

▶ PHD STUDENT (M/F/D) IN TISSUE ENGINEERING

The INM – Leibniz Institute for New Materials in Saarbrücken, Germany, is an internationally leading center for advanced materials research with a growing focus in materials bioengineering.

INM's research group „Dynamic Biomaterials” investigates how functional natural materials are derived from epithelial tissues during cornification, such as the strong and reversible adhesive surface of lizard's toes. We aim to establish *in vitro* models of the lizard epidermis, including its ability to regenerate during molting, with the vision to bioengineer gecko-like adhesives in the laboratory. We search for a motivated team player eager to join the team and perform collaborative research towards this goal.

Your profile

- ▶ Master's degree in cell biology, bioengineering, veterinary medicine or related fields.
- ▶ Previous experience in cell culture
- ▶ Interest in super resolution fluorescence and electron microscopy to reveal grown tissue's morphology
- ▶ Interest in understanding how nature builds up complex materials from cellular structures
- ▶ Very good communication and writing skills and thorough command of the English language. German language skills are beneficial but no required.

You will work

- ▶ on an exciting topic, at the interface between cell biology and material science
- ▶ in an interdisciplinary and international research group
- ▶ in a research institute with excellent, state-of-the-art infrastructure
- ▶ in a cooperative environment, with plenty of opportunities to interact with other researchers, also outside the team and the institute
- ▶ in an institute that trains you to perform high-quality research and supports you to develop your scientific profile
- ▶ in an environment that welcomes participation and supports self-driven development
- ▶ in a Leibniz network that stimulates creative and entrepreneurial personalities
- ▶ at the heart of the Greater Region (Germany, France, Luxemburg, Belgium).



CONTACT

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Your starting point

- ▶ Development of *ex vivo* and complex *in vitro* cultures of gecko skin
- ▶ Quantification of vitality and functionality of the engineered tissues
- ▶ Characterization of the morphology and functionality of the developed tissue. Imaging at different scales, down to cytoskeletal structures by super resolution imaging techniques (confocal fluorescence and electron microscopy)
- ▶ Identification of *in vitro* tissue culture conditions (medium, mechanical stimulation etc) and mechanisms that can trigger regeneration of epidermal layers.

Your contract conditions

- ▶ A 3+1 year contract and E13 TV-L 60% salary, with the possibility to increase based on transparent performance criteria.

Interested? We look forward to your application! Please send us your CV, motivation letter and at least the name of one reference person by **31.05.2023** via e-mail (single pdf file < 5 MB) to aranzazu.delcampo@leibniz-inm.de.

The INM practices an open and appreciative corporate culture in which the existing diversity is promoted and lived. The institute is an equal opportunity employer with a certified family-friendly policy, and it provides offers for a better work-life balance, flextime, and mobile working. We promote professional opportunities for women and strongly encourage them to apply. Severely disabled applicants with equal qualifications and aptitude will be given preferential consideration.



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