

NSERC CREATE  Un programme  
FONCER du CRSNG

## Séminaire

Le vendredi 20 octobre 2023, 13h

ARC 233 et [MS Teams](#)

\*Le séminaire se déroulera en anglais.\*

## Seminar

Friday, October 20, 2023, 1 p.m.

ARC 233 and [MS Teams](#)

### Historical and future developments of III-V technologies at AZUR SPACE Wolfgang Guter, AZUR SPACE Solar Power

**Abstract:** Today's satellite markets place unique demands on solar power solutions, evaluated in metrics such as W/m<sup>2</sup>, kg/W and \$/W. The latest generation of metamorphic quadruple junction solar cells 4G32 extends AZUR SPACE's product portfolio to highest performance levels beyond the 3G30 family. Scientific missions such as ESA's JUICE mission or NASA's Europa Clipper are powered by AZUR's LILT products. But also concentrator photovoltaics (CPV) is seeing a renaissance as technology supporting the world's need to provide renewable energy and green hydrogen. These markets can be supplied by AZUR's CPV solar cells and enhanced Fresnel modules. Finally, AZUR used its core III-V technologies to develop product lines in the LED segment, for Laser Power Converters and Power Diodes.

This presentation will discuss the historical and future developments of technologies and products for various AZUR platforms.

**Bio:** Dr. Guter studied physics at the University of Freiburg, Germany and at the University of New South Wales, Australia. He obtained his PhD from the University of Konstanz and Fraunhofer Institute for Solar Energy Systems, where he developed triple-junction solar cells and achieved world record efficiencies for CPV and for GaAs. For his research, he was awarded scholarships from Universitas21 and the German Environmental Foundation and received the German Thesis Award from the Körber Foundation. In 2017, he received his MBA degree with focus on Innovation in R&D from the German Graduate School of Management and Law. After his education, he served AZUR SPACE Solar Power in several positions as R&D engineer, Head of Product Management and Director of Technology, where he led the development of AZUR's solar cells for space and CPV applications. He was also responsible for the company's diversification into opto- and power devices. In his current role as Director of Marketing, he is responsible for designing the company's future roadmap in technology innovation, product design and growth.



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 joindre les rangs d'équipes de recherche et développement.

Pour de plus amples renseignements sur TOP-SET, veuillez consulter [create-topset.eecs.uottawa.ca/fr/accueil/](https://create-topset.eecs.uottawa.ca/fr/accueil/).

NSERC CREATE Training in Optoelectronics for Power: from Science and Engineering to Technology (TOP-SET) is a training program that aims to form a cohort of highly qualified personnel with comprehensive understanding of optoelectronic systems, capable of joining advanced R&D teams.

For further details regarding TOP-SET, go to [create-topset.eecs.uottawa.ca](https://create-topset.eecs.uottawa.ca).



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