

Annual report on the activities of the KCORC foundation – 2018

August 2019, prepared by E. Casati, Executive Secretary

Introduction

The Knowledge Center on Organic Rankine Cycle technology (KCORC) is a not-for-profit international foundation of volunteers incorporated in the Netherlands. Its premises are in Kluyverweg 1, 2629 HS Delft, The Netherlands (RSIN: 858237799, Chamber of Commerce: 70288283). The KCORC Foundation operates globally, is run by a Board of five volunteers, and its main objective is to promote research, development and implementation of Organic Rankine Cycle (ORC) technology in all fields, for renewable energy, energy conservation and reduction of greenhouse emissions. The foundation activities are currently funded from surplus from the organization of conferences and from contributions by affiliated universities, research institutes and companies. More information can be found on the KCORC Executive Plan 2018.¹

The purpose of this document is to give an overview on the activities and results achieved by the KCORC Foundation in the year 2018.

The KCORC Website

The KCORC website² is the main channel through which the Foundation activities are disseminated. The website is constantly developed and maintained by an Editorial Board whose Chairman reports monthly to the board.

This website is the hub of a community of professionals from the academia and the industry dedicated to the promotion of ORC technology. Anyone can become a member of KCORC by submitting a registration form via the website, which is then approved by the Secretary of the Board. In case of doubt, the Secretary reports to the Board for a decision.

The biannual International Seminar on ORC systems

The KCORC Foundation organizes this event which is the reference for the ORC community since its first edition in Delft in 2011. The Foundation main activities in this context are to

- Launch a call for proposals to identify the seminar location. The coming edition, the fifth, will be held in Greece from the 9 to the 11 September 2019, and is organized in cooperation with The National Technical University of Athens (NTUA),³
- support the organization of the event helping with finding industrial sponsors,
- contribute to define the seminar Scientific Committee,

¹ Available online: www.kcorc.org/media/medialibrary/2018/10/18-10-30_Executive_plan_KCORC.pdf

² http://www.kcorc.org/en/

³ Conference website: https://www.orc2019.com/



- support in the review process of abstracts and papers submitted for presentation at the seminar and for publication in the associated international peer-reviewed journals,
- confer the "Prof. G. Angelino Award" to the best Poster Presentation contributed to the seminar.

Scholarships

The KCORC Foundation proudly invests the surplus generated by the Biannual Seminar to fund competitive scholarship for students and researchers aiming to pursue R&D projects in field of ORC technology. These bi-annual scholarships cover travel and accommodation related to short-term research projects of 3-6 months. The grants amount to €3000 − €10,000, depending on project duration and location of the hosting institution.

During 2018, the Scholarship Committee active within the Foundation launched the 4th Call for Proposals, with deadline on December 31st. The total available budget was 25.5 k€. After the selection process, the awardees will be able to start their activities in the second quarter of 2019.

Standards & Regulations

There is a committee active within the Foundation which involves professionals from companies and academic institutions which aims at defining "suggested standards and regulations guidelines" in the field of ORC systems. The long-term vision is to foster the establishment of a recognized international standard devoted to ORC technology, its design, performance definition, and so on.

Collaborations

The Foundation works constantly to establish collaborations with other organizations active in the promotion of technologies related with energy conservation and the exploitation of renewable resources.

In 2018, collaborations were established with <u>EORCC</u> (Engine ORC Consortium) and the possibility of cooperating with the <u>GPPS</u> (Global Power and Propulsion Society) and the <u>supercritical CO₂ power cycle</u> symposium has been investigated, though the outcome is not clear yet.