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Student Thesis

Production of fuel cells for mobility applications

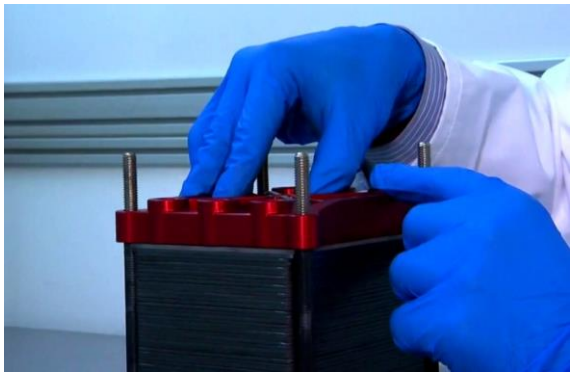

Foto: br.de

Foto: Hyundai

Initial situation:

Fuel cells are regarded as a promising alternative to vehicles with conventional drive technologies such as the combustion engine. Large automobile manufacturers like Toyota or Hyundai already offer fuel cells as standard equipment. German automobile manufacturers are also working at full speed to research the technology for their future market solutions.

The core of these efforts includes the reduction of system costs, the establishment of reproducible production processes and the adaptation of material selection in order to improve the reliability of the systems. The industrialization of the fuel cell and thus the qualification for its use in mobile applications is hereby achieved over different development generations.

Your task:

The central aspect of this work is the derivation of a standardized production process for fuel cells and the identification of innovation potentials from a production point of view.

First, a research on production technologies in the context of fuel cells will be conducted. The focus lies on the elaboration of the process chain. Subsequently, the existing process chain will be used to systematically identify and classify essential trends on the basis of a technology matrix. This should open up future fields of research in fuel cell production technology. The topic can be supervised as a Bachelor's, Master's or project work.

Requirements:

- Passion for eMobility
- Studies: Engineering or similar
- Independent and creative work style

What we offer:

- Development of expert knowledge in the field of innovative drive concepts.
- A motivated and dynamic team
- Individual & intensive supervision
- A thesis that can be processed quickly and in a structured manner

Interested?

Please send us a current excerpt of your GPA as well as a meaningful curriculum vitae and certificates to the e-mail address below.

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