

Multi-scale description of biomass thermo-chemical conversion processes

Scope of work:

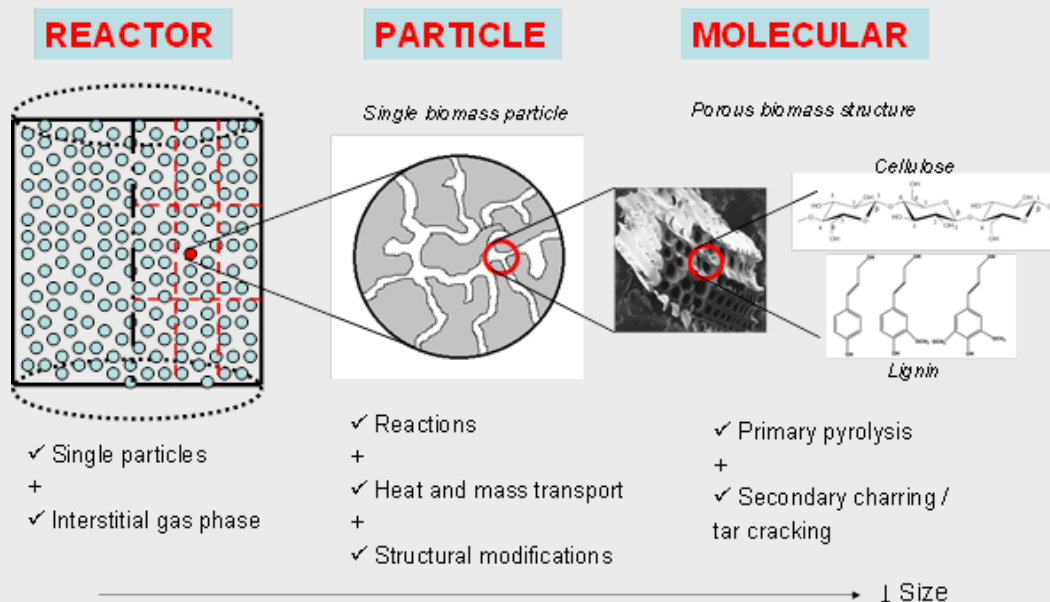
Work to be conducted in the framework of the H2020 European project BRISK-II (Biomass Research Infrastructure for Sharing Knowledge, see previous project: <http://briskeu.com/>) and other national and European projects with industrial partners.

Overall goal of H2020 project: To achieve a complete description of biomass conversion processes (combustion, gasification and pyrolysis), considering the different relevant scales (such as particle and reactor level) in a multi-scale approach to describe the main products and emissions in these thermo-chemical processes for energetic biomass utilization.

The work of the PhD thesis will be mainly based on modelling, improving and further developing already available models for a more accurate description of biomass conversion processes, which can lead to more efficient and cleaner conversion technologies. Furthermore, it will as well include experimental work to provide access and further develop the available research infrastructure in the project BRISK-II. A direct cooperation with several national and international partners will take place.

Skills:

- Basic knowledge on CFD modelling.
- Capacity to conduct experimental work.
- Good communicative skills for teamwork with international partners.
- Very good English level.



Framework conditions:

Start: June 2017

Duration: 3 years

Place: @ IWT

Salary: according to the collective agreement of the employees of Austrian

Universities (classification: B1)

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