

The INM – Leibniz Institute for New Materials in Saarbrücken, Germany, is an internationally leading center for materials research, with a particular focus on biomaterials and biointerfaces, and their exploitation for medical applications. We are seeking PhD students with a background in biology, biochemistry, biophysics, chemistry or physics to enroll in the Leibniz ScienceCampus Living Therapeutic Materials (<https://www.lsclifemat.de/>) and work on the development of advanced synthetic cell systems for applications at the intersection of cancer immunotherapy and immunoregulatory materials.

INM's research group **Immuno-Materials** investigates how microscale cell-like materials can be formed such that they combine multiple life-like functionalities and can be integrated into living systems. For this we apply organoid cultures, bottom-up synthetic biology and microfluidics to reconstitute immunoregulatory processes for therapeutic applications. In the new project **ART-TIME (ARTificial Tumor Immune Microenvironments)**, we invite applications for a

PHD STUDENT (M/F/D)

on development of new synthetic cell composites for immunotherapy

starting on November 1st 2022 (with some flexibility).

Your tasks

- Design, construct and characterize synthetic cell models with immunological properties.
- Investigate immunoregulatory interactions between synthetic cells, cancer cells and immune cells.
- Develop new strategies for the culture of tumor organoids for immunotherapeutic purposes.
- Investigate the activation of primary human immune cells by synthetic cell materials.

Your profile

- Master's degree in biology, biochemistry, biophysics, chemistry, physics, or a related field.
- Interest and possibly experience in biohybrid materials, synthetic biology or organoid culture.
- Previous experience with advanced light microscopy imaging, electron microscopy, transcriptome profiling and other characterization techniques is beneficial.
- Very good communication and writing skills and thorough command of the English language. German language skills are beneficial but not required.

You will work...

- on scientifically interesting and technically relevant challenges in a motivated research group that collaborates with leading researchers and institutions,
- in an institute that supports you to perform high-quality research and to present and publish your research results,
- in an interdisciplinary and international institute with excellent infrastructure,
- at the heart of the Greater Region (Germany, France, Luxembourg, Belgium).

Interested? We are looking forward to receive your application (CV, publication list, motivation letter, at least one reference) **by August 21st, 2022**. Please send it via e-mail (single pdf file < 5 MB) to Dr. Oskar Staufer.

E-mail: oskar.staufer@leibniz-inm.de • Reference: "PhD: Immuno Materials"

The INM is an equal-opportunity employer with a certified family-friendly policy and it provides offers for a better work life balance, flexi-time and mobile working. We promote the professional opportunities of women and strongly encourage them to apply. Severely disabled applicants with equal qualification and aptitude will be given preferential consideration.



CONTACT

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