

An application for material properties

Background

We are building a new modelling tool expanding on three previous generations of modelling tools, specially tailored for generating dynamic models for chemical processes, which are defined as functions of physical and material properties.

Description

This project aims at implementing an application that provides an interface for requesting physical and material properties.

This will involve:

- Analysing the properties of the dynamic process model and determine which properties can be requested from the material model software.
- Provide knowledge to the user on which information is missing in order to provide the material properties.
- Feed the material software with the properties it requires and broadcast the results dynamically back into the model.

The material model software is running and we are using it in a variety of ways. It would be very useful to build an interface that enables for interactive use of what the core of the software can generate. This interface could have the form of an application that can go along the modelling tool. This project is a good opportunity refresh the thermodynamics and at the same time learn more on modelling and programming.

Supervision

Supervisor: Heinz A Preisig and Tore Haug-Warberg

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Reserved: