

## **Pietro Licignano**

Stellantis

Topic

### **Different Approaches to Hybrid Manufacturing for New and Future Structural Automotive Components**

In this talk, a new design and manufacturing paradigm based on Adding-Value Functional Features (AVFF) is presented. AVFF are small-scale 3D geometric features deposited on a preformed substrates manufactured by conventional technologies. AVFFs are designed to provide one or more additional functionalities to vehicle systems, such as static and dynamic stiffening, heat dissipation, vibration dumping, energy absorption guidance, etc. The talk will explore the overall concept (CRF patented), the design (CRF and GEM), and the manufacturing (CRF and FhG-IWS) methodology approaches that will enable a future economic and environmental mass production in the future of transportation.

### **About the Speaker**

I am currently a research consultant in the Material Technical Expertise department of Stellantis. After receiving my bachelor's and master's degrees in Materials Engineering from the Polytechnic University of Turin, I joined CRF as a consultant, specializing in sheet metal technologies. I also contribute to European-funded research projects and work on the development of innovative methodologies for the evaluation of recycled steels and aluminum alloys.