## Zero-V, a zero-emissions marine research vessel



Marine research and hydrographic activities could soon be possible without the risk of polluting either the air or the ocean. It is thanks to a new ship design and feasibility study led by Sandia National Laboratories.

## Zero-emissions Technology

Hydrogen fuel cells have existed for decades, and there are multiple advantages to using them instead of diesel engines to power research ships. Fuel cells are zero-emissions technology, so they won't contaminate air or water samples collected in sensitive ecological areas. They make almost no noise, so they won't upset marine life or interfere

with the many sensors scientists use to listen to the sound in the ocean.

## Technically and Economically Feasible

Despite these and many other advantages, the feasibility of a hydrogen-powered research vessel has never been studied or proven. A Sandia report released recently shows it is technically and economically feasible to build such a vessel in a manner consistent with marine regulations. The project team nicknamed the vessel the *Zero-V*, short for a zero-emissions research vessel.

In the May/June edition of Hydro International, you'll find a more detailed description of the project. Don't miss it.

https://www.hydro-international.com/content/news/zero-v-a-zero-emissions-marine-research-vessel