



Spin-ION
TECHNOLOGIES

The next memory revolution

OPEN POSITIONS IN APPLICATION OF ION BEAMS FOR ENGINEERING SPINTRONIC MATERIALS

SPIN-ION technologies (www.spin-ion.com), a spin-off company from the University of Paris-Saclay/CNRS, provides a full suite of ion beam processes and equipment to tailor the structural and magnetic properties of thin magnetic films at the atomic level and improve their performance for applications such as Magnetic Random Access Memories (MRAM). In order to sustain its R&D roadmap development toward the commercialization of its solutions on the MRAM market, Spin-Ion Technologies offers **2 permanent engineer positions**.

Position 1: Process engineer in materials science

The main tasks of this position concern the development and optimization of ion beam processes to enhance the performance of advanced magnetic materials with perpendicular magnetic anisotropy for MRAM applications. The magnetic materials are provided through industrial partnerships, the ion beam process is delivered by an advanced prototype developed by Spin-Ion technologies and extensive structural, magnetic and electrical characterizations will be performed.

Spin-Ion technologies is seeking a high-level junior scientist, expert in materials science and/or ion beam process, with a very good knowledge in structural and magnetic characterizations, who is willing to contribute to existing business activities within the start-up as well as to open new directions in applications of ion beams in spintronics.

Position 2: Product development engineer

Spin-Ion technologies targets the commercialization of ion beam facilities to academic and industrial R&D laboratories. The aim of the position is to pilot the design and development of ion beam facilities in connection with suppliers expert in ion beam technology. This includes the monitoring and management of the design, development and manufacture of the equipment through installation and final commissioning as well as the research of potential customers.

Spin-Ion technologies is seeking a high-level junior or senior engineer expert in UHV solutions and ion beam technology including ion sources, extraction system, diagnostics, mechanical design, ion beam calculations, vacuum technology, specification report, qualification and tests, who is willing to contribute to existing business activities within the start-up as well as to open new directions in applications of ion beam equipment.

Qualifications

Candidates may be engineers with significant experience (5-7 years) or PhDs with a post-doctoral experience (2-5 years). The ability to conduct successful R&D activity in a tech start-up environment is essential. The candidate must be able to demonstrate a previous productive and creative experience, propose and conduct original research and have the ability to set new projects and manage research collaborations with academic and industrial partners.

While no candidate will embody every quality, the successful candidate will bring many of the following professional qualifications and personal attributes:

- PhD or engineers in the field of spintronics, engineering, ion beam physics, instrumentation or a comparable field in applied science.
- Research experience in experimental ion beam physics.
- Experience in structural and magnetic characterizations of thin films.
- Basic knowledge in MRAM technologies.
- Academic work experience abroad is desirable but not mandatory.
- Good English communication skills, and optimistic / enthusiastic to the work, and good teamwork.
- Good at managing projects and multiple tasks.
- Commitment, flexibility and leadership competence.
- A strong passion for entrepreneurship and challenges.

Inside Spin-Ion technologies

Working at Spin-Ion Technologies will provide a great opportunity to join a talented start-up company and learn new technological and business knowledge in a very attractive working environment. Besides, the start-up team will support your career development which will include but not be limited to, process and equipment management, advanced MRAM materials and devices development, new products introduction, business strategy, etc. Your efforts and innovation ideas would be fully recognized.

Spin-Ion was selected among the 10 most promising deep tech company in France in 2019 and awarded the “Grand Prix I-lab” from the French government. The start-up is hosted by the Center for Nanoscience and Nanotechnology (C2N) at Palaiseau (<https://www.c2n.universite-paris-saclay.fr/en/laboratory/presentation/>), France and benefits from very large facilities including one of the largest clean rooms in Europe. Spin-Ion technologies is located on the campus of University of Paris-Saclay

<https://www.universite-paris-saclay.fr/en>), one of the top education, research and innovation cluster in the world.

If you are excited about the challenge of building something new and working in a start-up environment, please send a resume to dafine.ravelosona@spin-ion.com