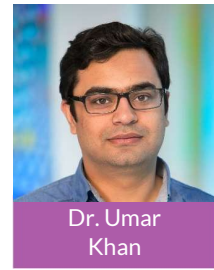


Program: Day 1 (16.08.2022)

Module:
Learn how to design a silicon photonic integrated circuit



Element	Speaker/Trainer	Where?	When?
Welcome	Roel Baets	Room Allan Turing , iGent Tower, Floor 1	09:00 – 09:10
Program and Housekeeping	Abdul Rahim		09:10 - 09:20
Short introduction to silicon photonics	Wim Bogaerts		09:20 – 10:00
Tutorial: <ul style="list-style-type: none"> • Concept of process design kit (PDK) • How to design silicon photonic ICs? • Compact models and circuit simulations 	Umar Khan		10:00 – 10:30
Hands-on: Designing a simple silicon photonic IC	Umar Khan		10:30 – 12:30
Hands-on: Designing a simple silicon photonic IC	Umar Khan		1:30 – 5:15
Quiz	Umar Khan		5:15 – 5:30



Available in the meeting room

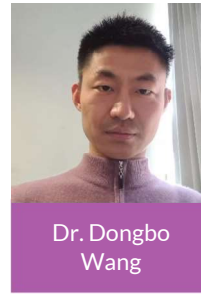


12:30 – 1:30 PM at Floor 12

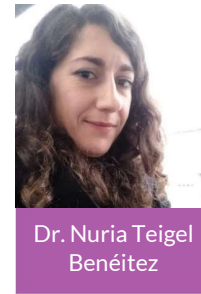
Program: Day 2 (17.08.2022)

Module:

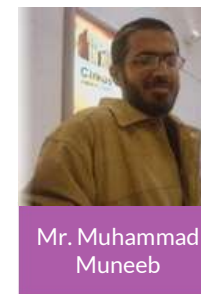
Learn how to design a silicon photonic integrated circuit



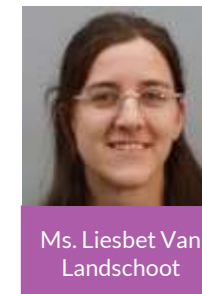
Dr. Dongbo Wang



Dr. Nuria Teigel Benéitez



Mr. Muhammad Muneeb



Ms. Liesbet Van Landschoot



Prof. Gunther Roelkens

Element	Speaker/Trainer	Where?	When?
Tutorial: Overview of silicon photonics chip fabrication in a CMOS fab	Dongbo Wang	Room Allan Turing , iGent Tower, Floor 1	09:00 – 10:00
Demos: <ul style="list-style-type: none"> Clean room safety Exposure to different silicon photonics platforms 	Muhammad Muneeb, Nuria Teigell Beneitez	Tech. Park building 123 (Clean room building)	10:30 – 12:00
Hands-on: <ul style="list-style-type: none"> Sample preparation (cleaving, cleaning, spin-coating) E-beam exposure of the design from Day 1 Reactive ion etching of the exposed and developed samples 	Muhammad Muneeb, Nuria Teigell Beneitez, Dongbo Wang, Liesbet Van Landschoot	Tech. Park building 123 (Clean room building)	1:00 – 4:30
Tutorial: Laser co-integration with silicon photonics	Gunther Roelkens	Room Allan Turing , iGent Tower, Floor 1	5:00 – 6:00
Quiz			6:00 – 6:15
Group Dinner		In a local Ghent Restaurant	7 PM – 10 PM



Available in the meeting room



12:30 – 1:30 PM at Floor 12

Program: Day 3 (18.08.2022)

Module:

Learn how to characterize a silicon photonic integrated circuit



Dr. Jing Zhang



Mr. Ewoud Vissers



Mr. Hong Deng



Dr. Maximilien Billet



Dr. Laurens Bogaert

Element	Speaker/Trainer	Where?	When?
Hands-on: <ul style="list-style-type: none"> Execute and optimize coupling of light in and out of a chip, both horizontally and vertically (single fiber or fiber array) for different application wavelengths <ul style="list-style-type: none"> Execute the measurement of a simple silicon photonic circuit (for example, a ring resonator or an MZI) Test a PIC with optical and low-speed electrical probing (for example, by using thermal heaters) 	Jing Zhang, Ewoud Vissers, Hong Deng	Measurement rooms, iGent Tower, Floor 4 Scheme: - By dividing the participants into three groups and rotating them among the three hands-on sessions	09:00 – 12:30
Hands on: <ul style="list-style-type: none"> Test a PIC with optical and high-speed electrical probing Characterization of a laser integrated on a silicon photonics chip 	Laurens Bogaert, Maximilien Billet	Measurement rooms, iGent Tower, Floor 4	1:30 – 4:30
Demo: <ul style="list-style-type: none"> analyze the measured data for chip fabricated on Day 2 			4:30 – 5:00
Quiz			5:00 – 5:15



Available in the meeting room



12:30 – 1:30 PM at Floor 12