

Post-doctoral Position in Experimental Quantum Acousto-Optics

The **Quantum information & Quantum optics group of Stockholm University** (Sweden) and the **FEMTO-ST Institute (Besançon, France)** invite applications for a shared one-year post-doctoral position in the field of **experimental quantum optics and acousto-optics**.

We are looking for a highly-motivated candidate who will conduct the development of a quantum photonic platform, merging integrated optics and acousto-optical and phononic devices. The objective is to pave the way towards an integrated hybrid quantum platform where interactions between light and mechanical vibrations could be further explored and used to provide signal processing devices operating in the quantum regime.

The successful candidate will conduct the technological implementation of the integrated platform and participate to the design, the fabrication and the characterisation of the required photonic and phononic components, in close connection with both experimental and theoretical groups located in the two Institutions. He/She will have access to state-of-the-art technological facilities within the AlbaNova Nanofabrication Facility in Stockholm and within the MIMENTO Technology Center, one of the large French technological facilities belonging to the Basic Technology Research (BTR) network in Besançon.

Requirements and Skills

Candidates must hold a PhD In Physics, Applied Physics, Engineering or closely-related discipline. Applicants are expected to be skilled experimentalists with a strong experience in working in a clean-room environment for the development of micro-nano-fabrication processes. Relevant experience in the design and characterisation of photonic devices is a clear advantage. The candidates are expected to show initiative, teamwork and excellent writing and communication skills in an international environment.

Funding Information

Contract type: Temporary.

Expected starting date: From October, 1st 2020.

Contract duration: 1 year, as of starting date.

Salary: 2850€ gross salary per month.

Funding Source: EUR EIPHI / University of Stockholm.

Application and Contact Information

Applicants shall send a detailed CV and a statement of purpose to Dr Sarah Benchabane (CNRS/FEMTO-ST, sarah.benchabane@femto-st.fr) and to Prof. Mohamed Bourennane (Department of Physics, University of Stockholm, boure@fysik.su.se).