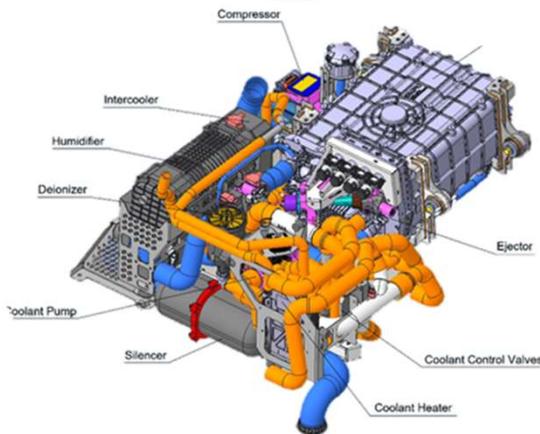


Implementation of a state-of-health monitoring concept for PEMFC



Short Description

In a previous study, various approaches to State of Health (SoH) monitoring for fuel cells were investigated and evaluated. Building on these results, the current objective is to further develop a particularly promising monitoring approach in a targeted manner and implement it in a practical context. The core elements include experimental investigations on the stack test bench as well as the implementation of a robust SoH monitoring system on an existing fuel cell system. This represents a decisive step toward more reliable, longer-lasting, and more economical operation.

The master's thesis thus makes an important contribution to transferring theoretical concepts into real-world applications and supports ongoing research and development activities in the field of hydrogen and fuel cell technologies.

Content / Time table:

- Getting started with the topic of SoH and the existing results, as well as detailed development and methodological refinement of the selected monitoring approach (1.5 months)
- Definition of a measurement and analysis program and its experimental implementation (2 weeks)
- Planning and execution of tests for implementation and validation on a fuel cell system (3 months)
- Documentation of the results and preparation of the master's thesis (1 month)

Start: as of now

Duration: approx. 6 months

Compensation: paid master thesis

Contact: Christian Zinner
+43 316 873 9880, zinner@hycenta.at
DI Dr. techn. Alexander Trattner
+43 (316) 873-9502, trattner@hycenta.at