
Senior R&D Scientist/Engineer in ALD Materials & Processes

Location: Copenhagen, Denmark.
Full-time on-site position (no remote work)
Travel: Expected <20% of work time
Reports to: Head of Technology R&D, CTO
Starting date: ASAP

Would you like to help us revolutionise the development and manufacturing of electronic, photonics, and optics industries? Welcome to ATLANT 3D – we would like to invite you for an amazing journey where you will be a part of a team working towards disrupting 60 years of micro and nanofabrication technologies and systems. We offer you a **once-in-a-lifetime experience**. What we develop is unique, and we are incredibly excited to make a difference.

We are looking for a senior R&D Scientist/Engineer in ALD Materials and Processes to lead the development of new process recipes based on ALD chemistries and related technologies for ATLANT 3D.

You will join a highly skilled and dedicated team of engineers and scientists and become a key participant in developing innovative solutions within nanotechnology. Cross-functional collaboration is the key to our success. We believe in combining theory and simulation with hands-on prototyping and testing.

What is the job about

You will lead and be responsible for innovation, prototyping and demonstration of new process and materials technologies, for example, the development or adaptation of ALD process chemistry to develop a working patterned ALD process for a new material system for ATLANT 3D's products. You will participate in all phases of core technology development, application, customer projects and product development and implementation of new products in production, as well as analyse production and quality issues to identify root causes for improving existing products.

This involves independent research, working with external experts and vendors, devising and executing experimental plans for demonstrations, working with patent attorneys on securing intellectual property protection, and working with Engineering on the technology transfer and integration into the products.

Ultimately you will be driving the performance improvements of ATLANT 3D's products that rely on expanding the materials and processes that can be processed and the quality of the process results.

What will be your responsibilities?

As R&D Scientist/Engineer in ALD Materials and Processes, we would expect you to be a driver of innovation drawing on input from the CTO, the Head of Technology R&D, augmented by the market road map as defined by the teams under the CPO to expand the technology leadership of ATLANT 3D. As such, this also includes the drive toward enhancing the company's IP portfolio as defined by the company's IP executive committee.



Your overall responsibilities:

- Develop and implement materials and processes R&D plans based on atomic layer processing methodologies. Perform independent research on chemistry and processes to be the world expert in this area.
- Collaborate with Engineering and Application teams to facilitate the state-of-the-art development of novel materials and processes.
- Provide guidance and mentorship to other colleagues and junior specialists.
- Devise innovative new concepts and solutions for process development of new material systems and applications based on the highest, most impactful customer needs.
- Collaborate with Engineering and Application teams to integrate R&D state of the art activities immediately into equipment product and applications development with clear goals and objectives and successfully transfer R&D project results with adequate documentation.
- Work with Engineering to ensure R&D projects consider necessary in compliance with regulations and standards.
- Develop analytical and manufacturing methodologies for quality control.
- Working with vendors to procure and install new ALD and other relevant equipment and install and maintain ATLANT 3D Nanofabricator systems.
- Lead external R&D engagements with academic and industrial partners.
- Design DOEs, analyse the data, and report the key results as reports, process development documents, summaries of results and present during meetings.
- Promote and support innovation to facilitate IP generation as appropriate.

Talent & professional capabilities

You will be at the core of developing the R&D roadmap for new materials and process technology for required material groups. You will work with the Business Development and Marketing department to align materials process R&D projects with validated customer requirements for the equipment product and applications development roadmaps.

- You have a passion for technical leadership and innovation and are the world expert in ALD materials and process technology, ALE, MLE and other relevant processes.
- PhD in Materials Science, Chemistry, Applied Physics, Electrical Engineering or similar fields.
- 5+ years of experience in ALD technology, process development and optimisation techniques.
- Expertise in physical characterisation techniques (ellipsometry, XPS, FTIR, Auger, SIMS, EDX, XRD)
- Experience working in an industrial or equivalent R&D environment (3+ years).
- Experience in the Design of Experiments (3+ years).
- Preferred background in industrial applications development of sensor or optoelectronics, photonic devices and processes.
- Preferred experiences in atmospheric spatial ALD process and equipment development.
- Understanding of safety requirements in the lab.
- Ability to work with various international partners, suppliers, customers, and associated travels.
- Experience with a variety of ALD systems and related equipment.
- Proficiency with computer systems and data analysis.
- Full proficiency in verbal and written English and MS Office 365 tools is necessary.



People skills & competencies

- You are easily self-motivated and proactive in collecting inputs and addressing issues timely.
- You are results-driven, eager to create a sense of urgency for R&D projects and make optimal use of available resources to produce R&D results.
- You can work independently as well as a part of the team, manage multiple projects simultaneously and drive innovation
- A well-developed judgment and strong decision-making skills allow you to work with other team members independently to produce results.
- A result-driven mindset and the ability to make optimal use of available resources to produce R&D results.
An open-minded mindset and creative as well as critical thinker.
- Excellent communication skills, and you feel comfortable engaging with stakeholders across all functions and cultures – both internally and externally
- You are self-driven and have chosen never to become complacent in life but aim to develop yourself and the people around you every day. You are also a natural challenger, not afraid to raise your opinion and challenge the status quo
- You know success combines hard work, solid priorities and high quality.
- You know that working as a team and supporting a solid feedback culture will get us all where we want to go – faster!

We offer you the following:

- The opportunity to become part of a company poised to revolutionise the development and manufacturing of the electronic, photonics, and optics industry.
- An opportunity to have influence and make a significant contribution to a young and fast-growing company.
- International team collaboration and a great place to work where we like to be together
- Opportunities and support to advance your personal and career.
- Working with state-of-the-art, most advanced technologies and highly innovative customer projects.
- Interactions with international partners, suppliers, customers, and associated travel.

ATLANT 3D Nanosystems is a unique workplace driven by exceptional, innovative people. Each team member is unique in our company and contributes to building an international, intelligent, diverse and positive work culture nurtured by a sharp vision and authentic engagement. By joining us, you will have the opportunity to enhance your skills and develop and drive impact. As an agile organisation, we aim to empower our employees with flexibility, transparent management, and inspiring learning. And then we love and support you when you develop into a new role on your career path.

We love passionate and motivated people (like you!) to help us bring innovative solutions, drive impact and be a part of a unique, exciting growth journey.

Ready to start an exciting journey at ATLANT 3D Nanosystems? Be curious and read about us [here](#). If you want to know more about the position, please get in touch with the Head of People & Culture, Susie Sandberg, by [email](#) or mobile at +45 4290 9097.

