Extraction-Column Design for Bio-Based Processes

At the University of Liège, the following position is offered:

Teaching Assistant in Chemical Engineering

Full-time contract for a doctoral student, for one year, to be extended to 5 years

starting February 01, 2018

In the Department of Chemical Engineering, you will work 2/3 of your time in the group Products, Environment, and Processes on a Ph.D. research project for the design of extraction processes and columns. The remaining 1/3 of the position is devoted to supporting teaching of chemical engineering courses in French and English at the department.

The research work on extraction-column design will include lab-scale and pilot-plant scale experiments as well as drop-based modelling and simulation. In interaction with industry we develop design tools based on the fundamental understanding on the drop scale, e.g. the mass-transfer and sedimentation behavior of drops. While the available simulation software developed allows such a consistent description of typical cases, the applicability is to be extended to systems with e.g. elevated viscosity. Such systems are of increasing importance also because of the shift in chemical industry towards bio-based feedstock. Thus, the goal is to obtain a validated modelling and simulation tool for extraction-process design with extended applicability. In the research, the specific experimental possibilities at the University of Liège are to be explored, like x-ray tomography and trajectography. Interaction with industry will be highly supported. It is intended to extend the contract to an overall duration of 5 years, which is considered sufficient to finalize Ph.D. research.

Requirements for this position are
- a Master degree in chemical engineering or similar,
- fluency in French and English,
- organization skills, autonomy, rigor.

If you are interested, please send your application including motivation letter, transcripts of your Bachelor and Master studies, abstracts of previous thesis work, and Curriculum Vitae preferably by e-mail to:
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