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TECOP - Manufacturing Processes of Polymeric Matrix Composites

IMAST members involved:

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- **CIRA S.c.p.A.** - Italian Aerospace Research Center
- **CRF S.c.p.A** - FIAT Research Center
- **Adler Plastics S.p.A.**
- **FGA S.p.A.** - Fiat Group Automobiles
- **CYTEC Italy S.r.l.**
- **MBDA Italy S.p.A.**
- **CNR** - Institute for Composite and Biomedical Materials (**IMCB**)
- **University of Naples** – Structural composites for innovative applications (**SCIC**)
- **University of Salerno** – Department of Industrial Engineering (**DIIN**) and Department of Chemistry and Biology (**DICHIB**)

This research project is aimed at the study and development of **materials and manufacturing processes** for components with structural and functional properties to be applied in the transport sector and defense. The aim is to meet the needs of the market by increasing the performance and/or reducing the weight or cost of the materials.

For the **automotive** sector, **structural and functional components** for **car dashboard** will be studied with the aim to improve aesthetic properties and weight reduction.

Representative parts of an **aircraft fuselage** (either plain or curved) will be produced in composite by means of innovative technique.

An **integrated composite system** for a structural panel will be designed and fabricated for **defence applications**.

Innovative design solutions will be obtained also through appropriate modeling tasks that will be useful to the structural design of components, optimization of manufacturing processes and the formulation of polymer systems in order to obtain significant improvements in the structural and functional properties compared to current standards.

