

## Postdoctoral Research Position at the Laboratory of Mechanical Metallurgy, Institute of Materials in cooperation with the Swiss Plasma Center at the Ecole Polytechnique Fédérale de Lausanne (EPFL) in Lausanne, Switzerland

The Laboratory for Mechanical Metallurgy at EPFL < Imm.epfl.ch > is inviting candidacies for a position as post-doctoral scientist. This position is funded by a large-scale (Swiss equivalent to an ERC Advanced Grant funded by the Swiss National Science Foundation) project that will explore the potential held by electromagnetic forces in harnessing melt flow and solidification towards innovations in the 3D printing of aluminium and its Additional alloys. responsibilities will be to participate in exploratory experiments, to teach, notably in practicals ("travaux pratiques") for undergraduate students and in supervising semester projects, and to assist in organisational and operational matters of the laboratory.

Candidates are sought having a top-level academic education and a demonstrated ability to conduct and publish outstanding research, a strong general background in materials processing, transport phenomena, electromagnetism and/or metallurgy, coupled with expertise, or the ability and interest to develop expertise rapidly, in the following:

- solidification processing of metals and alloys;
- experimentation in fluid and heat flow;
- magnetohydrodynamics;
- image capture and analysis;
- physical and mechanical metallurgy.

A motivation and the ability to excel in science and in teaching are essential. Employment is to begin preferably on or before October 2022. EPFL is located next to Lake Geneva in a beautiful setting near the city of Lausanne. Salaries and working conditions are internationally competitive. The working language at EPFL is English (good skills essential), while a command of French is desirable, notably for teaching activities.

Applicants are expected to be about to finish their PhD degree, or to have earned their PhD within a few years. Applications should include a cover letter with a statement of motivation, curriculum vitae, list of publications, transcripts from all years of university study, and the names and addresses (but not letters) of at least three academic referees. The dossier should be submitted on the following web site, preferably by July 5, 2021 (applications will be received until the position is filled; however, screening and offers will begin July 5):

https://recruiting.epfl.ch/Vacancies/2428/Description/2.

