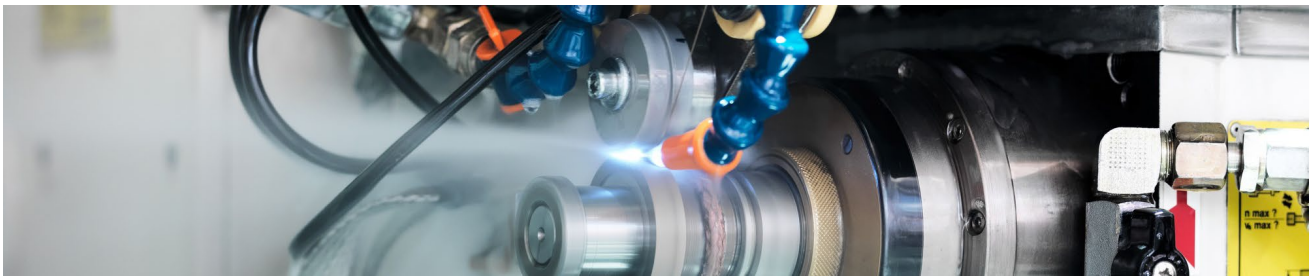

Strategic Focus Area
Advanced Manufacturing

Annual Review Meeting 2023

14 February 2024, Empa in Dübendorf (Akademie)

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 2023, 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.

Registration

Participation in the Annual Review Meeting 2023 will be free of charge. However, registration is mandatory. If you would like to attend, please complete the online registration form until **01 February 2024**.

Venue and Contact

The Annual Review Meeting 2023 will take place at Empa in Dübendorf (Akademie). How to get to Empa is described here. Your contact is:

- Dr. Lena Schinkel, Empa, lena.schinkel@empa.ch, +41 58 765 6152

Program

During the Annual Review Meeting 2023 the leaders of the research projects that started in 2021 will present the results that have been achieved so far. Furthermore, 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. This year, we also provide a platform for successful SFA-AM spin-offs and research results. During an exhibition, the projects can present their demonstrators and discuss their results.

09:00	Registration - Welcome coffee & breakfast	**Foyer**
10:00	Welcome, introduction and presentation of the program	**AK I**
10:15	**Block 1A: Research Projects that started in 2021** ▪ Microfluidics – Functional Integration for Rapid Realization of Microreactors and Bio-assays ▪ SCALAR – Highly Scaled Gravure Printing ▪ DiPrintProtect – Digitally Printed Temporary Protective Films for Application in the Watch Industry ▪ AMYS – Advancing Manufacturability of Hybrid Organic-inorganic Semiconductors for Large Area Optoelectronics ▪ SOL4BAT – Fabrication and diagnostics of stable solid-solid interfaces for next-generation Li-ion batteries **Block 1B: Succecssful SFA-AM Technologies** ▪ Selective laser sintering of ceramics – graded porosities, self-healing ceramics (*Prof. Dr. Konrad Wegener)* ▪ Start-Up: Readily3D (*Dr. Paul Delrot)*	**AK I**
11:30	**Block 1C: Project Exhibition and Speakers' Corners**	**AK II**
12:15	Lunch	**AK III**
13:00	**Block 2A: Research Projects that started in 2021** ▪ ClosedLoop-LM – Ultrafast Laser Closed-loop Manufacturing using mid-IR Spectroscopy ▪ SMARTAM – Fast Optimization of Additively Manufactured Metallic Parts with a Combination of Adaptive Feedforward Control and Numerical Simulation ▪ Multi-Mat – Multi-material laser powder-bed fusion ▪ MANUFHAPTICS – Manufacturing of Actuators Integrated in Active Exoskeletons **Block 2B: Successful SFA-AM Technologies** ▪ Additive-free Conductive Inks for Room-temperature Fabrication of Electronics (*Dr. Sina Azad)* ▪ Start-Up: Inveel (*Dr. Barbara Horvath*)	**AK I**
14:00	**Block 2C: Project Exhibition and Speakers' Corners**	**AK III**
14:45	**Block 3A: Capacity Build-up & Technology Platforms** ▪ ETHZ ▪ EPFL ▪ PSI ▪ Empa	**AK I**
15:30	**End of the official meeting** – Small apéro for further discussions	**Foyer**
15:45	Steering Committee meeting (NEST-Building)	**NEST 022**