



ACIB – the Austrian Centre of Industrial Biotechnology – is one of the leading research centres in the field of industrial biotechnology. ACIB is dedicated to joint research at the industrial-academic interface. Seven Austrian Universities and more than 50 leading industry partners are working together within the ACIB research program.



CODOBIO – Continuous Downstream Processing of Biologics – is a recently granted Marie Skłodowska Curie European Training Network. CODOBIO is implemented by a European Consortium of universities, research institutions and companies in the field of bioprocess engineering. Main objectives of CODOBIO are (i) **process control and modelling** of continuous downstream processes, (ii) **miniaturization, scale-up and -down** of continuous downstream processes and (iii) **process design** and development of **integrated continuous downstream processes**. Find out more on www.codobio.eu.

acib GmbH offers in Vienna, Austria, a

PhD position in Residence time distribution (RTD): effect on start-up and shut-down for product collection

Starting date May 1, 2019

Project description

Objectives:

- Development of mathematical model to characterize the residence time distribution of interconnected unit operations
- Characterization of residence time distribution of individual reactors (fixed bed, expanded bed, tubular reactor, membrane cassette)
- Experimental verification of mathematical model and prediction to large/industrial scale equipment
- Organization of model process fluids (CHO culture supernatant containing recombinant antibody, E. coli containing hFGF) for laboratory scale/microfluidics experiments;

Expected Results:

- Decision making aid for time for start and shut-down of an integrated manufacturing process based on a mathematical algorithm
- Decision making aid for time required to resume product collection after process has run out of specification
- Residence time distribution of laboratory scale and large scale equipment
- CHO-culture supernatant and E. coli broths characterized and provided to other partners of the consortium.

Your benefits

- Be part of a highly interacting interdisciplinary project team – **structured secondments** to other project partners are planned
- Start to build up your **scientific network** - meet and exchange regularly with 15 other PhD students working in the same project
- Join an embedded and customized **education program**– gain scientific/technical skills as well as transferable skills to complement your qualification

Your profile

- **Specific Eligibility Criteria** valid at time of recruitment on the H2020 Marie Skłodowska Curie programme:
 - The applicant has to be within the first four years (full-time equivalent research experience) of their research careers and have not been awarded a doctoral degree.
 - Mobility rule: The applicants may not have resided or carried out main activity (studies, work, etc.) in Austria for more than 12 months in the 3 years prior to the recruitment date.
- **Excellent skills** in spoken and written **English**
- **Master's degree** or equivalent in biotechnology, bioprocess engineering, (bio)chemical engineering
- Interpersonal skills conducive to **team work** and group research efforts
- **Travel** abroad for training purposes is part of the training programme

Please submit the application via our application portal application.acib.at (ref. 13_2018).

Application deadline: February, 28 2019

Further information may be obtained from petersatzer@acib.at

This job advertisement addresses qualified male and female persons equally. ACIB is not part of any collective agreement under Austrian law. It is intended to offer a minimum yearly gross payment of EUR 31,700.-- for the PhD-Position advertised. According to the ITN rules a Mobility and, if eligible, Family Allowance are scheduled in addition.