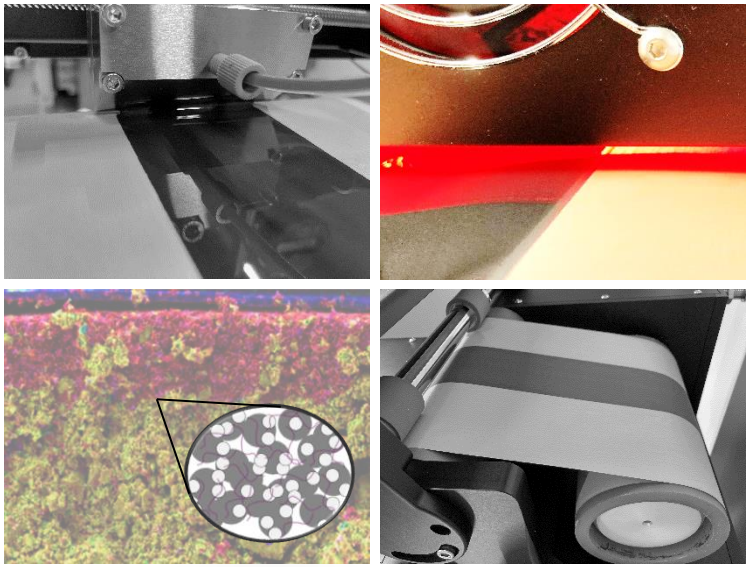
Manufacturing of PEM fuel cell components

iPAT
Institut für Partikeltechnik

Bachelor‘s, master‘s thesis (experimental)

Technologies for the production and use of green hydrogen are required for cross-sector decarbonization in the course of the energy transition. The PEM fuel cell is a promising technology for the reconversion of green hydrogen into electricity – for both mobile and stationary applications. The *membrane electrode assembly (MEA)* is a key component for the performance and longevity of PEM fuel cells.

As part of your work, you will investigate various factors that influence the processing of electrode or membrane materials. These factors will be evaluated by characterizing the manufactured components in terms of their structural and functional properties.



Potential work packages:

- Suspension, electrode, and membrane production
- Characterization of functional and structural properties
- Evaluation of process and material influences

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