

JOB POSTING

Recruiting organisation:

Janssen Pharmaceutica NV

Subproject title:

Electrochemistry as a tool for Drug Discovery

Starting date:

1st September 2023 (or earlier if preferred)

Salary:

The Doctoral Network "MiEl" is financed by the European Union under the framework of the program HORIZON Europe, Marie Skłodowska-Curie Actions. The doctoral candidate will be hired for 36 months under contract by Janssen Pharmaceutica, with a monthly gross salary of approx. 3400 € (including mobility allowance, but excluding other allowances that depend on eligibility, e.g. family allowance, special needs allowance).

Background information:

Marie Skłodowska-Curie Doctoral Networks are joint research and training projects funded by the European Union. Funding is provided for doctoral candidates from both inside and outside Europe to carry out individual project work in a European country other than their own. The training network "MiEl" is made up of 10 partners, coordinated by Fraunhofer ICT in Germany. The network will recruit a total of 12 doctoral candidates for project work lasting for 36 months.

New industrial production strategies like "production on demand" and "Industry 4.0" are increasing the demand for new digital concepts for the chemical industry that are easily scalable and can work like a construction kit. In addition, the reduction of fossil fuel consumption requires novel synthesis concepts with on-demand capabilities paired with the use of electrical energy as a primary source for chemical processes.

MiEl will address this demand from the chemical industry, combining the advantages electrochemistry, micro process engineering and flow chemistry. The recruited researchers will explore new models for electrodes electrochemical flow cells, and develop innovative integrated prototype cells using printed circuit board (PCB) technology as a mass-scalable and flexible tool. These cutting-edge technologies will be applied to promising fine chemical pharmaceutical synthetic routes, which will be further accompanied by techno-economic evaluation defining new business opportunities. The new MiEl technologies and processes will allow safe, flexible and sustainable synthetic routes for the chemical industry of the future.

Job description:

The advertized subproject is fully funded by the Marie Skłodowska-Curie European Training Network "MiEl". The doctoral candidate will carry out research at the Johnson & Johnson R&D site in Beerse, Belgium over a duration of 36 months. He/she will be enrolled in a PhD program at the University of Amsterdam.

The recruited researcher will work on developing novel electrochemical methodologies to expand the toolbox of reactions available to medicinal chemists. He/she will work with both batch & flow electrochemistry technologies with direct application in ongoing med chem projects as well as potential for publication. The goal of the research is both to search for new reactivities, as well as to move towards a greener pharmaceutical industry.

Benefits:

The recruited researcher will have the opportunity to work as part of an international, interdisciplinary team of 12 doctoral candidates, based at universities and industrial firms throughout Europe. She/he will be supported by two mentors within the MiEl project, and will have multiple opportunities to participate in professional and personal development training. Through her/his work she/he



will gain a unique skill-set comprising electrosynthesis, flow chemistry and lab automation. She/he is expected to finish the project with a PhD thesis and to disseminate the results through patents (if applicable), publications in peer-reviewed journals and presentations at international conferences.

Janssen Research & Development seeks to bring innovative and effective treatments in therapeutic areas of high unmet clinical need. The Janssen campus in Beerse, close to the vibrant city of Antwerp has a unique ecosystem covering the complete drug development life cycle, with all capabilities from basic science to market access on one campus. Our medicinal chemistry department focusses on discovery of innovative small molecule therapeutics to treat diseases like Alzheimer's disease, various types of cancers and infectious diseases like COVID, Hepatitis B, influenza etc.

Janssen offers an inclusive team environment where diversity and different opinions are respected and valued, and the importance of a good work-life balance is recognized. The recruited researcher will have access to employee benefits including on-site sport accommodations, health/energy programs and career development trainings.

Requirements:

Qualifications / experience:

- In accordance with the European Union's funding rules for doctoral networks, applicants must NOT yet have a PhD
- Excellent Masters degree in chemistry or chemical engineering with a focus on electrochemistry, organic or organometallic chemistry
- A passion for hands-on science and delivering high quality results in the lab.
- Excellent communication skills and willingness to work in collaborative projects with multiple partners

- Strong writing and speaking skills in English are required.
- Creative, curious, and independent, you like working in a dynamic & international environment.

Mobility:

The applicant must not have resided or carried out her/his main activity (work, studies etc.) in Belgium for more than 12 months in the past 3 years.

How to apply:

Please send your CV by e-mail quoting the reference "10DC-JAN" to Dr. Alexander Jones at:

ajones40@its.jnj.com

Application deadline: 31st March 2023