



University of Stuttgart

Institute of Combustion and Power Plant Technology

Prof. Dr. techn. G. Scheffknecht

Master thesis & Student research projects

Cynthia Kroumian

12.02.2020

Oxyfuel technology for grate firing systems

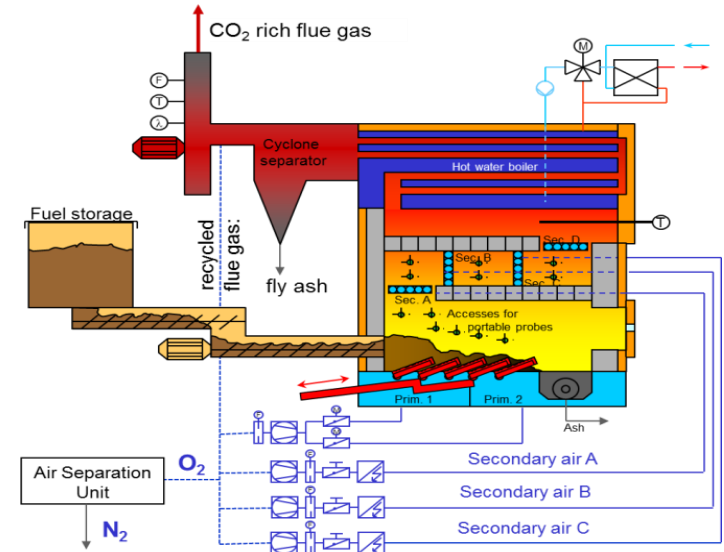
Position Master thesis

Technology Oxyfuel technology for grate firing systems
Biomass and waste combustion
Process simulation
CCS/CCU

Useful skills CAD and LabView

Start date As soon as possible

Contact Alexander Mack
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Tel. 0711/685 68941, Room 1.73



Determination of grindability of pre-treated biomass

Position	Student project
Technology	Biomass particle characterisation Adapted hardgrove grindability index
Tasks	Literature review Sample preparation Execution of experiment Analysis of results
Useful skills	MatLab
Start date	As soon as possible



Fuel characterization – single particle combustion

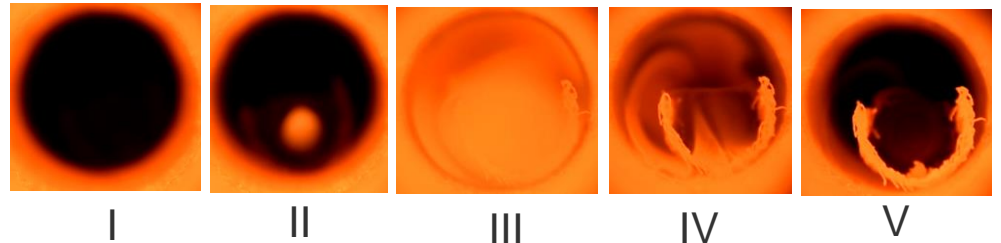
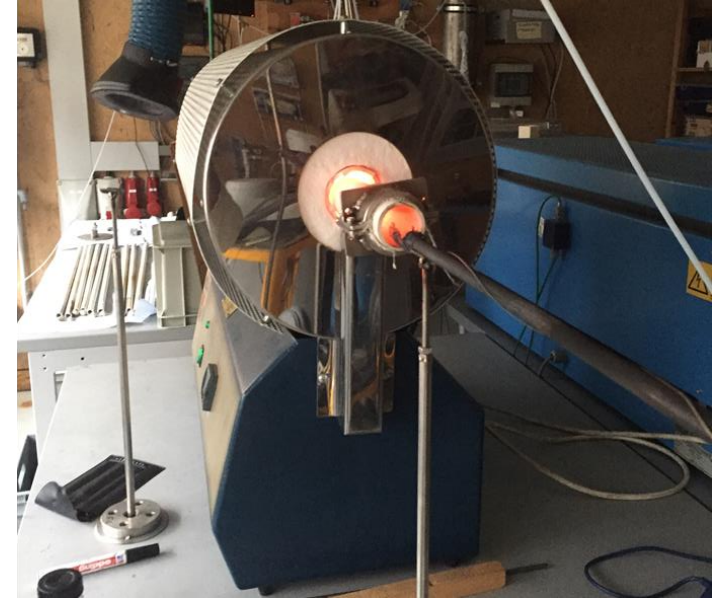
Position Master thesis / Student project

Technology SRF particle characterization
Single particle combustion
Oxyfuel technology

Tasks Adapting furnace for oxyfuel process
Automation of measurement process
Sample definition (grouping sample into sub-components)

Useful skills MatLab, LabView

Start date Not defined



Oxyfuel technology in 500 kW down fired combustion rig

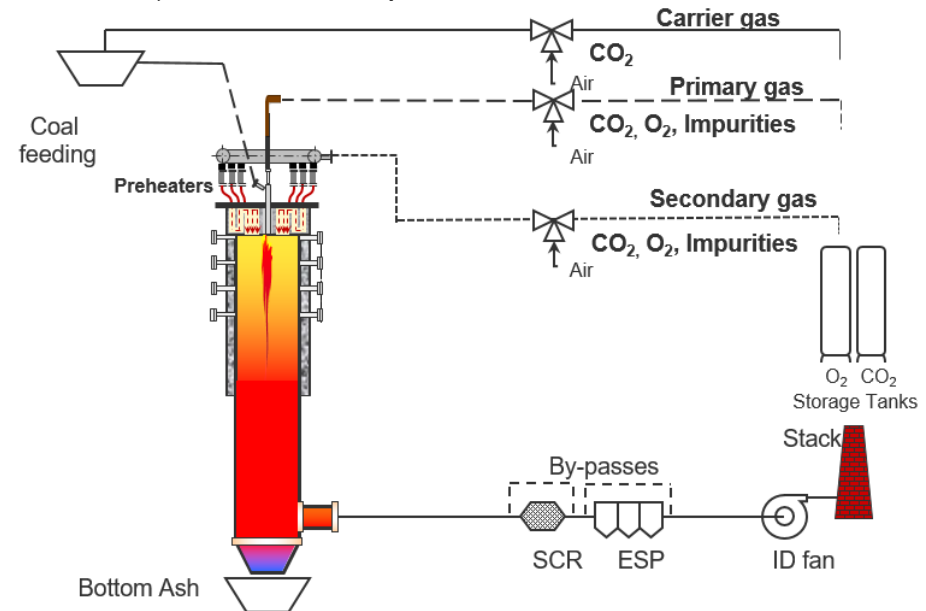
Position Master thesis

Technology Biomass/SRF combustion under oxyfuel condition
Biomass/SRF characterization tests

Tasks Literature review (Oxyfuel combustion, Bio-CCS...)
Facility adaptation
Experiments
Analysis or results

Useful skills CAD, LabView and CFD
simulation (FLUENT)

Start date April



Master thesis and student projects in IFK/KWF

- Responsibilities
 - Literature review – oxyfuel combustion, Bio-CCS, biofuels
 - Adapting and commissioning the test facility
 - Execution of experiments
 - Analysis of results
- While writing a master thesis it is possible to work as a HiWi in the department
- If you are interested, send me your
 - CV
 - Cover letter, highlight previous work experience or courses you have attended related to combustion



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Thank you!



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