Acropolis Museum, accompanied by a dinner at the Museum Restaurant, the opening of which was addressed by the Coordinators of the Seminar Prof. Sotirios Karellas and Prof. Emmanouil Kakaras, the Dean of the School of Mechanical Engineering of the NTUA Prof. Nikolaos Marmaras, as well as the Honorary Coordinator of the Seminar Prof. Piero Colonna from the Delft University of Technology (TU Delft).

A speech of the distinguished academic and member of the Academy of Athens, Prof. Christos Zerefos ensued. Prof. Zerefos is one of the pioneering researchers in the field of climate change. In his speech, Prof. Zerefos made a historical overview of the concept of energy efficiency, starting from Ancient Greece, Archimedes and Aristotle and ending in the present day. Prof. Zerefos highlighted the great contribution of the seminar in the fight against climate change and its role in increasing energy efficiency.

The scientific papers presented are posted on the seminar website: <https://www.orc2019.com/>