



The [Soft Machines and Robotic Systems](#) group of [Prof. Aniket Pal](#) invites applications for **a funded, full-time PhD positions** in the field of **soft robotics**. The group is part of the Institute of Applied Mechanics, University of Stuttgart.

### Job Description

The research of the Soft Machines and Robotic Systems group focusses broadly in the field of **soft robotics**, with special interests in **responsive materials, mechanical instabilities, mechanical metamaterials, and soft sensors**. Soft robotics is a burgeoning interdisciplinary field where robotic actuators and sensors are fabricated with intrinsically soft (polymeric) materials. Instead of motors, gears, etc., this class of robotics systems utilizes smart responsive materials, which react to different stimuli to power and actuate the robots. Using soft materials also opens up a large design space where utilizing interesting mechanics and material properties can lead to embodying the control in the body of the soft robot itself. Soft robotic systems are ideal for exploring and understanding mechanics of non-linear soft matter. Successful candidates will be involved in innovative research, learn experimental and numerical skills, and publish in peer reviewed journals and conferences; and prepare themselves for a successful research career in academia.

### Your profile

We are seeking candidates with a Master's degree and a strong background in mechanics. The scope of research is primarily experimental, so relevant experimental skills (fabrication, 3D printing, mechanical and material characterization, etc.) and lab experience working with soft materials is necessary. Numerical skills (FEM, 3D modelling, python, etc.) will be considered positively. Backgrounds in mechanical engineering, electrical engineering, or materials science usually fits with our research, but being excited by about science is the most important factor. Ability to collaborate in an interdisciplinary team and good communication (written and verbal) skills are essential.

### What we offer

PhD students will receive an internationally competitive salary and benefits according to the TV-L E13 scale. An initial contract will be offered for 3 years with the possibility of extension up to 5 years. We offer state-of-the-art research facilities, amazing career and family support, access to many research partners in the Cyber Valley ecosystem, while being located in one of Germany's most beautiful and innovative regions.

### How to apply

Interested candidates can apply by sending an email to [aniket.pal@mib.uni-stuttgart.de](mailto:aniket.pal@mib.uni-stuttgart.de) with a single PDF document containing their full CV (including name and contact information of 2-3 references), a brief (max 1 page) motivation or research statement, and copies of any peer-reviewed publications. Your cover letter should be future-looking: describe what research direction you would like to follow and how you are best suited for it. Applications will be accepted until the positions are filled, but those received by 15 November 2023 will be prioritized. Early applications are encouraged.

The University of Stuttgart represents outstanding, world-renowned research and first-class teaching in one of Europe's most dynamic industrial regions. As a reliable employer, the university supports and promotes the academic careers of its researchers. It is proud of its employees, who currently come from over 100 different countries. The university is a partner for knowledge and technology transfer and focuses on multidisciplinary.

At the University of Stuttgart, we actively promote diversity among our employees. We have set ourselves the goal of recruiting more women scientists and employing more people with an international background, as well as people with disabilities. We are therefore particularly pleased to receive applications from such people. Women who apply will be given preferential consideration in areas in which they are underrepresented, provided they have equal qualifications. Applicants with severe disabilities will be given priority, provided they have equal qualifications.

As a certified family-friendly university, we support the compatibility of work and family, and of professional and private life in general, through various flexible modules. We have an employee health management system that has won several awards and offers our employees a wide range of continuing education programs. We are consistently improving our accessibility. Our Welcome Center helps international scientists get started in Stuttgart.

Information in accordance with Article 13 DS-GVO on the processing of applicant data can be found at [https://careers.uni-stuttgart.de/content/privacy-policy/?locale=en\\_US](https://careers.uni-stuttgart.de/content/privacy-policy/?locale=en_US).