

## Press release

### **Topsil in scientific project to further investigate the potential for nitrogen doped float zone material**

Topsil and Polish-based Institute of Electronic Materials Technology (ITME) have teamed up in a scientific project scoped to gain additional insight into nitrogen behaviour in float zone silicon. Under the name of NitroSil, the project is to further investigate nitrogen doping float zone technology and provide a better understanding of nitrogen behaviour in this type of material. The project will, moreover, explore the possibility of developing a new kind of silicon for high-energy particle detectors.

R&D Manager in Topsil, Theis Leth Sveigaard explains: "By expanding our understanding of nitrogen behaviour in float zone silicon, we will be able to gain new insights that will help us to further enhance our production capability. Broadly speaking, this is an example of a research programme which will be beneficial to Topsil, as it aids us in our quest to continuously improve our products. Although this certainly is a niche area, it builds upon our existing technology platform. With a successful launch of a new kind of silicon, we could become a unique supplier of this type of product".

The ultimate goal for the research project is to - in the future - be able to introduce nitrogen enriched float zone silicon for high-energy particle detectors with increased radiation hardness. This could help research institutions such as CERN (The European Organisation for Nuclear Research), when conducting particle accelerator research, as possible increased radiation hardness will prolong the durability of the detectors applied.

Theis Leth Sveigaard comments on his initial project expectations: "We might ultimately be able to develop a new silicon product on the basis of our research which would be great. Before getting there, however, we have to learn more about nitrogen behaviour and will focus on expanding our capabilities on products already in our portfolio."

The NitroSil project is mainly funded by the National Centre for Research and Development under the Polish Ministry of Science and Higher Education, and partially by Topsil. The project will run through 2017. For further information see [www.nitrosil.com](http://www.nitrosil.com) or contact Topsil Project Coordinator, Michael Kwestarz, (M. Sc. Eng.) [mk@topsil.com](mailto:mk@topsil.com) / Topsil Project Manager, Christian Hindrichsen, (Ph.D.), [cch@topsil.com](mailto:cch@topsil.com).

#### **Topsil in brief**

Topsil is a world leading supplier of ultrapure silicon to the global semiconductor industry. Engaging in long term relations with customers, Topsil focuses on premium quality, an efficient production process and a safe delivery of products. Silicon is used in electronic components to aid conversion and control of electrical power. Topsil provides ultrapure silicon mainly for the most demanding purposes, based on extensive knowledge and significant investments in new technology, facilities and equipment. Topsil is headquartered in Copenhagen Cleantech Park, is established in Denmark, Poland and Japan, and has sales representation in Asia and the US.