

POSTDOC OFFER

Context: The University Claude Bernard Lyon 1 is a partner of the European project IREL 4.0, started in early May 2020, bringing together more than 70 industrial partners and European laboratories in the field of Electrical Engineering and Electronics, to work together on the evaluation and optimization of the reliability of components and systems. Within this European project, a group of major French partners, federated around the company UMS (United Monolithic Semiconductors), a subsidiary of THALES and AIRBUS, develops novel technologies for heterogeneous integration, intended for the manufacture of multifunctional "SiP" micro-systems (System in Package). The major objective is related to a low-cost collective production of micro-systems, according to the principles and with the tools of micro-technologies, involving the processing of wafers, the integration of passive components and semiconductor chips on the wafer, and the protection of components and assemblies by polymer-based encapsulation.

Research project: In this context, the IMP laboratory is associated with the LMI laboratory to optimize the integration of polymer-based materials into this technological development. The major objective of this postdoc program will be to select appropriate polymer materials and characterize their physical properties (structural, mechanical, thermal, dielectric properties) and as well as their functional properties (sealing, accelerated aging behaviour), in order obtain polymer-based assemblies with enhanced performance.

Starting date: September 2022

Required Profile: PhD degree with strong skills in physical chemistry of polymers (more clearly marked in physics)

Application: CV + letter of motivation + letter of recommendation to anatoli.serghei@univ-lyon1.fr