

Prof. Yves Perriard

LAI – Integrated Actuators Laboratory

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Scientific Collaborator in Soft Actuators

The **Center for Artificial Muscles** has been settled up in Microcity, the EPFL Microtechnology antenna in Neuchâtel, Switzerland. This Center, founded by the “Werner-Siemens Stiftung” is developing biocompatible soft artificial muscles for cardiac, urological and face reconstruction applications in order to become one of the key place in the next decade to propose a credible alternative to current cumbersome devices.

Job description:

This multidisciplinary project requires knowledge in soft actuators, in particular in dielectric elastomer actuators (DEA), and high-voltage electronics. The candidate will support the manufacturing of a high mechanical power soft actuator based on DEA including cleanroom process and power electronics design. She or he will also insure the reliability of the device with mechanical and electrical tests. In-vivo preclinical tests are planned in 2021. Moreover, the candidate will work in close collaboration with doctoral students in the development of innovative actuators. She or he will be in charge of Innosuisse projects in close collaboration with Swiss companies. Technical achievements, reporting and project management are couple of tasks dedicated to the candidate.

Required expertise:

- PhD (or Master) in microengineering, mechanics, electrical engineering or related fields.
- Experience on biomedical innovative soft actuator is a must.
- Strong experimental skills: prototyping, cleanroom process, high-voltage & electronics design, test bench development, command & control.
- Knowledges on FEM, CAD, Matlab, Labview and electrical modelling are a plus.
- Must have excellent organization skills and ability to handle multiple tasks and manage doctoral students.
- Highly motivated, willingness to acquire new skills.
- Excellent verbal and written communication skills (English).

Contract details:

- 4 years (maximum), renewable each year
- Start date: January 1st, 2021
- Competitive salary in accordance to level of expertise
- Work location: EPFL Microcity Neuchâtel, Switzerland

Candidates should send their CV, letter of motivation and summary of their previous projects to yoan.civet@epfl.ch

Closing date for application: November 30th, 2020

Further information about the laboratory is available at the website: lai.epfl.ch, cam.epfl.ch