

Workshop on Challenges and Novel Approaches for Microassembly in Microtechnology and Photonics

When it comes to microassembly, the fields of microtechnology, microelectronics and photonics have to face similar challenges.

For example, integrated photonics is a rapidly emerging field with applications such as optical fiber communication, automotive, quantum communications, etc. However, integrated photonics requires highly precise assembly processes to connect the waveguides with the optical components (such as lasers, filters, modulators, photodetectors, etc.).

Also, in microtechnology/microelectronics, novel trends such as e.g., in Photonics (LED, Lasers, Detectors, Sensors, and Imaging devices), or for Optical Communication Systems and Components (fiber related) or Quantum Medical Endoscopes require better precision, smaller integration and a speed less than 1 sec per move.

In this joint workshop, organized by the two Innovation Boosters Microtech and Photonics, Ciposa SA and FEMTOprint SA, we would like to bring together experts from different fields to jointly identify needs and possible new approaches in the field of microassembly.

This workshop aims for both, partners seeking an innovative solution and potential technology providers. Participants will also benefit from insights on current technology topics. This will be followed by group discussions where questions will be explored in more depth and potential areas of need and solutions will be discussed.

Furthermore, you will have the opportunity to network with potential project partners and, ideally, start a collaboration project that can be funded by the Innovation Boosters Microtech and Photonics.

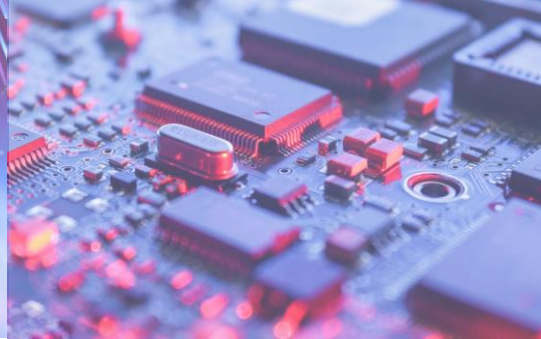
To get the most out of this workshop, describe your need/challenge/problem in the field of microassembly already when you register!

Date: Thursday, 16th of March, 10:30 – 17:30

Place: Ciposa S.A. Rouges-Terres 61 2068 Hauterive

Program

10:00	Arrival
10:30	Welcome & Introduction into the Workshop by Joëlle Tosetti and Selina Casutt
10:45	Introduction of the host company Ciposa SA by Florian Stauffer
11:00	Lab tour host company Ciposa SA
12:00	Networking lunch



13:00

Workshop Part I, Input talks:

Introduction to the Workshop by Joëlle Tosetti and Selina Casutt

Laser-based glass micro-machining for integrated photonics by Rolando Ferrini, FEMTOprint SA

The constraint of volume dosed by the dispensing module by Yves Pelletier, Ciposa SA

Micro-Optics – Chances and Challenges in Microassembled System by Wilfried Noell, SUSS MicroOptics SA

Swiss Photonics Integration Center, Swiss PIC by Thomas Hessler, LIGENTEC SA

14:15

Coffee break

14:45

Workshop Part 2, Group discussions:

Group 1: *New materials, processes and building blocks for integrated photonics packaging & assembly*, moderated by Rolando Ferrini

Group 2: *Deep learning to serve active alignment*, moderated by Yves Pelletier

Group 3: *Miniaturization of Photonics Systems*, moderated by Wilfried Noell

Group 4: *Swiss Industry needs for the Photonic Packaging*, moderated by Thomas Hessler

16:00

Wrap-up in the plenum

16:30

Networking Apéro

Participation is free of charge. Please apply for registration on <https://microtech-booster.swiss/novel-microassembly-approaches/> until 10.03.2023. The maximum number of participants is limited. Registrations will be processed in the order in which they are received.