Chairman	**Guadagno L.**
Topic	*Multifunctional Composites for Aeronautical Applications*
Objectives	Multi-functional materials can be designed to have integrated electrical, electromagnetic, flame resistance properties, regenerative ability and possibly other functionalities that work in synergy to provide advantages that reach beyond the sum of the individual capabilities. The improvement in the aircraft safety by self-healing structures and protecting nanofillers is a revolutionary approach that should lead to the formulation of a novel generation of multifunctional aircraft materials with strongly desired properties and design flexibilities. In recent years, in fact, the development of new nanostructured materials has enabled an evolving shift from single purpose materials to multifunctional systems that can provide greater value than the base materials alone; these materials possess attributes beyond the basic strength and stiffness that typically drive the science and engineering of the material for structural systems. The aim of the session is to present recent advancements in the field of self-responsive smart materials for applications in aeronautics.