Editorial

Marine Energy, the Future Practical Route to Carbon Neutrality— Foreword: Navigating the Voyage of Marine Energy Research

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In the wake of escalating global climate change, the urgent need for energy transition has been imminently obvious and even more time-pressured under the current circumstances, in which high-temperature records on Earth have been continuously broken from the summer of 2022 to 2023. Human society is entering a pivotal era in our civilization's history and standing on the edge of a precipice to face the unprecedented threat of climate change. Renewable energy utilization is then so urgent and essential, to lead our industrial civilization to a carbon-neutral future. Within this confirmative landscape, marine energy will become the beacon of hope to fasten energy transition, which has great untapped potential and offers tremendous but promising resources viably.

The oceans cover approximately 71% of the Earth's surface and contain abundant energy resources, much of which are green and renewable compared with the land. Marine energy includes offshore wind, offshore solar, ocean wave/tidal current, ocean thermal, natural gas hydrate and offshore oil and gas, although the last two are not completely clean energy. World-wide research on marine energy have been significant during the quick growth of marine energy industrialization in this scope, which is also an important direction for human scientific development. For this purpose, we initiate this new open-access journal *Marine Energy Research* (MER), supported by SCIEpublish. As we embark on this voyage of exploration and discovery in marine energy, we would like to extend our gratitude to the global community of researchers, innovators, policymakers, etc., who can share the vision and commitment to advance the research and innovation of marine energy. The manuscript sources will include the following topics but not limited to:

- Offshore wind/solar energy
- Ocean wave/tidal current energy
- Ocean geothermal energy and OTEC
- Nature gas hydrate
- Offshore oil and gas
- Marine energy storage and conversion
 - Integrated development of marine energy and other marine industries

Aiming to provide recent research updates regarding the development and utilization of marine energy, in the pages of *Marine Energy Research* we will illuminate the path forward, shedding light on the latest advancements, breakthroughs, and challenges for the voyage on marine energy research. We hope that the whole research community in marine energy can share your enthusiasm and bring your knowledge, professional experience, and expertise, to make this journal the home for marine energy research.