

We are looking for an MSc thesis student who will help optimize our luminescent coating

MSc thesis – Delft
Starting January/February

Please apply for this job if you want to:

- Make a difference by changing the perspective.
- Be part of the 30 most promising tech pioneers worldwide and most promising start-ups in the Netherlands (according to World Economic Forum).
- Work for a company who recently secured EUR 1.5 million of external funding and a EUR 2 million EU subsidy to help fuel our growth.
- Join an enthusiastic, ambitious team full of fun and creativity.
- Enjoy a free daily lunch and weekly bootcamp.
- Work in the coolest building of Delft with a rooftop terrace and glass pavilion.

The company

At PHYSEE we have a thorough belief in sustainable innovation without compromise. Innovation which brings added value for our customers, without compromising on aesthetics, technology or costs. Holding on to this belief has led us to design and produce the world's first fully transparent, energy and data generating windows; PowerWindow and SmartWindow.

Since we focus on building a better future we are determined to expand our young and ambitious team, following the principles of our company culture, which is described as '*a place where free-spirits can flourish*' by one of our valued PHYSEEnairs.

The job

Fascinated about applying your scientific knowledge to real-life innovative products? Within PHYSEE's research department we develop luminescent coatings for the next generation & more powerful PowerWindow+. By applying our patented coating on glass, sunlight is absorbed and subsequently re-emitted towards the edges of the window where it is converted into electricity by PV-cells. During this thesis you will be a researcher at the forefront of sustainable innovation. You will be working with a lab-scale industrial coating technique - magnetron sputtering, and conducting research in TU Delft's advanced luminescence labs.

Your mission

- Optimize our patented SiAlON:Sm²⁺ luminescent coating for the development of a sustainable energy generating window
- Deposit thin-film coatings with magnetron sputtering and thorough characterization of their morphology, luminescence and optical properties using a variety of experimental (and computational) techniques
- Consider the industrial applicability as well as preserving an academic level
- Preferably publish a scientific publication about your work with our help

Requirements and skills

- MSc student in chemistry/physics/material science
- Capable of working independently & taking ownership of your project
- Enthusiastic to work with various experimental equipment
- Basic knowledge in scientific programming for data analysis (preferably Matlab and/or Python)
- Preferably knowledge of luminescence and optical measurements (Fluorescence spectroscopy, UV-VIS spectroscopy)

Interested? Apply before 31/12/18 by sending an e-mail with your CV to Frédérique at job@physee.eu. For any questions related to the project please contact Sadiq at Sadiq@Physee.eu.

We are looking forward to seeing you!