AIMPLAS-Plastics Technology Centre, Ana Palanca Roig

Research centre

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# 1. Your organization and capacities

**AIMPLAS, Plastics Technology Centre**, Valencia (Spain), is a private, non-profit Association.

+ 750 associated companies. +230 highly skilled professionals and 30 years expertise

AIMPLAS has **state-of-the-art 10,000 m² facilities**, including thermoplastics & thermoset pilot plants, coatings, polymer/nanoparticles synthesis, clean rooms and testing laboratories and training areas.

AIMPLAS has a broad expertise in the fields of recycling, plastic blends, reactive extrusion, synthesis and processing of biopolymers and renewable source materials, special assisted processing technologies (microwaves, supercritical $CO_2$), gases capture and conversion systems, catalyzers, plastronics, materials for Additive Manufacturing, high performance coatings, polymer nanocomposites, functionalization of nanoparticles, multilayer structures and development of plastic products for a broad range of industrial sectors.

# 1. Your organization and capacities

Tailor-made 3D printed structures based on CNTs and MOFs materials for efficient CO2 capture

New process for efficient CO2 capture by innovative adsorbents based on modified graphene aerogels and MOF materials

Advanced materials and processes to improve performance and cost-efficiency of Shallow Geothermal systems and Underground Thermal Storage

Developing a new organic redox flow battery suitable to work at higher temperatures

Feasible Recovery of critical raw materials through a new circular Ecosystem FOR a Li-Ion Battery cross-value chain in Europe

Liquid Hydrogen (LH2) storage tank to enable the transition towards H2 - powered aviation

# 2. Topics of interest in calls 2024

| Topic | Experience and Contribution |
|---|---|
| HORIZON-CL5-2024-D3-01-05: Development of carbon fixation technologies for biogenic flue gases | -Materials (fine chemicals, polymers) development to capture & fix carbon based gases<br>-Catalysts development |

| Topic | Experience and Contribution |
|---|---|
| HORIZON-CL5-2024-D3-01-06: Innovative applications/ integration of geothermal heating and cooling in industry. | Development of advanced materials (additives, phase change materials) and processes to improve the performance and cost-efficiency of geothermal heating and cooling in industry. |

| Topic | Experience and Contribution |
|---|---|
| HORIZON-CL5-2024-D3-01-10: Next generation of renewable energy technologies | -Catalyst development and synthesis<br>-Chemical Building blocks development and synthesis |