Postdoc, Applications of textile microfluidics & soft robotics (F/H)

POSTE À POURVOIRle 04/01/2027 LOCALISATION DU POSTE 75005 PARIS, ÎLE-DE-FRANCE 75005
ÉTABLISSEMENT Institut Curie

ENVIRONNEMENT ET CONTEXTE DE TRAVAIL

Notre établissement fait partie de l'Université PSL. Située au cœur de Paris, celle-ci fait dialoguer tous les domaines du savoir, de l'innovation et de la création. Classée parmi les 50 premières universités mondiales, elle forme au plus près de la recherche des chercheurs, artistes, ingénieurs, entrepreneurs ou dirigeants conscients de leur responsabilité sociale, individuelle et collective.

STRUCTURE D'ACCUEIL

The Curie Institute Research Center

France’s leading cancer research and treatment centre, Institut Curie unites a renowned research centre and a specialist hospital, fostering close collaboration between scientists, clinicians and healthcare professionals. It offers an environment of excellence where expertise comes together around shared values: care, humanity, openness, collaboration, efficiency, innovation, solidarity and commitment.

MISSION D'ENSEIGNEMENT

Context

The Artexa project, led by IPGG/PSL and Ensadlab, explores the applications of textile microfluidics and soft robotics in the fields of art, design, fashion, and healthcare. It builds on a technology developed at Institut Curie, combining textiles and microfluidics to create soft, lightweight, and responsive materials capable of deforming under pressure.

This interdisciplinary project brings together scientists, designers, and academic partners, including IPGG, École des Arts Décoratifs – PSL, and ENSAIT. Its objective is to design and develop functional prototypes of active textiles and wearable devices. One of the first envisaged applications is compression therapy, particularly for wound healing and sports. Further applications in art, design, and fashion will also be explored.

The project and the missions

The successful candidate will be responsible for operational coordination between the partner laboratories and will contribute to the scientific and conceptual development of the project. They will oversee its material, instrumental, and experimental aspects, including technology development and refinement, the exploration of new concepts, and the design, fabrication, and functional testing of prototypes, with potential for intellectual property development and valorization.

Their responsibilities will also include designing and conducting experiments, theoretical modelling, quantitative data analysis, and developing dedicated data-processing tools and models. They will contribute to the dissemination of research findings through team meetings and presentations at international conferences, the preparation of scientific publications, as well as participation in the general activities of the laboratory and student supervision.

The position is based in an international, inclusive, and interdisciplinary scientific environment at IPGG/PSL in Paris, in close collaboration with research teams specializing in physics, biology, textile engineering, and design.

Occasional travel to Roubaix will be required.

References*:*

1. https://www.institut-pgg.fr/Recherche_9.html

2. https://www.ensadlab.fr/

3. https://www.metasoft-matter.psl.eu/en/projects/metasoft-2026-artexa

4. https://www.gemtex.fr/

Watel, Q. et al., Fully woven textile-based closed microfluidic system design. The Journal of The Textile Institute, 116(7), 1358–1367, doi.org/10.1080/00405000.2024.2378219

MISSION DE RECHERCHE

COMPÉTENCES ATTENDUES

Training and Skills required

PhD in Physics or Materials science

Experience in one or more of the following fields will be particularly appreciated: soft robotics, soft matter, elastomer materials, pneumatics, and hydraulics. Given the intensely collaborative and interdisciplinary nature of the project, teamwork skills and scientific curiosity are essential. A keen interest in, or even experience of, arts-science collaborations would be an additional asset. Applications from research engineers with a few years of post-graduation experience will also be considered.

Abilities

Ability to work independently, managerial abilities, Aptitude for working in a team and to supervise students

Ability to communicate and write fluently in English

Mastering of French, both oral and written, is not mandatory but will be a plus.

Opportunities : The position will offer opportunities to discover and improve an emerging field with fast growth and important societal application, to publish in high level scientific journals, to participate in patent filing and innovation, and/or to artistic events.

Contract information

Type of contract: Postdoctoral contract

Starting date: 01/01/2027

Duration: 18 months, renewable

Working time: full time

Gross annual salary: from 36219€ to 39809€ according to the current grids

Benefits: Collective catering, reimbursement of transportation fees up to 75%, supplementary health insurance

Location of the position: Paris

Contact

Please send your CV, letter of motivation and email of 2 references

Publication date: 26/11/2026

Deadline for application: once filled

Faithful to the legacy of its founder, the Institut Curie is deeply committed to promoting equal opportunities, diversity, and inclusion. Convinced that diversity of backgrounds and experiences contributes to collective performance, we strive to provide everyone with a respectful and equitable working environment and encourage all candidates to apply for our job opportunities.

All our opportunities are open to people with disabilities

https://euraxess.ec.europa.eu/sites/default/files/brochures/eur_21620_en-fr.pdf

NON DISCRIMINATION, OUVERTURE ET TRANSPARENCE

Notre établissement, comme l'ensemble de l'Université PSL, s’engage à soutenir et promouvoir l’égalité, la diversité et l’inclusion au sein de ses communautés. Nous encourageons les candidatures issues de profils variés, que nous veillerons à sélectionner via un processus de recrutement ouvert et transparent.

CONTACT

qazqbv2ktl5k@emploi.beetween.com

AUTRES INFORMATIONS

Recherche principal : **Sciences biologiques** Recherche secondaire : **Biologie**
Rémunération : **De 36219.0 à 39809.0 € (Euros) par an**
Durée du contrat18 mois

Expérience souhaitée
1 à 4 années d'expérience (R2) an

Référence
qazqbv2ktl

PUBLIÉ LE 26/11/2026

L'Université PSL (Paris Sciences & Lettres)