



CHEMICAL
ENGINEERING
DEPARTMENT

VACANCY Postdoctoral Researcher in Pressure Swing Adsorption

Department of Chemical Engineering Vrije Universiteit Brussel (VUB, Brussels, Belgium)

Description

The adsorption team of the Department of Chemical Engineering (Prof. J. Denayer) at the Vrije Universiteit Brussel (<http://vubchemicalengineering.be>) aims at the development of better and sustainable separation processes. In the present project, an industrial Pressure Swing Adsorption (PSA) process is optimized. A fully equipped 2-bed pilot PSA unit is available in the research unit, allowing to obtain very accurate data for the cyclic separation process. In this project, pilot plant tests will be combined with detailed modeling of the PSA process to achieve an improvement of process performance in terms of power consumption, productivity etc. Besides, a full characterization of the adsorption properties of the materials used in this separation will be carried out via a range of experimental methods (gravimetry, volumetry, calorimetry, porosimetry,...) available in the research group.

Brussels, the capital of Belgium and Europe, is a small sized city (ca 1 million of inhabitants) offering a lot of attractive free-time facilities.

Profile

Preferably, the candidate owns a PhD Degree in Chemical Engineering and a doctor's degree in adsorption. Experience in modeling of Pressure Swing Adsorption and/or Temperature Swing Adsorption and/or Simulated Moving Bed is a plus.

Contract

Full time during 2 years, starting as soon as possible or January 3rd, 2022 at the latest. The application procedure will require more or less two to max. three months.

Application

The candidates should contact Prof. Joeri Denayer. Please send a complete Curriculum Vitae, with a recent photograph, and the names of two leading scientists who are ready to support your application and recommend you as an active, creative and autonomous post-doctoral researcher, ready to work in a team.

Contact Prof. Denayer Joeri

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