WORK OFFER Ref. No. CZ-2023-100018

Employer Information

Employer: Brno University of Technology - Faculty of Chemistry

Institute of Physical and Applied Chemistry

Purkynova 118

61200, Brno Czech Republic

Number of employees: 120

Business or products: Research and development

Website: https://www.fch.vut.cz/en.html

Location of placement: Brno Nearest airport: Prague, Brno, Vienna Working hours per week: 30.0 Working hours per day: 6.0

Student Required

General Discipline: CHEMISTRY AND CHEMICAL ENGINEERING;

MATERIAL SCIENCES AND ENGINEERING

Field of Study: Physical Chemistry.; Environmental Chemistry.;

.Materials Science.; Materials Chemistry.

Completed years of study: 3

Student status requirements: required when nominated

Language required: English Good (B1, B2)

Required Qualifications and Skills:

Thermodynamics | Data Analysis | Critical Thinking | Creativity | Analytical

Thinking

Other requirements:

Online interview can be required!

Fundamental knowledge of physical chemistry and chemistry of hydrogels (preparation and characterization).

Basic knowledge of viscoelastic properties testing on macrolevel (oscillation

rheometry) and microlevel (atomic force microscopy). Basic knowledge of transport properties (diffusion) studies.

Work Offered

The scientific goal of proposed internship will be aimed on the study of mechanical (viscoelastic) properties of semi-solid materials (i.e. hydrogels with tailored internal architecture) and transport properties studied via diffusion techniques.

The viscoelastic properties will be studied on macrolevel scale using oscillatory rheometry (outputs: shear moduli) and on microlevel scale using atomic force microscopy (output: Young modulus).

Outputs from both techniques will be cross-correlated.

Chosen hydrogels with tailored internal structure will be also deeply studied by suitable diffusion techniques such as diffusion cells. The viscoelastic properties together with transport properties will be then correlated.

Note: A trainee can be also involved in other fundamental research projects or applied research.

Number of weeks offered: 8 - 8 Working environment: Research and development

Within the months: 02-MAY-2023 - 02-AUG-2023 Gross pay: 15000 CZK / Month

Or within: 15-AUG-2023 - 15-NOV-2023 Deduction to be expected: no

Company closed within: - Payment method / time of first Bank Transfer / monthly, first payment after 1

payment: month

Latest possible start date:

Accomodation

Canteen at work: Yes

Expected type of accommodation: Student dormitory Estimated cost of lodging: 5000 CZK / Month

Accommodation will be arranged by: IAESTE Estimated cost of living incl. lodging: 12000 CZK / Month

Additional Information

Please follow the instructions for preparing nomination documents and the visa process in the attached document. These documents are only for you and your student, please

don't add them into your student's nomination!

Nomination Information

Deadline for nomination: 15-MAR-2023

Date: 25-JAN-2023 On behalf of receiving country: IAESTE Czech Republic



Nomination guide for applications to the Czech Republic

Dear student,

the purpose of this document is to provide guidance for the preparation of your nomination documents for the internship in the Czech Republic. Please follow the steps listed below, before sending your nomination to us.

Structure of nomination documents

All documents must be in English.

The final nomination document needs to have sections listed below, please keep the order of individual sections as listed. Before sending your nomination please check if all the pages have the same size.

- 1. Work offer
 - i. The original document that is available on Exchange Platform
- 2. Student nomination
 - i. Use the digital version of the document and not one that is filled out by hand
 - ii. Make sure the dates and duration you selected to fit into those specified in the work offer
- 3. Motivation letter*
 - i. Focus on the work-related information
 - ii. At most 1 page
- 4. CV*
- i. Use a structured form of CV
- ii. At most 2 pages
- 5. Transcript of records
 - i. The document must be in English, verified by your university (stamp and signature needed)
 - ii. Grade scale must be included
- 6. Language certificate
 - i. Do not upload certificates older than 2 years
 - ii. Upload certificates for all languages required by work offer
- 7. Confirmation of enrollment
 - i. Work offer may require this document to be valid throughout the whole period of internship
 - ii. The document must be in English, verified by your university (stamp and signature needed)
- 8. Recommendation letter *(only if required by the employer)
- 9. Scan of valid passport/ID
 - i. Page with the travel documents should be placed on a page with size as the rest of documents
 - ii. The travel document should be placed in the upper left corner
- 10. Passport-sized photo
 - i. The Photo should be added in the same way as your travel documents
 - ii. Use a formal picture, no photos with friends or holiday pictures!

Any other relevant (!!) documents should be added to the end of the nomination document.



*Beware the motivation letter and CV are the only documents written solely by you. Make sure these documents contain information relevant to the employer and check for any grammar mistakes.

All documents should be combined into one PDF, sent using the Exchange Platform. Documents sent using other ways of delivery will not be considered as proper nomination documents and will not be processed in compliance with General Data Protection Regulations (GDPR).

Visa process

Listed below you will find government websites dedicated to the visa process. Keep in mind that this process usually takes a quite long time, apply for your visa as soon as possible. Thanks to accreditation by MEYS, you can apply for a student visa. Upon acceptance by the employer, we will support your claim for a student visa with an invitation letter and confirmation of accommodation.

- ❖ Visa is not required for citizens of the EEA (EU, Switzerland, Liechtenstein, Iceland, Norway)
- Short-term Schengen visa (up to 90 days)
 - Countries with a visa exception
 - Countries with a visa obligation
- Long term visas (over 90 days) are obligatory for all countries except for EEA countries.