



WORK OFFER

Ref. No. BE-2020-035VUB

Employer Information

Employer: VUB - IR - MACH - FYSC
FYSC
Pleinlaan 2

1050 Brussel
Belgium

Website: <http://www.vub.ac.be/MACH/FYSC/>

Location of placement: Physical Chemistry and Polymer Science (VUB)
Nearest airport: Brussels Airport, Zaventem
Working hours per week: 37.0
Working hours per day: 7.6

Number of employees: 25

Business or products: Research and Development

Student Required

General Discipline: 40C-CHEMISTRY, MATERIAL SCIENCE, AND
CHEMICAL ENGINEERING

Completed years of study: 4

Field of Study: 14.0701-Chemical Engineering.
14.0702-Chemical and Biomolecular Engineering.
14.1801-Materials Engineering.
40.0504-Organic Chemistry.
40.0506-Physical Chemistry.

Student status requirements: Student status during the entire internship is required: please include a Certificate of Enrolment with nomination.

Language required: English Excellent Or
Dutch Excellent

Required Knowledge and Experiences:

Required skills:

- Reporting tools: Word, PPT or equivalent
- Calculating tools: Excel, Matlab or equivalent
- Programming or modelling tools such as Matlab, Comsol, Abacus are a plus match interests.

Other requirements:

As a minimum the application should contain a CV, motivation letter, past diplomas and score sheets.

The applicant will be interviewed via Skype to evaluate the student and to

Work Offered

The FYSC research group has developed considerable expertise in the physicochemical characterization of reversible covalent polymer network systems to create stimuli-responsive materials for different types of applications, which include recyclability of polymer networks, reversible adhesion and self-healing materials. You will assist in FYSC's current research activities on different levels, based on your previous experience and interests.

The work may include several of the following activities, taking into account your skills and the time of the appointment:

- Synthesis and development of new dynamically reversible chemistries for stimuli-responsive polymer network systems. These stimuli may include thermal, photochemical or mechanical activation;
- Design of new polymer network architectures with the aim of improving the (mechanical) performance or altering the viscoelastic behaviour of existing polymer networks for current or new applications;
- Improvement of existing processing techniques and/or development of new processing and manufacturing techniques for polymer network materials or finished products for current and new applications;
- Product characterization, either after synthesis of new materials or after alteration of polymer network design, and subsequent evaluation for further use;
- Assessment of stimuli-responsiveness of the designed material or product, with respect to targeted application, e.g. self-healing soft devices or recyclability.
- Life cycle analysis of material synthesis, production, application and end-of-life;

We are looking for people interested in materials research and innovation, who work well in a team, yet able to focus independently on their respective tasks. Researchers are ought to be curious, studious and ambitious. In innovative research it is important to think out of the box, to have a critical mind and strong analytical and assessment skills. Experience with polymer science, synthesis or applications are a plus.

Number of weeks offered: 12 - 24

Within the months: 27-JUL-2020 - 26-MAR-2021

Or within: -

Company closed within: 25-DEC-2020 - 03-JAN-2021

Working environment: Research and development

Gross pay: 200 EUR / Week

Deduction to be expected: 0

Payment method / time of first payment: Bank Transfer /

Latest possible start date: 05-OCT-2020

Accommodation

Canteen at work: Yes

Expected type of accommodation: Student dormitory

Estimated cost of lodging: 100 EUR / Week

Accommodation will be arranged by: Employer

Estimated cost of living incl. lodging: 200 EUR / Week

Additional Information

Nomination Information

Deadline for nomination: 15-MAR-2020

Date:

29-JAN-2020

On behalf of receiving country:

Annelies Vermeir