

Postdoctoral Research Associate Position

Applications are invited for a postdoctoral researcher position at École Polytechnique Fédérale de Lausanne (EPFL) working with [Prof. Kumar Varoon Agrawal](#) and [Prof. Vivek Subramanian](#) for developing an innovative roll-to-roll tool for preparing porous single-layer graphene based membranes for carbon capture under EPFL flagship project [Solutions4Sustainability](#).

Background:

EPFL is looking to scale-up membranes for carbon capture developed by Prof. Agrawal. These membranes are based on porous single-layer graphene and are produced by a batch process involving controlled oxidation of graphene followed by transfer of graphene to a porous membrane support. The current project seeks to develop a roll-to-roll (R2R) tool capable of implementing oxidation of graphene as well as graphene transfer in a continuous fashion. We are looking for a postdoctoral candidate with experience in precision tool design, including mechanical design, component selection, and tool assembly. Experience with R2R tool design is highly desirable. The project, with the help of the hired postdoc, seeks to implement the R2R tool. This includes mechanical design of the tool, implementation of the tool, and related diagnosis.

Qualifications:

1. The candidates should have recently obtained a PhD in chemical engineering/mechanical engineering/chemistry/material science.
2. The candidate must have prior experience in precision tool design. Experience with R2R tool design is preferred.
3. The candidate must be proficient in written and spoken English.
4. The candidate must work proficiently in a multidisciplinary team consisting of chemists, chemical engineers, and mechanical engineers.

Additional information:

The initial contract will be for a period of one year extendible up to four years. The salary will be according to the scale for a postdoctoral candidate at the ETH board in Switzerland.

Application procedure:

Send an email to kumar.agrawal@epfl.ch and vivek.subramanian@epfl.ch with a cover letter and CV which should include a detailed educational background, publication record, awards, presentations, and references. The subject of email should be `postdoctoral_position@R2R`.