MECHANICAL ENGINEERING MSc SEMINAR (30 min.)

Thursday, August 14 2025 at 13:30-14:00, D. Dan and Betty Kahn Building, Room 217

A new Concept of Docking Vessel

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Docking ships are used to transport and launch landing crafts, for launching offshore platforms, and other marine operations.

This research develops a new concept of docking vessel, for the optimization of landing operations. Our idea is separating the functions of transit and landing into two different vessels, where the transporter is the docking vessel of the lander. This idea may lead to an efficient concept, as efficient transportation craft and efficient landing craft have different properties to fulfil the functional requirements. The separation enables the design of each vessel to appropriate cruising speed, range and seakeeping, functional specifications which affect the whole naval architecture of the vessels.

This new concept is applicable for shores with no harbor facilities, where landing may be necessary for supply or survey. The transporter provides a floating base to the landing craft, with advanced cruising performances, while the lander design has optimal features for shallow water maneuvering and landing.

Following preliminary study, the docking vessel is of a Semi-SWATH (Small Water-plane Area Twin Hull) concept.

The research invents this new concept of Docking Vessel and applies advanced analysis methods to study its feasibility.

Note: the seminar will be given in English

Seminars Coordinator: Assoc. Prof. Shmuel Gal.