

Carbon Fibres & Advanced High Performance Composites Cluster (CFPC)

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The Carbon Fibres & Advanced High Performance Composites Cluster (CFPC) activity under H2020 aims to bring together EC funded projects to enable the sharing of ideas, results and concepts and to use the synergistic effect to improve the dissemination and exploitation of the project results and enhance their impact and to contribute to the Strategic Research Agenda and Roadmaps. The main goal is to gather the scientific partners, research groups, technology providers and industries engaged in the development and manufacture of carbon fibres (CFs), carbon fibre reinforced polymers (CFRP) and other high performance composites, in order to promote the successful results of the organized research of the involved partners. The intention is to enable as many stakeholders as possible to participate in a highly integrated innovation environment.

The CFPC is an open group and a self-driven initiative. Initially membership consists of projects that were involved in the setup of the Carbon Fibres & Advanced High-Performance Composites Council activities following the March 2015 workshop. Membership then has been widened to include projects relevant H2020 projects that include fibres and composites in their core description.

The Cluster Objectives are: • Development of a competitive network for the production, assessment and marketing of carbon fibre based materials. • Development of a European carbon fibre manufacturing network, improving performance through the sharing of expertise, know-how and technology within the CFPC. • Development of an international business network collaboration and establishment of European Strategic Partnerships through linking and sharing of information. • Dissemination of the CFPC objectives, challenges and results both to specific sector audience (scientific and industrial) and to the large audience. • Promotion of European groups contribution to the emergence of new value chains and the aim to take a leading position globally, supporting internationalization towards developing countries.

The Specific Cluster Areas of Research areas are: • Optimization of precursor characteristics to further improve carbon fibre performance properties, through the fostering of collaborations between partners from different countries and effective exchange of innovative ideas. • Implementation of pilot/industrial facilities capable of manufacturing innovative carbon fibres, as well as carbon fibre preforms and semi-finished products. • Focus on more efficient and sustainable products and processes based on life cycle assessment studies. • Development of modelling and simulation tools to provide further understanding of properties and phenomena towards the optimisation of innovative carbon fibres, as well as carbon fibre preforms and semi-finished products and related manufacturing processes. • Networking and interaction with other networks to promote multi-disciplinarity and cooperation in the production of carbon fibres based materials.

By elaborating on these themes, the CFPC will support horizontal actions towards: • Policy & Strategy. • Characterization, Modelling & Design. • Safety & Standards. • Dissemination and Networking.

Cluster Website

<http://www.technologycluster.eu>