

Hogere Zeevaartschool - Your maritime partner in marine science projects

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Within the context of Flemish Higher Education, the Hogere Zeevaartschool (HZS, in English Antwerp Maritime Academy) occupies a unique position. As the only university college in the country to educate our budding maritime officers (both in Nautical Sciences and in Maritime Engineering), we function between the academic world and the maritime industry and offer our expertise in these matters to both sides: shipping activities tend to impact the natural marine environment, and the contact of ships with sea water tends to have important and detrimental consequences for the ship and the equipment on board - let alone the valiant crews sailing the seven seas.

Researchwise, this provides us with plenty of opportunities to offer this expertise in a number of academic projects as well. A short overview of several of the research programmes going on at our institute demonstrates this adequately:

- the correct use and application of paint layers on ship hulls and ballast tanks
- corrosion of static steel structures in the North Sea (from shipwrecks over sheet piling in ports to windmills)
- using sensors and data analysis to detect corrosivity of marine environments
- analysis of relations between ship traffic, wind conditions, waves and erosion in intertidal ecosystems in the Scheldt estuary
- using sensors and data analysis to detect potential polluting ship emissions
- navigating with a highly performing solar vessel (2nd place at the 2018 Solar & Energy Boat Challenge in Monaco!)
- testing the performance and sustainability of antifouling paints
- hydrographic analysis of edimentation and channel formation in a newly created tidal area (Burchtse Weel, Antwerp)
- data analytics and optimisation in a nautical context
- and many more...

A full list can be found at <https://www.hzs.be/en/research/scientific-research>.

At the VMSD, we hope to discuss how this expertise can be an added value in your (research) project.

Keywords: Corrosion; Nautical science; Maritime science; Antifouling; Nautical data