Université Claude Bernard Lyon 1- Hosting offer for a MSCA Post-doctoral fellowship candidate

in **modelling phonon dynamics in high entropy alloys**

Host Organisation	**Université Claude Bernard Lyon 1**
Department	**Department of physics**
Laboratory	**Institute Light and Matter**
Website (lab / research team)	**https://ilm.univ-lyon1.fr/**
Supervisor Contact name	**Samy Merabia/Konstantinos Termentzidis**
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Host Organisation

The Université Claude Bernard Lyon 1 welcomes Marie Sklodowska Curie Postdoctoral Fellowships applications !

With 62 laboratories and more than 7000 publications per year, and leading French university in terms of the number of patents filed in collaboration with industry, Lyon 1 contributes to scientific and innovation progress in numerous fields: health, mathematics, IT, physics, chemistry, earth and space sciences, life sciences, etc. Creator of emerging knowledge and new technologies, the University is consolidating its research excellence on a global and international level by developing inter- and multidisciplinary approaches targeting the major challenges facing today society.

Host research lab/team

The Institute Light and Matter (ILM) is a leading research lab in Europe in advanced materials and optics, complex matter and out-of-equilibrium systems, nanosciences, optics, dilute media, and ultrafast processes, theory and modeling, and life sciences, health, and the environment.

The research team Modeling of Condensed Matter and Interfaces (**MMCI**) develops models of condensed matter and interfaces, at all scales from atoms to materials and samples, with numerical and analytical methods. Its activity combines model development and comparison to experiments along three axes: out-of-equilibrium interfaces, plasticity and failure, light and transport.

Hosting Offer

The **ILM lab** offers to host a MSCA Postdoctoral Fellowship candidate (typically a post-doc of less than 8 years research experience since PhD defence), submitting an application to the next MSCA-2026-PF call for proposals (deadline 09th of September 2026), interested to work on the following research topic:

-atomistic simulations of phonon dynamics in high entropy alloys

-development of machine-learning potentials for high entropy alloys

-thermoelectricity of high entropy alloys

The fellowship could last for 12 to 36 months, depending on the type of Postdoctoral Fellowship.

Supervision

The successful Marie-Curie Post-doctoral fellow will be supervised by CNRS profs. S. Merabia and K. Termentzidis at INSA-Lyon. She/he will also interact with our experimental collaborator, Dr. A. Nomine, at the Institut Jean Lamour in Nancy, France. Their research interests include modelling phonon dynamics in nanostructured and disordered systems using atomistic simulation tools (Molecular Dynamics and ab-initio Density Functional Theory).

Application process

Interested candidates are invited to contact us exclusively by email at samy.merabia@univ-lyon1.fr and konstantionos.termentzidis@insa-lyon.fr.

Make sure that you include the reference to this offer in the title of your email. Please attach a CV, a motivation letter, your MSc marks, **as well as a 1 page research proposal**.

Professional grant application support:

Candidates will receive the support of the supervisors, as well as online training from a professional grant application company, and advices from successful applicants, to prepare and submit their application with ILM as a host laboratory, to the next MSCA-PF call for proposals.