



Strategic Focus Area **Advanced Manufacturing**

Annual Review Meeting 2019

29 January 2020, EPFL, Neuchâtel

Advanced Manufacturing is one of the Strategic Focus Areas (SFA) in the strategic planning of the ETH Board. The SFA Advanced Manufacturing aims to enable fundamental research in engineering science in areas where missing knowledge or technical problems are hindering Swiss companies to use advanced manufacturing technologies.

Goal of the Meeting

At the Annual Review Meeting 2019, the [Steering Committee](#) of the Strategic Focus Area Advanced Manufacturing (SFA-AM) will review the progress and results of the [research projects](#) as well as the measures taken by the participating institutions of the ETH Domain to build up capacity and to establish new technology platforms in the field of advanced manufacturing.

In addition, the event aims to give the scientific and technical community in advanced manufacturing insight into the projects and activities funded by the SFA-AM. Interested representatives from academia and industry are invited to attend the meeting to get insights into the research activities of the SFA-AM and to foster the exchange and collaboration inside the advanced manufacturing community.

Programme

The programme of the Annual Review Meeting 2019 is divided into four blocks.

In the first three blocks, related to the five [Technical Focus Areas](#) (TFA) of the SFA-AM, the leaders of the research projects will present the results that have been achieved since the project start in 2017 and 2018, respectively.

In the fourth block, the representatives of the participating ETH institutions will present the planned or already realized measures to build up capacities and to establish new technology platforms in advanced manufacturing.



10:00	<i>Registration and welcome coffee</i>
10:20	Welcome, introduction and presentation of the programme
10:30	1) <u>TFA 1 - Precision Free-Form Manufacturing</u> <ul style="list-style-type: none"> ▪ Ceramic X.0 – High-precision micro-manufacturing of ceramics ▪ FUORCLAM – Fundamental Understanding of Oxide Refractory Ceramics and Laser Additive Manufacturing ▪ Powder Focusing – Powder Focusing for Beam Induced Laser 3D printing ▪ PREAMPA – Precision Additive Manufacturing of Precious Metals Alloys
11:30	<i>Coffee break</i>
11:45	2) <u>TFA 2 - Printed Electronics</u> and <u>TFA 3 - Sustainable Digital Manufacturing and Design</u> <ul style="list-style-type: none"> ▪ FOXIP – Functional Oxides Printed on Polymers and Paper ▪ CFRP-AM – Carbon Fiber Reinforced Polymers and Additive Manufacturing ▪ SD4D – Sustainable Design of 4D Printed Active Systems
12:30	<i>Lunch break</i>
13:30	3) <u>TFA 4 - Sensing Technologies</u> and <u>TFA 5 - Intelligent Systems and Advanced Automation</u> <ul style="list-style-type: none"> ▪ D-SENSE – Digital Manufacturing of 3D-Printed Wearable Sensors ▪ MOCONT – Monitoring and Control of Additive Manufacturing Metal Process ▪ Nano Assembly – Automated Process Flow for High-speed Additive Nanostructure Assembly with Integrated Process Control ▪ X-Ray Diagnostics – High-Efficacy X-Ray Diagnostic Tools for Process Optimization and Quality Management on Roll-to-Roll and Conveyor-based Manufacturing Lines
14:30	Walk arounds, discussions at the project stands and networking
15:30	4) Capacity Build-up & Technologies Platform activities at ETH Zurich, EPFL, PSI and Empa
16:30	Walk arounds, discussions at the project stands and networking
17:30	<i>Apéro Riche / Dinner</i>

Registration

Participation in the Annual Review Meeting 2019 will be free of charge. However, registration is mandatory. If you would like to attend, please complete the [online registration form](#) until 17 January 2020.

Venue and Contact

The Annual Review Meeting 2019 will take place at the [Microcity](#) of EPFL Neuchâtel, Rue de la Maladière 71, 2000 Neuchâtel, Switzerland ([Google Maps](#)). Details how to access the Microcity building can be found [here](#).

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An initiative of the ETH Board

Participating institutions of the ETH Domain

