

Project Groups of „Future Energy Technology“:



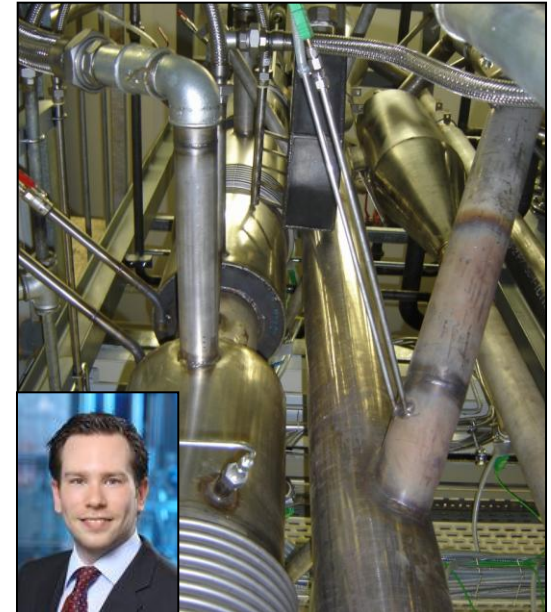
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Project Group:
Gasification & Gas Cleaning
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Synthetic Biofuels
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Project Group:
Zero Emission Technologies
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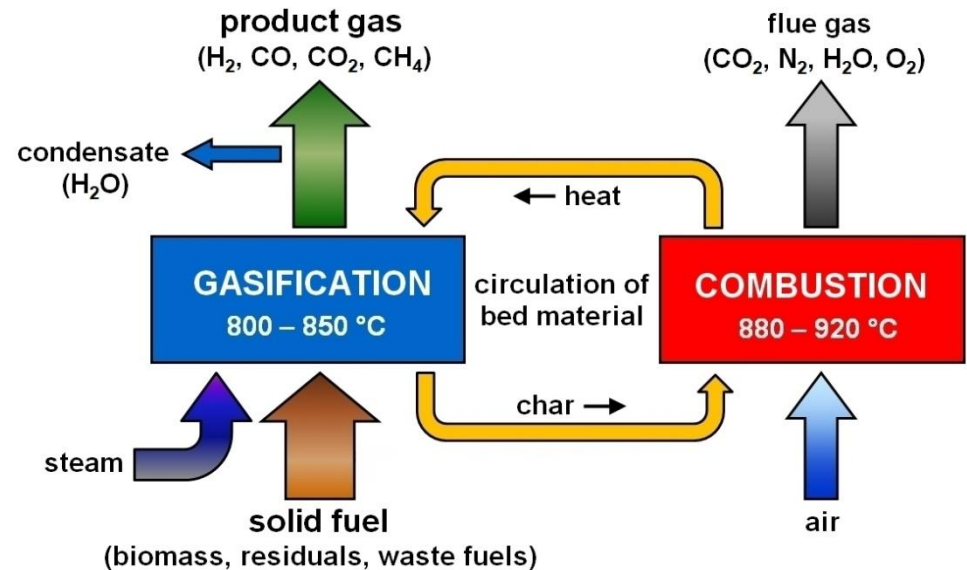
Gasification & Gas Cleaning

The GGC team focuses on projects from the energy technology sector with a specification on gasification technologies as well as catalytic tar removal from producer gas originating from thermo-chemical hydrocarbon conversion processes.

Mission: Development of fuel flexible, high efficient gasification technologies for the production of high quality syngas.

Research topics:

- Dual fluidized bed steam gasification of biomass, coal, waste materials
- Producer gas adaptation by catalytically active bed material
- Catalytic reforming of hydrocarbons in secondary units
- Research and development on novel of gas cleaning technologies



Gasification & Gas Cleaning



wood



agricultural waste



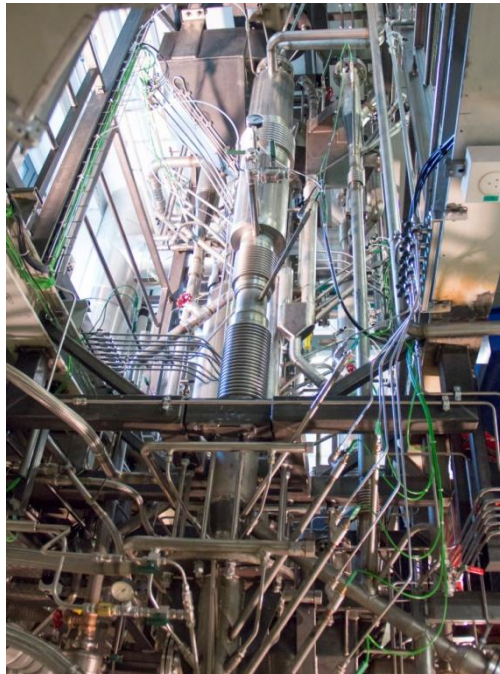
coal



industrial residues



waste fractions



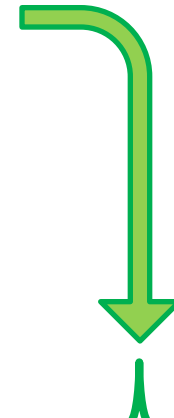
Results with the 100 kW test plant at TU Wien:

- Development and research on novel gasification processes
- Measurement results and data validation with simulation tool
- Detailed process knowledge with various fuel types and fuel mixtures
- Data for the design of gas cleaning equipment
- Scaling possibility to industrial sized plants, minimizing of technological risks

Gasification & Gas Cleaning

Consulting plant engineering projects:

- Design and conceptual consultancy
- Mass and energy balances of industrial sized plants
- Input for the basic engineering phase
- Support due to the commissioning of plants
- Optimization on plant operation



heat



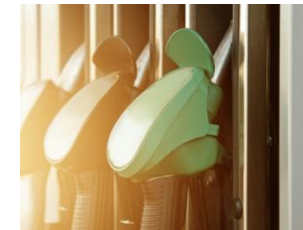
electricity



hydrogen



fuels



synthetic natural gas



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