

Séminaire

Le lundi 14 février 2022, 10h

[MS Teams](#)

Le séminaire se déroulera en anglais.

Seminar

Monday, February 14, 2022, 10 a.m.

[MS Teams](#)

Sustainable solar energy

Mirjam Theelen, TNO/Solliance

Abstract: Solar energy is an important source of renewable energy and an unmissable building block for a climate neutral energy supply. To provide sufficient renewable energy, application at gigantic scale is necessary. This is only possible and desirable if solar energy is in every aspect sustainable for people and planet. Although solar energy is already very sustainable, there is still room for further improvement. The CO₂ footprint of solar energy, especially related to the production (often based on energy from fossil fuels), needs to be reduced further, the use of materials should be decreased, and solar panels should become completely circular, in order to save scarce materials and CO₂ emission and prevent waste. Moreover, the solar panels should be optimally introduced in our surroundings, for optimal integration into nature and our environment. Since the consequences of climate change get more and more clear, we really need to make sustainable solar energy available at gigantic scale.



Bio: Mirjam Theelen has studied Chemistry at the Radboud University Nijmegen in the Netherlands. After MSc graduation in 2007, she started working as a researcher at TNO/Solliance. Next to her work, she obtained her PhD degree from Delft University of Technology in 2015, studying the reliability of CIGS solar cells. She is still working as a senior research scientist at TNO/Solliance, focusing on predicting, understanding, and improving long term stability of thin film photovoltaic devices, and the development of advanced methods for their lifetime and reliability studies. Since 2019, she has also been studying the sustainability of photovoltaics. In 2021, she was one of the co-authors of a Dutch paper and speaker on a webinar on this topic. Her presentation is based on this work.

TOP-SET est un programme de formation FONCER du CRSNG en puissance optoélectronique ayant pour but de façonner une cohorte de personnel hautement qualifié détenant des connaissances approfondies en systèmes optoélectroniques pour rejoindre les rangs d'équipes de recherche et développement.

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