Wednesday, October 10, 2018

WEBINARS PHOTONICS MEDIA photonics.com

Expand your knowledge. Grow your career.

Join us for a FREE Webinar

A Thermally Tuned PIC with External Light Coupling: Design and Layout

Tuesday, October 23, 2018 1:00 PM - 2:00 PM EDT

Register Now

Presented by

SIMULIA

About This Webinar

Photonic Integrated Circuits (PICs) are becoming increasingly important in many areas, including communications, remote sensing, and medical applications. Designers active in this field rely on simulation to study and optimize a circuit, even before the prototype stage. Simulating such circuits can be challenging due to their large size in relation to the wavelength of interest and the need for multiphysics simulation. Another important challenge in all PICs is efficiently coupling external light into the chip. The two major methods are surface coupling and edge coupling.

In this eSeminar, Dr. Ali Kabiri from 4Catalyzer will present how a diffraction grating coupler for surface coupling can be designed and optimized using a combination of Luceda Photonics IPKISS and CST Studio Suite. High-performance computation is used to speed up simulation of the ultralarge simulation domain and find the optimum performance. This eSeminar will also show how parameters characterizing active devices, such as a thermally tuned ring resonator, can be automatically extracted from simulation using a similar workflow.

About the presenters:
Dr. Ali Kabiri is currently the lead of photonics design at 4Catalyzer Inc. He received his Ph.D. from the University of Waterloo department of electrical engineering and computer sciences in 2010 on metamaterial and its application on microwave frequencies. He performed a postdoctoral fellowship at Harvard University at the School of Applied Sciences and Engineering (SEAS), where his main research areas were in nanoplasmonics and nanophotonic structures and optical metamaterials at visible wavelength. He is a member of The Optical Society (OSA) and a technical reviewer for several journals.

Pierre Wahl co-founded Luceda Photonics in 2014 where he is in charge of sales, support, and training operations. At Luceda, he trains and supports R&D teams of major corporations, research institutes, foundries, and universities in China, North America, and Europe. He completed his Ph.D. in optoelectronics at the Free University of Brussels and Stanford University on ultralow energy optical interconnects in 2014. Wahl obtained his master's degree in photonics from the University of Ghent and the Free University of Brussels in 2010. He has co-authored multiple journal publications and delivered various talks around specialized design, simulation, and optimization techniques used in integrated photonics.

Frank Scharf is a SIMULIA technical sales director with a focus on optical applications. Scharf obtained his Ph.D. in electrical engineering from Ruhr-Universitaet Bochum, Germany. During his graduate studies, he focused on modeling and simulating the plasma sheath in high-intensity discharge lamps. He joined CST in 2008 and transferred to CST of America in 2009.

Who should attend:
Photonics design engineers, photonics research engineers, R&D hardware engineers, and PIC development engineers will learn from this in-depth overview on how to design thermally tuned PICs. You will learn about the scope of CST Studio Suite and how you can benefit from its use.

About SIMULIA:
SIMULIA is a market leader in providing 3D EM field simulation tools that enable users to explore real-world behavior of product, nature, and life. Its solutions, offered through a global network of sales and support staff and representatives, are used globally by market leaders in a diverse range of industries, including aerospace, automotive, defense, electronics, health care, and telecommunications.

Mark Your Calendar

Date: Tuesday, October 23, 2018

Time: 1:00 PM - 2:00 PM EDT

Space is limited. Reserve your Webinar seat now at: https://attendee.gotowebinar.com/register/2516234952953520643

After registering you will receive a confirmation email containing information about joining the Webinar.

SYSTEM REQUIREMENTS

PC-based attendees
Required: Windows® 10, 8, 7, Vista, XP or 2003 Server

Mac® -based attendees
Required: Mac OS® X 10.6 or newer

Mobile attendees
Required: iPhone® , iPad® , Android™ phone or tablet, Windows 8 or Windows Phone 8

More from Photonics Media

Upcoming Webinars

- Protective Coatings Extend Optics Lifetimes, 10/10/2018 1:00:00 PM EDT
- Computational Imaging: Using Hardware and Software Together to Design High-Resolution, Light-Efficient Imaging Systems, 10/16/2018 1:00:00 PM EDT
- Continuously Variable Filters for Spectroscopy, HSI, and Fluorescence Diagnostics, 10/18/2018 10:00:00 AM EDT

Archived Webinars

- Green Light on Lidar: Developing Low-Cost Systems for Autonomous Vehicles
- Emerging Organ Models and Organ Printing for Regenerative Medicine
- Imaging Applications in Quantum Research