Activities on Tidal Current and Wave Energy in China

By L. Zhang, Harbin Engineering University

First international joint venture company for tidal current energy exploration has been established in China in November, 2006. The JV company will implement a project supported by UNIDO; the partners are Ponte di Archimede, PdA, Italy and Daishan Gaoting Shipyard, DSS, China.

A pre-design tool for the performance analysis of vertical axis variable-pitched tidal stream hydro turbine, VAPHT, has been presented up to 2006 by HEU. Its code is based on the modified stream tube models and the vortex-panel model and still in validation through the model test and prototype machine.



Tidal

"Wanxiang-II"
40kW tidal
current
prototype plant.

Weight in air 60 ton. The electric power output is used for a light tower near a bridge.



Wave energy

50 kW onshore oscillating wave power buoy with 3 pumps with a capacities of 10kW, 20kW and 40kW



