

PAST AND CURRENT RESEARCH TRENDS IN ORC POWER SYSTEMS

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ABSTRACT

The past years have seen an almost-exponentially increasing number of published papers in the ORC research field. This profusion of publications sometimes makes it difficult to get a global picture of the main challenges and ongoing research.

Recent literature has also been characterized by a certain lack of originality, the same methods and approaches being repeated multiple times with few new relevant insights. It is therefore of primary importance to highlight the state-of-the-art and foster new and original research, potentially resulting in new technological improvements.

This keynote provides an overview of the state of the art and of the main research trends in ORC power systems. It does not aim at covering all research fields, but highlights and describes a few relevant topics originating from the previous ORC conferences and from the scientific literature. The main methods, mathematical tools and results are described in such a way to provide useful information for the replication of such studies. Recommendations are finally formulated, together with an open discussion regarding possible relevant future contributions in ORC research