

An innovative solution to metal corrosion



Key words: **anti-scaling, anti-fouling, surface solution**



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CEO of SiOx Aps | Main product: Nanomel

Aim

To prevent metal surfaces from scaling and fouling

EIT Community connection

EIT Climate-KIC Accelerator (EIT Climate-KIC Nordics)

The project

The idea

SiOx is based on the knowledge that with just a small change to a heat transfer surface, scaling and fouling can be prevented. We created Nanomel, a thin film that provides a dense and flexible silica-on-metal coating that effectively protects the metal substrate.

Inspiration

Other projects have addressed the problem of scaling and fouling, but none was able to fabricate a thin coating suitable for heat transfer surfaces. We recognised this as an ideal solution.

Unique selling points

For heat exchangers, it is essential that the coatings are thin. They must also fulfil various requirements for installations related to drinking water and food.

EIT Community support

The EIT Community supported us with networks, masterclasses, funding and coaching. It's all been extremely beneficial to building our company, especially when developing the business case and establishing contacts.

Teamwork

We are two engineers working full-time. I have a Ph.D. in electrochemistry and materials

science and am the CEO. I use my networking and presentation skills to be the 'face' of SiOx. I keep a strong focus on bringing the technology from lab to market.

Alexander Bruun Christiansen, Ph.D. in physics and nanotechnology, is our R&D Engineer. He pursues a highly scientific approach to quickly identify the challenges and opportunities for potential applications of the technology.

In addition, SiOx has a network of collaborators, including the Technical University of Denmark, Alfa Laval and Elplatek.

Venture development

We have already demonstrated the potential of Nanomel in the lab, and are now working on market installations in district heating and biogas. We are always looking out for new markets to enter.

The nominee

The beginning

I have always been interested in nature and preserving our environment. The use of abundant non-toxic materials is essential for the sustainability of our planet.

Entrepreneurial flair

I think the key to becoming a successful entrepreneur is will, talent and networking skills.

Learning from experience

Be ambitious. Always.

Best memory

Our best memory was when we opened the test heat exchanger in Alfa Laval and realised the huge difference that can be made.

Ideal advisor

Elon Musk, CEO and co-founder of Tesla Motors. He is trying to redefine transportation on land with electric vehicles and send humans to other planets.



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