

## POSTDOC OR SCIENTIFIC CO-WORKER (M/F/D)

New materials are the drivers of new technologies. INM combines the two worlds of multidisciplinary scientific research and material-oriented technology transfer under one roof. Chemistry, physics, biology, materials science, and engineering interact in close cooperation and at high level. An essential focus of our work is the transfer of biological principles to the design of new materials, structures and surfaces. Our results create and improve flexible displays and intelligent grippers, high-performance batteries and efficient solar cells or implants for personalized therapies and regenerative medicine. The INM is an institute of the Leibniz Association and employs around 260 people.

For our Program Division *Nano Cell Interactions* we are seeking to fill an open position for a scientific co-worker or postdoc with a degree in

### MICROBIOLOGY, BIOTECHNOLOGY

or a related science field.

The Program Division *Nano Cell Interactions* explores the effects of advanced materials on human cells and tissues to enable safe applications of these materials in technical and biomedical fields. In frame of a third-party funded project the focus is on the biologically mediated transformation of industrially relevant polymer/composite materials in order to enable recycling of these materials. In a first step, the feasibility of this approach, leading to selective and controlled polymer degradation needs to be proven. The transformation products as well as the microbiological process itself will be characterized in order to establish a basis for industrial exploitation of the approach.

Your scientific duties comprise cultivation and maintenance of specialized microorganisms, characterization of parameters like viability, growth, and metabolic activity by biochemical and chemical assays, determination of relevant cultivation parameters (e.g. optimization of media composition, substrate supply), and analysis of materials substrates and transformation products by means of chemical and structural (e.g. microscopy) analysis.

Candidates should be interested in biological pathways leading to modification of materials. They should have detailed experience in the field of microbiology and biotechnology. Candidates should be self-motivated, have good communication and presentation skills, and the ability to work independently as a member of a multi-disciplinary team. Proficiency in German and in English is required.

The INM is an equal-opportunity employer with a certified family-friendly policy. We promote professional opportunities for women and strongly encourage them to apply. Salary and working hours are in accordance with the German state public service salary scale (TV-L) and the accordant social benefits. Full time jobs can be generally divided. Severely disabled applicants with equal qualification and aptitude will be given preferential consideration.

Interested candidates should submit their complete application (pdf-format, < 5 MB) via e-mail before June 30, 2021 addressed to Gabriele Koster, secretary Nano Cell Interactions, under [gabriele.koster@leibniz-inm.de](mailto:gabriele.koster@leibniz-inm.de).



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