

## Capgemini collaborates with *École polytechnique fédérale de Zurich* (ETH Zurich) to help accelerate sustainable manufacturing

Collaboration will devise methods and tools to create the next generation of multi-material structures and help build advanced engineering designs in a sustainable way

## Paris, April 19, 2023 - <u>Capgemini</u> announced today the launch of a research collaboration with ETH Zurich (*Eidgenössische Technische Hochschule Zürich*), to develop artificial intelligence solutions to design multi-material structures for Additive Layer Manufacturing (ALM).

Additive Layer Manufacturing is a technology which can drive greater sustainability of industrial operations, allowing reduction of material waste and distributed manufacturing of products reducing the need for transportation. A key aspect, to develop more sustainable products, is the printing of structures that incorporate different materials: multi-material structures can significantly improve the performance of products.

Capgemini will work in collaboration with ETH Zurich on sustainable advanced engineering designs; developing innovative technologies, thought leadership and assets to help future proof engineering services. The research will focus on the discovery of new combinations of materials that can be printed using standard additive manufacturing technologies. The purpose is to significantly enlarge the range of products that can be manufactured this way, reducing their environmental footprint while improving their performance.

For this project, Ramon Antelo, Chief Technology Officer for Manufacturing and Industrial Operations at Capgemini Engineering, along with other experts at Capgemini, will join forces with a team of researchers supervised by Prof. Markus Bambach, Advanced Manufacturing Lab, at ETH Zurich.

Commenting on the announcement, Prof. Markus Bambach, Advanced Manufacturing Lab, at ETH Zurich said: "I am thrilled to embark on a new project with Capgemini, focusing on designing the next generation of multi-material solutions for high-performance products. I am eagerly looking forward to collaborating with their excellent team and leveraging our expertise to create innovative and cutting-edge solutions that will contribute to revolutionize various industries."

This new research program with ETH Zurich is part of *Capgemini's Strategic University Program*, a key initiative with the primary objective to co-invest with world-class universities to produce high quality research outputs that contribute to answer the question "*What are the key challenges of a more intelligent industry in our society*?" These deeply collaborative projects, where Capgemini experts work alongside leading academics, aim to contribute to the advancement of engineering in a three-to-five-year research horizon. They are designed to harness the power of technology and enhance capabilities in Intelligent Industry<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> 'Intelligent Industry' is the new era of digital transformation: characterized by a growing convergence of the physical and virtual worlds - product, software, data, and services - across all industries; and fueled by the rapid development of technologies, including cloud, artificial intelligence (AI), internet of things (IoT), edge computing and 5G.



"Accelerating on sustainable manufacturing is not only crucial to meet our sustainability targets, but also a must-have to achieve never seen before advanced engineering designs, thanks to cutting edge expertise in multi-material structures. We are excited to launch a new research program with ETH Zurich, a world-class university in technology and engineering, to further enhance our capabilities in Intelligent Industry," stated **William Rozé, CEO of Capgemini Engineering and Group Executive Board Member**.

## About Capgemini

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