R&D Semiconductor Materials Scientist

About Topsil GlobalWafers A/S

Topsil GlobalWafers A/S is a global leader in high-purity silicon production, specialising in Float Zone (FZ) crystal growth for advanced power electronics. Our crystals are used in demanding applications such as renewable energy, electric transportation, medical equipment, and high-efficiency industrial systems—where reliability and material quality are essential.
Our mission is to push the boundaries of ultra-pure silicon through precision engineering, innovative research, and close collaboration with customers and partners worldwide. At Topsil, we believe that technological progress happens when skilled people are empowered to explore, experiment, and grow.

About the Role

We are expanding our Research & Development team (R&D) and are seeking an R&D Semiconductor Materials Scientist.
In this role, you will work hands-on with experimental development related to FZ crystal growth, perform data-driven analysis, and contribute to the continuous improvement of crystal quality and production processes in a global high–tech environment.
You will play a key technical role in developing next-generation FZ crystals and advanced material solutions for the global power electronics industry.

Key Responsibilities

- Design, execute, and evaluate experiments related to FZ crystal growth
- Perform detailed material analyses on silicon ingots and wafers, including crystalline defects, impurity control, and process-structure-property relationships
- Use statistical tools and advanced analytical methods to understand material performance and process variation
- Collaborate closely with production, quality, and engineering teams on development initiatives
- Contribute to the development of new silicon materials, process improvements, and technology innovation projects
- Prepare reports, presentations, and technical recommendations based on your findings.

Your Background

You enjoy working with hands-on experimental development and structured data analysis, and you are motivated by understanding how materials behave in real production and crystal-growth environments. You are curious, proactive, and comfortable working both independently and collaboratively.

We would love to hear from you if you have:

- A Master’s degree or higher in materials physics, physics, semiconductor engineering, nanoscience, chemistry, or a related field
- Practical experience with experiments, measurements, or process-related development
- Solid analytical skills and experience with data processing
- Familiarity with statistical or analytical tools (e.g., JMP, Python, R, Matlab, or similar)
- Experience with semiconductor materials, wafer processing, crystal growth, or related processes is preferred
- A proactive mindset and motivation to work in a global, fast-moving high tech environment.

What Topsil Can Offer You

- A flexible and trust-based work environment
- Professional and personal development opportunities
- A flat, collaborative organization
- A social and inclusive community with activities such as a running club and events organised by our staff association
- Pension at PFA with a firm paid amount of 8,9 % and a self-paid amount of 4 %.
- Health insurance – also offered by PFA.

How to Apply

We will conduct interviews regularly so if you are up for the challenge, please send us a cover

letter, CV, and any other relevant documents as soon as possible.
If you have any questions, you can reach out to Ane Kristine Baden, Project Leader, akb@gw-topsil.com
We look forward to hearing from you!

About Topsil

Topsil is an innovative manufacturing company and a leading supplier of ultra-pure silicon to the global semiconductor industry. The company has business partners worldwide, and also collaborates internationally with universities and private organizations on research and development.
Topsil's ultra-pure silicon is primarily used for the most demanding applications, and our products are developed based on years of experience and significant investments in new technology, facilities, and equipment. The products are used in, among other things, electric vehicles, high-speed trains, the power grid, wind turbines and other green technologies, as well as for more specialized applications within, for example, the medical and detector industries.
There are exceptionally high-quality requirements for our products and production processes, and we work, among other things, in accordance with the IATF 16949:2016 Automotive Quality Standard and are ISO-certified in environment, energy, and occupational health and safety.
We are now more than 240 employees, all gathered at our site in Frederikssund, where we keep production running 24/7. With us, you will have daily contact with a broad diversity of people and professions. We appreciate a good laugh and have an informal tone, with respect for the individual.
You can read more about us at *www.topsil.com* and on our LinkedIn:
https://www.linkedin.com/company/topsil/