

Student assistant

CFD Simulation of biomass combustion systems

Scope of work:

BIOENERGY 2020+ GmbH. is working on the development and optimization of new biomass plant technologies in close cooperation with industrial partners. To minimize the cost of process development and optimization activities by reducing the downtime and the need for physical experimentation, as well as to improve the design reliability BIOENERGY 2020+ GmbH uses advanced CFD simulations.

The tasks of the student employee will be the generation of the simulation geometry using Solid Works or Ansys Design Modeler as well as the simulation grid. Furthermore the student will set up simulation models, conduct the CFD simulation and evaluate the results under the guidance of experts.

Skills:

- Basic knowledge on gas phase reaction kinetic
- Basic knowledge on biomass combustion
- Knowledge on software ANSYS Fluent and/or CHEMKIN and/or programming (Matlab, C++) is an advantage

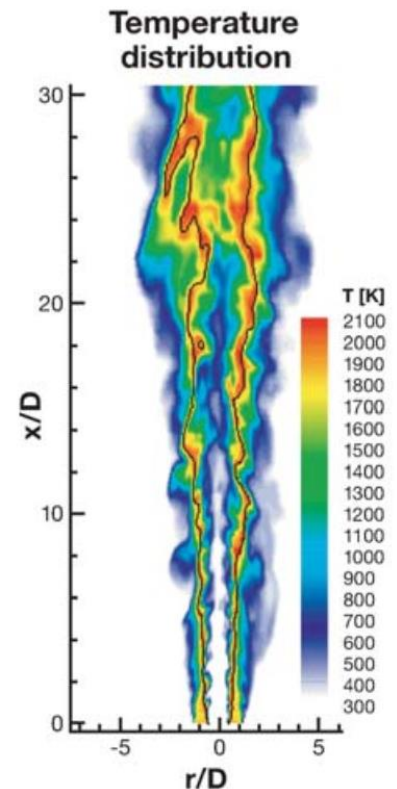
Start date: As soon as possible

Duration: Will be defined depending on the subject

Remuneration: Based on the rates of FWF

Contact:

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Simulation of Sandia flame D with flamelet model (H. Pitsch, Annu. Rev. Fluid Mech., vol. 36, 2006).