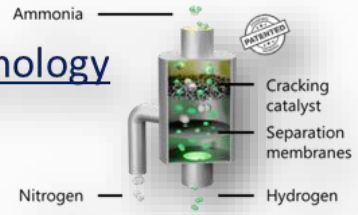
Neology

https://neology.ch/

NEOLOGY

Technology



Product

AHGS
Ammonia to Hydrogen Generation System

Use-case (heavy-duty vehicle)

Challenges / Problems

- Lack of scalable and cost-effective solution for zero-emission heavy-duty transportation.
- Problem of storing and distribution hydrogen either in high pressure gas or as a liquid.

Proposed solutions

- Utilization of ammonia as carbon-free energy carrier, being easily storable at low pressure and ambient temperature, with high energy density, non-explosive, and available at scale already today.
- Compact, energy-efficient and cost-effective ammonia cracking to hydrogen (AHGS product), enabling adoption of hydrogen-based powertrains (fuel-cells and engines) applied in heavy-duty transportation.

Competitive advantages:

- Plug-and-play, compact and energy-efficient hydrogen supply.
- Flame-free solution for maximal safety.
- Versatility of design: scalable and applicable in mobile and stationary.

Looking for collaboration / partnership with:

- Supplier companies, within Ammonia and Hydrogen value-chains, such as hydrogen fuel-cells, hydrogen and ammonia tanks, catalysts, PGMs, mass-flow controllers, valves, gas detectors…
- Manufacturing partners for local production of AHGS solution.
- Ammonia producer/supplier/importer and hydrogen consumers (refinery, industry, transport…)

Future business plan:

- Outsource manufacturing (with partners); Neology to sell finished AHGS units to clients.
- Off-board (stationary) applications from 2024, while on-board (mobiles, vehicles) from 2027 after industrialization of design (together with partners).

SWITZERLAND
Lutry

2023
Founded Year

SEED
Funding Stage

9
Employees

INVEST JAPAN

J-BRIDGE

HackOsaka
2nd. Edition