



**Micro- and Materials Mechanics Lab welcomes applications for a PhD position:
Understanding and simulating adhesion mechanisms in programmable mechanical
metamaterials**

PhD position (80%), Start-date: 01.12.2021

The topic of the PhD position is to implement adhesion mechanisms into programmable mechanical metamaterials to establish different stable structural states. Such states can be used to store (materials memory) or process (if-then-else) information. The work will focus on the design and simulation of mechanical meta material unit cells integrating adhesion at interfaces as functional elements. This work will be conducted in close collaboration with experts within the Zeiss Cluster iProm. Association with the Excellence Cluster livMatS is also envisioned. Furthermore, collaboration with the Fraunhofer Cluster of Excellence Programmable Materials is possible.

The new position is located at the Chair of Micro and Materials Mechanics at IMTEK. We are looking for a candidate with an above-average Master's degree in materials, mechanics, bionics, physics, microsystems technology or similar with interest in a challenging research topic and the ability to work independently in an interdisciplinary environment. Very good English language skills are required.

Is initially limited to end of 2024. The salary will be determined in accordance with TV-L E13.

We are particularly pleased to receive applications from women for the position advertised here.

To apply:

Please include a letter of motivation, CV, certificate & transcript of your highest degree earned, a description of research accomplishments and future research interests (max. 2 pages), CV with publication list and the names and contact details of at least two persons who will be able to provide references on demand.

Please send your application in English including supporting documents mentioned above citing the reference number 00001802 by 15.10.2021 at the latest. Please send your application to the following address in electronic form to: chris.eberl@imtek.uni-freiburg.de and cc. nadira.hadzic@imtek.uni-freiburg.de.

Micro- and Materials
Mechanics Lab

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