CO_2 valorisation and H_2 transportation using magnetic heating (Master thesis)

The project

CO_2 can be turned into something **useful**, via catalytic reactions.
A novel approach to **switch on or off** a catalytic reactor is to use **magnetic induction**.
Reaction temperature (~700 ^{O}C) can be reached in a **few minutes.**

The goal of this project is the synthesis of **dual function** particles that serve both as **active sites** and as **material heaters.**

Your activities

Synthesis of **iron-based** supported catalysts

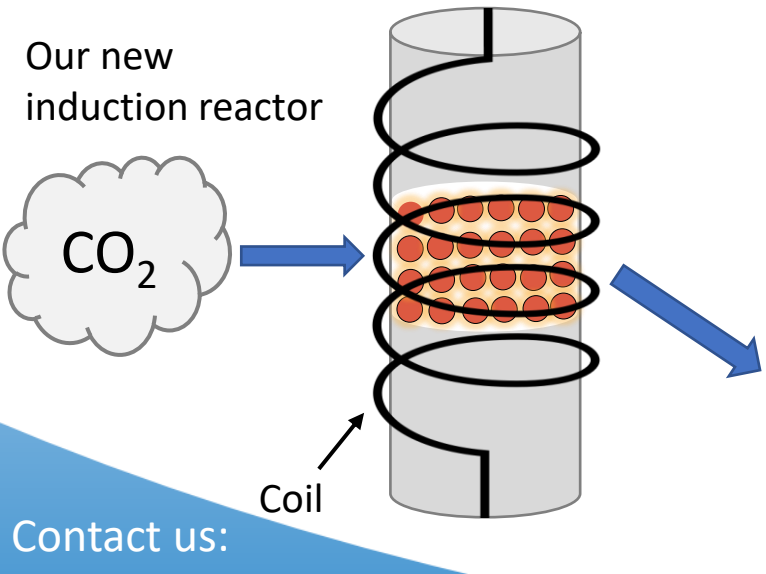
Material **characterisation** (XRD, TPR, Mössbauer spectroscopy)

Magnetic measurements of materials (VSM)

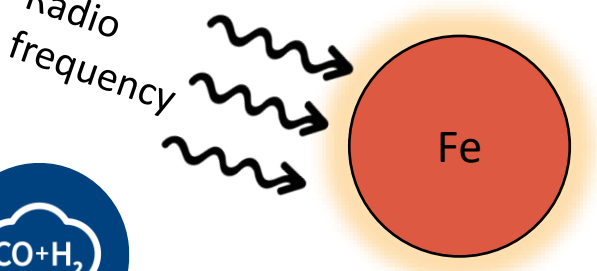
Catalytic evaluation in a fixed bed micro-reactor

For **process engineering** or **applied physics** students!

Our new induction reactor



Magnetic heating



Hot and **active** particles

Contact us:
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Scan me for more info!