

# Status of the Technology Development on Alternative Energy in the Seas of East Asia

Ki-Dai Yum

Principal Research Scientist

Coastal Eng. & Ocean Energy Research Department

Korea Ocean Research & Development Institute

Ansan, P. O. Box 29, Seoul 425-600, Korea

E-mail Address: kdyum@kordi.re.kr

Kwang Soo Lee

Jin Soon Park

Ocean energy is recognized as one of the largest renewable energy resources available in the sea of East Asia, and an emerging industry which has a potential to satisfy the demand for electricity, water and fuels. Ocean energy can be exploited from a number of conversion methods, such as wave power, hydrokinetic energy from tides and ocean currents, tidal barrage, and ocean thermal energy conversion. Renewable energy resources are differing from country by country, and so are the R&D programs for technological development. The state of the art of the ocean energy conversion techniques has advanced significantly over last 5 years.

In this paper, the state of the art of the technology development on the ocean energy at each country around the seas of East Asia is briefly introduced including the national R&D programs and some examples of existing ocean energy generating facilities, such as Jiangxia tidal power plant in China, wave power conversion and OTEC (Ocean Thermal Energy Conversion) in Japan and Uldolmok tidal current power pilot plant in Korea. And future works and some recommendations for the development of ocean energy are followed.



23-27 November • Manila, Philippines