

# **THE HYDRAULIC PROBLEMS OF THE COMBINED ACTION OF THE SWELL TO THE THROW SEA -WATER CURRENT**

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## **Abstract:**

The present paper treats one of the phenomena that hydrotechnic designers in the construction project of thermo electrical plants on the sea, where a particular attention must be given to the hydraulic calculation of the construction of the sea-throw. In fact, the swell influence and its combined action on the sea-throw affects the hydrotechnic construction stability which influences much the sedimentary rate of the construction, in particular the bottom erosion in the throw area.

In this context, we expose a methodological approach of the combined action of the swell with based currents on the gravitary (gravity) wave's analysis model with horizontally-heterogeneous opposed currents done in a swell-basin.

**Keywords:** Swell gravitary waves; effective fetch length; breaking, blockage; Significant heights.