

collaborate on the development of a new generation hydrogen vessel



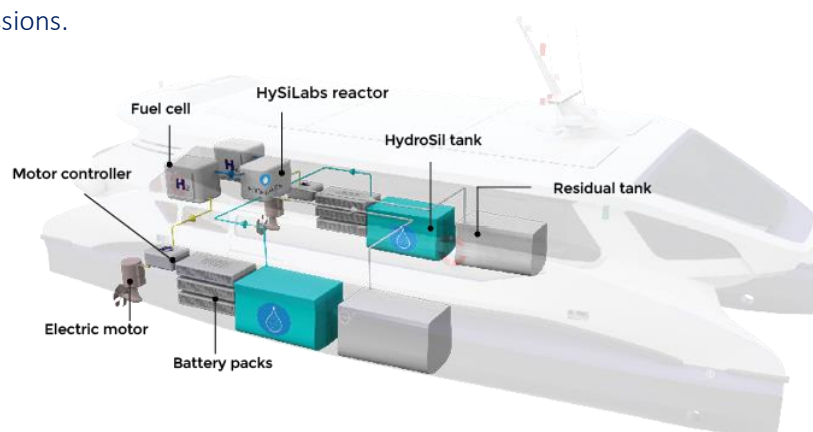
NepTech designs zero-emission vessels for passengers and cargo transport. HySiLabs has developed a liquid hydrogen carrier that will revolutionize hydrogen mobility. Both companies announce at Vivatech their collaboration in the development of an electro-hydrogen-powered passenger vessel.

A unique hydrogen storage solution adapted to heavy mobility

The cooperation agreement includes technical and economic feasibility studies for the use of HydroSil, the solution developed by HySiLabs, as an energy carrier in a NepTech passenger vessel. HydroSil is a safe and stable liquid hydrogen carrier that allows hydrogen to be released on demand without the need for external power.

It enables the use of the same logistical infrastructure as existing fossil fuels, revolutionizing the hydrogen delivery market. The high hydrogen concentration of HydroSil can carry 7 times more hydrogen in a single truck than with high-pressure H₂ gas, reducing the operational costs of transportation and the associated emissions.

Hydrogen provides emission-free propulsion, long range and low maintenance. This energy vector will have a huge impact on the maritime world. However, the integration of a hydrogen propulsion system comes together with major technological and economic challenges.



NepTech develops electro-hydrogen-powered passenger and cargo vessels as efficient as legacy vessels. The design of the vessels, built around the propulsion system, and the hydrodynamic drag reduction technologies developed by NepTech aim at significantly reducing the energy requirements of the vessel to exceed the operational performance of diesel-powered vessels.

1st step towards the development of a full-scale prototype

NepTech and HySiLabs, both located at the Technopôle de l'Environnement de l'Arbois in Aix-en-Provence, France, started their discussions several months ago and decided to concretize their collaboration.

The feasibility studies, based on a 21.5-meter vessel capable of carrying up to 100 passengers, are expected to last one year and will consist of two main stages. First, NepTech will be in charge of the design and integration studies of the solution - including risk analysis - before moving on to the next step, supervised by HySiLabs: the realization of a test bench to simulate the operational environment of the propulsion system.

« This agreement represents the first step towards the development of a full-scale prototype of a NepTech vessel, using HydroSil as an energy carrier. It marks the beginning of a great collaboration between two players in the Southern Region committed to the development of innovative, intelligent and clean solutions ».

Tanguy Goetz, CEO & co-founder of NepTech

« This is a great territorial synergy that will allow us to move forward together in the energy transition. This collaboration will combine NepTech's expertise in the maritime sector with a fully adapted liquid carrier technology. ».

Pierre-Emmanuel Casanova, CEO & co-founder of HySiLabs

About HySiLabs – www.hysilabs.com

HySiLabs has developed and patented an innovative hydrogen carrier called HydroSil, a stable, non-toxic, non-hazardous and infinitely recyclable liquid derivative of silicon hydride. Founded in 2015 and based in Aix-en-Provence, HySiLabs relies on its partners (logisticians, EPC companies, hydrogen producers) to distribute hydrogen in a simplified way, via its non-carbon solution (HSL solutions™)

About NepTech – www.neptech.co

NepTech designs zero-emission, high-performance and intelligent passenger and cargo vessels. NepTech's vessels are 10 to 30m electro-hydrogen powered catamarans that can carry up to 200 passengers or 20 tons of cargo. Founded in May 2020 in Aix-en-Provence (South of France), NepTech innovates to design the naval mobility of tomorrow.

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