

Vector Foiltec is the world market leader for transparent ETFE constructions and realizes innovative roofs and facades worldwide. We are looking for a **PhD-student (M/F/D) for our Research and Development Department in Bremen-Lesum** in the framework of the project „ACTA REBUILD“, funded by the European Union as part of the Marie-Sklodowska-Curie ITN programm. The project starts in October and is limited to 3 years, but could be extended for another year.

PHD-STUDENT R&D (M/F/D)

The PhD focuses on the evaluation of environmental effects and performance, especially the „carbon footprint“ based on a life cycle assessment, of the membrane building industry and the comparison of the different international building certification systems. In this context, special attention will be paid to new materials and building systems (lightweight, ultralightweight, metamaterials, use of bio-based materials, second skin, phase changing materials) as well as to the potential of these new materials and systems for refurbishment and/or prolongation of the lifetime of the built environment. It is essential for the building industry to accept these challenges, how new materials and building systems, starting from the design choices, are eco-efficient and sustainable, reducing the impact on the climate changes in a changing world.

Your main tasks

- Development of comparative Life Cycle Analysis (LCA) from cradle to grave between “classic” façade building structures and novel structural skins in terms of building systems
- Validation of sustainability of novel structural skins and materials as well as comparison between international building certification systems (LEED, BREEAM, DGNB,...)
- Integration of parametric procedures from the design tools to the LCA and eco-efficiency assessment for a real time verification
- Evaluation of environmental impact of production processes and novel materials for building structures
- Assistance in R & D related tasks

Your profile

- Master of Science in applied physics, physical, civil or chemical engineering or comparable
- First experience with LCA and environmental databases for building applications
- Strong interest in ETFE and membrane architecture
- Excellent knowledge in MS Office applications
- Basic programming experiences
- High proficiency in written and spoken English. Basic German knowledge will be appreciated.

- The prerequisite for EU funding is residence and work of maximum 12 months in Germany in the last 36 months.

Your strengths

- Highly determined, flexible, iterative and committed working style
- Combination of academic research with industrial innovation roadmaps
- High team player capabilities
- Presentation and reporting skills

We offer

- Remuneration according to the Marie-Sklodowska-Curie ITN regulations of the EU, which is competitive with industry standards in Germany.
- An opportunity to work within a challenging European research project and to collaborate with the leading industry players and universities across Europe. The position includes a one year stay at the Polytecnico di Milano (Italy), one of the 2 enrolment institutions of this joint PhD project together with the Universidad de Valladolid (Spain).
- Opportunity to take over responsibility in a company, which is operating worldwide as the market leader in ETFE cladding of buildings.
- Vector Foiltec GmbH is located in Bremen, located in the north of Germany, where you have direct access to the whole world via the Bremen Airport.
- Company fitness program

If you find yourself in this profile, we would like to get to know you and possibly offer you an interesting position.

For further information of the job vacancy, please feel free to contact or send your application together with your earliest starting date to:

Vector Foiltec GmbH
Dr. Torsten Balster
Steinacker 3
28717 Bremen
Germany

or per E-Mail to: recruiting@vector-foiltec.com