

## **ABSTRACT**

Cyprus is an island that is surrounded by the Mediterranean Sea. Centuries ago, from the Bronze Age, in the island has been developed in a considerable degree the shipbuilding trade in the area of fishery and tourism. Therefore, different types and sizes of ships and boats from those times anchor at the port of Limassol. After the creation of Limassol's marina and in consultation with my supervisor, I wrote my thesis with the subject "**System Design Hoisting and boat launch,**" which is a necessary system that would be widely used in all ports around the world.

**The purpose** of this assignment is to serve the need of boats and vessels not to stay for a long time immobilized in the sea due to various problems arising from that. Problems such as the development and accumulation of marine organisms and plants in the boat hull and the corrosion and electrolysis caused at the metallic parts of the boat such as the motors and propellers due to the chemical elements of the water.

Therefore it is necessary to design a system for the hauling and launching of the boat that should take into consideration some other important requirements, such as being an ergonomic, reliable and safe system. Also, it is necessary to have good layout due to the continuously developing requirements of modern and luxurious ports around the world.

Keywords: [vessels system, lifting / launching, hoist device, gear motors, Limassol marina, Analysis of Dynamic, strength material]