

The Laboratoire des Matériaux Avancés (LMA) now part of the Institut de Physique des 2 infinis de Lyon (IP2I) is a world renowned laboratory specialised in large very low loss optics. It is a unique facility doing coating for the most challenging applications as well as conducting research in materials for substrates and coating. LMA is located on the campus of the University of Lyon I, adjacent to the vibrant city of Lyon.

In the framework of the research on sapphire funded by the Breakthrough Program of the IDEX of Lyon, the LMA has opened a position for a:

## Optical research engineer

The successful applicant will upgrade an existing very high finesse Fabry-Perot cavity (Finesse ~350 000, 1.5m long) in the LMA clean room. In the new setup, the sapphire mirrors will be mounted on motorised stages to be able to study the optical losses as a function of the position of the incident laser beam. Correlations with surface roughness and direct scattered measurement will be made.

### Qualifications/Experiences

- A Ph.D. or equivalent professional experience in a related area
- Experience with Fabry-Perot cavities (cavity locking will be a strong advantage)
- Practice in automation of experimental setup
- A knowledge of Matlab even if not mandatory will be a plus
- Good communication skills and strong ability to work independently

### Employment conditions

- The position is first for 1 year which could be extended twice (total 3 years)
- The salary will be based on experiences according the University of Lyon I salary scale.

### Selection criteria

Candidates will be evaluated based on qualifications as assessed through their track record of accomplishment and assessed potential for creative and independent research. The start of the position is as soon as possible.

### How to submit your application for this position

- Applicants should send their CV (including a list of publications and a short summary of their scientific work) to Jerome Degallaix by e-mail: [j.degallaix@lma.in2p3.fr](mailto:j.degallaix@lma.in2p3.fr).
- They should also provide the contact details for two referees.

Review of applications will begin on first September 2020 and will continue until the position is filled.