

Motivation and Goals of this Position

Economic and safe production of drop in chemicals, enzymes and recombinant proteins using bioprocesses need strategies for more efficient experimental design, as well as monitoring and advanced multiparametric control strategies. We strongly believe that hybrid models, mixtures of mechanistic and data driven models, in its interaction with digitalization and Industry 4.0 solutions can be used as powerful methods for model based experimental design and control of bioprocesses.

Within this context, we are looking for a motivated PhD student for innovative process solutions! The work will be mainly focused on i) Mechanistic and hybrid modelling, (ii) experimental design, iii) continuous bioprocessing, and (iv) model based monitoring and control approaches.

Opportunities

We offer a highly interesting, diversified position comprising bioprocess technology and modelling tools in tight cooperation applied basic science projects with industrial partners.

Requirements

Master in Bioprocess Technology, Biotechnology, Electrical Engineering, Chemical Engineering or similar.

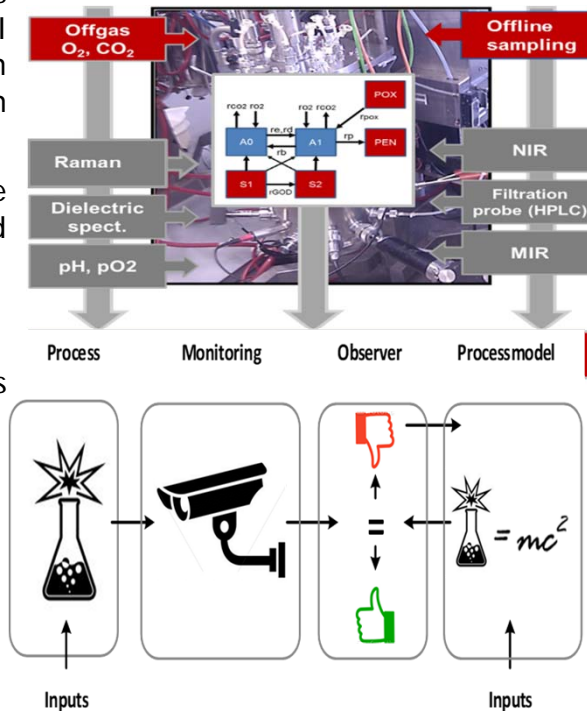
You should have:

- Experience in analytical methods and background in fermentation technology
- Sensitivity for data analysis and statistical assessment of large data sets
- Strong background in mechanistic modelling (Python, MATLAB®) using advanced mathematical tools, such as practical identifiability, Fisher Information Matrices and control techniques etc.

A superior command of English is required. Furthermore, you should be accustomed to networked and critical analytical thinking, scientifically interested and able to work in a team respecting tight project timelines.

The monthly minimum wage is currently € 2'048,- (14x per year), before tax at a 30h/week employment. Applicants have no claim for reimbursement of travel costs arising from the recording process. The university aims to increase the proportion of women especially in scientific personnel and encourages qualified women to apply.

This PhD position starts on **October 1st**, 2018 and is scheduled for 3 years.



Please contact:

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