MeMC
MECHANICS OF MATERIALS
& CONSTRUCTIONS

Interested in materials and their applications shaping tomorrow?

We are looking for two doctoral researchers and a post-doctoral researcher in mechanical performance and interface characterization of (recycled) carbon fibre-reinforced thermoplastic composite materials

Where

The Department **Mechanics of Materials and Constructions** of the Vrije Universiteit Brussel invites candidates to apply for a vacancy as (post-)doctoral researcher (X/F/M). You will be working in a dynamic environment.

MeMC has established an internationally recognized expertise in the mechanical characterization and the design and analysis of innovative lightweight material systems, components and structures. Their mechanical performance is studied under complex loading conditions by means of (combined) experimental testing and advanced numerical modelling.

Our research environment is situated in the capital of Europe, Brussels Humanities, Sciences & Engineering Campus, Pleinlaan 2, Brussels (https://www.vub.be/en/about-vub/faculties-institutes-and-campuses/our-campuses/vub-main-campus-brussels/directions).
More information on studying in Brussels can be found at (https://www.vub.be/en).

Duration

Doctoral researcher: A full-time research position for initially one year, extendable to a 4 year funded PhD given a positive evaluation each year.
Post-doctoral researcher: A full-time job position for 3 years, starting with a trial period of 1 year.

Job content

The researcher will conduct a thorough experimental investigation into the mechanical performance of thermoplastic composite materials. You will be part of a team of researchers who will all work on recently granted research projects in our department in this domain. The post-doctoral researcher is also expected to support the PhD students and act as a mentor and tutor for them.

The projects have two academic partners ULB and UCL and an industrial partner SYENSQO.

Our VUB-MeMC research group focuses on aspects of experimental characterization of mechanical properties. The targeted knowledge leap is to get insight in the mechanical properties at the meso- and macro-scale and link it with

findings at micro-scale level. Experimental data analysis, used also to feed and validate finite element models, will give insight in the performance and contribute to the general understanding of the mechanical behaviour.

What do we offer?

Access to experimental facilities and a large computing infrastructure is available. MeMC has established intensive collaboration at the national level with industry and universities performing research in related fields. You will get the opportunity to present your work in international conferences.

At the VUB, you're guaranteed an open, involved and diverse workplace where you are offered opportunities to (further) build on your career.
As well as this, you'll enjoy various benefits:
Full reimbursement for your home-work commute with public transport according to VUB-policy, or compensation if you come by bike;
Cost-free hospitalisation insurance;
The space to form your job content and continuously learn via VUB LRN;
Excellent facilities for sport and exercise;
Ecocheques;
Delicious meals at attractive prices in our campus restaurants;
An open, family-friendly work environment where attention is paid to work-life balance, and exceptional holiday arrangements with 35 days of leave (based on a fulltime contract).

What do we expect from you?

- Doctoral researcher: You hold a **Master degree in Mechanical Engineering,** or a related field, and want to contribute to innovations and sustainability in materials, and link it with processing conditions and mechanical performance.
- Post-doctoral researcher: You hold a **PhD Degree** (with doctoral thesis) in Engineering.

- You have a solid background in mechanics of materials.

- You have former experience with (non-destructive) experimental material characterization.

- The candidate is a person showing the necessary reliability, autonomy and initiative.

- You are interested to interact and collaborate closely with academic and industrial partners.

- You are a team-player and can work in an international environment using English as a scientific communication tool.

- You have an affinity for writing as you will be strongly encouraged to publish in peer-reviewed international journal articles.

Timing

The candidate should preferably be able to enter into service with immediate effect. Candidates should be highly motivated and have the PhD and/or Master degree.

Application procedure

The contact persons at Vrije Universiteit Brussel, Department of Mechanics of Materials and Constructions for this vacancy are Prof. Lincy Pyl and prof. Danny Van Hemelrijck.

Your application must include the following as a minimum:

- A CV with:
  - your personal details (name, address, date of birth, nationality,...);
  - your education, degrees and the subject of your master thesis;
  - transcripts of records of Bachelor, Master and PhD degree;
  - additional skills (software, programming languages, experimental techniques, communication skills, ...);
  - mastered languages (English, Dutch, French);
  - references (previous projects in the domain, published papers,...);
  - reference person.
- A letter with your motivation to seek for a researcher position;

Incomplete applications are not considered.

Please send your application (in English or Dutch) by post or e-mail to prof. Lincy Pyl and prof. Danny Van Hemelrijck:

Prof. dr. ir.	
LINCY PYL	DANNY VAN HEMELRIJCK
Lincy.Pyl@vub.be	danny.van.hemelrijck@vub.be
+32 2 629 29 20	+32 2 629 29 29
Vrije Universiteit Brussel Faculty of Engineering Sciences Dept. Mechanics of Materials and Constructions (MeMC) Pleinlaan 2 | 1050 Elsene	

Look forward to receiving your application.