



*Press release*

**EMBARGO September 27, 2022 / 12 :00 / Swiss Time**

## **EPFL and CSEM open a new advanced manufacturing center to address technological challenges faced by Swiss industry**

**Neuchâtel, 27 September 2022 - The manufacturing industry is going through a period of profound change, driven in part by the advent of 3D printing and other advanced technologies. In order to support Swiss industry at this critical juncture, EPFL and CSEM have joined forces to create the Micromanufacturing Science & Engineering Center (M2C), a new focal point for pure research, technology transfer and everything in between.**

The [M2C](#), which focuses on high-precision 3D microfabrication, will cover every step of the development process – from pure research at EPFL laboratories to the transfer of sustainable, high value-added technologies to industry under the guidance of CSEM. The new center will catalyze collaboration between academic, institutional and industrial partners, as well as serving as an education and training platform for members and users.

“3D fabrication methods are raising the bar for precision and digitization,” says Bruno Studach, the operational director of advanced manufacturing at EPFL. “These groundbreaking techniques are shifting the industrial landscape, taking us toward a future in which objects and computers are increasingly connected. Investing in these rapidly evolving fields is vital if we are to stay ahead of the global competition and remain at the forefront of innovation. The M2C was created with precisely these challenges in mind.”

Additive manufacturing, also known as 3D printing, is a technique by which objects are built up in successive layers of material. Its growing popularity can be attributed to the fact that it unleashes creative freedom and allows engineers to build complex yet lightweight and robust components. With 3D printing, every step in the process can be digitized – from design to production. Moreover, a single machine can build fundamentally different objects. The scientists and engineers at the M2C will explore ways to capitalize on new materials and production systems through design, development and testing.

Thanks to their distinctive characteristics, 3D-printed parts appeal to sectors and industries as diverse as space exploration, custom prosthetics, microfluidic devices and watchmaking. Moreover, because sensors and other technologies can be built directly into these components, they open the door to the collection of varied and precise data sets for applications such as predictive maintenance and complex system monitoring.

The M2C team will develop solutions for systems and components on scales ranging from a few microns to several dozen centimeters. The center’s work aligns with the advanced manufacturing strategic focus



area of the ETH Domain. “This multidisciplinary alliance will allow EPFL and CSEM labs to share cutting-edge facilities and work together to fast-track the adoption of new manufacturing technologies,” says Olha Sereda, the group leader in additive manufacturing at CSEM. “That means Swiss manufacturers will keep pushing the boundaries of innovation and stay competitive on the global stage.”

**More information:** [M2C Website](#)

**Contact :**

**EPFL**

Bruno Studach  
M2C Operational Director  
+41 21 695 42 85  
[bruno.studach@epfl.ch](mailto:bruno.studach@epfl.ch)

**CSEM**

Olha Sereda  
Group leader, add. manufacturing  
+41 32 720 54 37  
[olha.sereda@csem.ch](mailto:olha.sereda@csem.ch)

**General enquiries:**

**CSEM**

Laure-Anne Pessina  
Communication Specialist  
+41 79 361 50 12  
[media@csem.ch](mailto:media@csem.ch)

**CSEM – Facing the challenges of our time**

CSEM is an internationally recognized Swiss innovation center developing disruptive technologies with a high societal impact, which it then transfers to industry. A public-private organization, its mission is to support the innovation activity of Swiss companies and strengthen the economy. CSEM is active in the domains of precision manufacturing, digitalization, and sustainable energy. Daily, CSEM's 550 employees from 44 countries collaborate with leading universities, research institutes, and industrial partners. Headquartered in Neuchâtel, CSEM also has sites in Allschwil, Alpnach, Bern, Landquart and Zurich.

[www.csem.ch](http://www.csem.ch)



**EPFL (École polytechnique fédérale de Lausanne)**

Through its dynamic community of over 16,000 people, EPFL has created a unique spirit of curiosity and an atmosphere of open dialog linked to its core missions – education, research and innovation. EPFL gives students solid technical skills while encouraging them to develop their imagination, creativity, and entrepreneurial spirit through cross-disciplinary projects. Across its several campuses, EPFL has a strong research community addressing critical areas such as data science, personalized health, biomedical engineering, energy, robotics and advanced manufacturing. Thanks to the Innovation Team, which is completely dedicated to acting as an interface between academia and industry, EPFL's research has a real impact by finding its way into society. EPFL is a key player in innovation in Switzerland, providing solutions that help deal with challenges such as climate change and the aging of the population – for the benefit of all humankind.

<https://www.epfl.ch/en/>