

Post-doctoral or research engineer Position on RF front-end design

Applications are invited for a post-doctoral (m/f) or research engineer position in the "Integrated and Secure Systems" Chair of Labex Sigma-Lim for a period of 18 months.

The Labex Sigma-Lim "Laboratory of Excellence" emerges from a collaboration between XLIM Institute (mathematics, informatics, cryptography, electronics, microwave and photonics Institute) and SPCTS Laboratory (Science of Ceramic Processes and Surface Treatments).

More than 600 investigators (PhD. students, post-docs, technicians and researchers) work in a dynamical environment with modern equipment. The Labex Σ -Lim main objective is to find "specific ceramics, materials and components for integrated, secure and intelligent communication systems".

The "Integrated and Secure Systems Chair" promotes multidisciplinary research projects for which an overall system optimization is sought between the satisfaction of user needs and energy costs. Two projects are currently underway: Sensor network and RF front-end.

The RF front-end project proposes to realize and test a reconfigurable phased array with innovative phase shifters (injection locked VCOs) and a reduced number of active RF chains for Radio Frequency transmission. Mass, volume and energy consumption must be as low as possible. The demonstrator will be used as a proof of concept of the beam forming concept and will be used to propose further work in the frame of the Labex roadmap.

The candidate must have a PhD or an engineering diploma in RF design. An experience on array antennas is welcome. The candidate must master English (spoken, read and written).

The successful candidate will participate in the "RF front-end" project and will be responsible for RF design and research, realization of the integrated RF front-end demonstrator. He/she will participate to its tests. He/she will participate to the dissemination of research through publications and communications.

This work will be done in collaboration with the Chair holder, his assistant, project manager and research teams in the Labex Sigma-Lim laboratories.

Candidates are invited to submit a CV, a cover letter and a list of references to: sigma-lim@unilim.fr before July 13, 2016

Location: Limoges, France

Salary: around 2000 euros/month, depending on experience.