

Marine Hydrodynamics Laboratory

Leadership:

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The Marine Hydrodynamics Laboratory (MHL) houses a small wave tank with wave generator and beach for studies of ocean wave mechanics and floating ocean body interactions with waves found in Ocean and Coastal engineering applications. The facility is also utilized to demonstrate wave mechanics to fluids students. Some examples of applications include testing of scale model floating offshore wind platforms, coastal breakwaters, simple wave energy convertors and hip model testing. The tank is 1m deep x 1m wide by 8m long and has computer controlled wave maker and several wave elevation measurement probes. The sidewall and bottom of the tank are glass plate so motions can be easily observed by students and recorded by external cameras. The facility is part of offshore energy and coastal engineering efforts being developed by mechanical engineering faculty as well as faculty in civil engineering.