

Key project facts

Start date: 01/05/2022 Duration: 36 months Project budget: 8.6 mln € EU contribution: 7.1 mln €

Project consortium

11 partners from 5 countries RTO institutions, industrial producers of ceramic fibres and their end-users from aerospace and manufacturing industry.





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Innovative Value Chains for European Ceramic Oxide Fibres

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Project description

Oxide fibre reinforced ceramics, so-called oxide ceramic matrix composites (O-CMC) are gradually becoming key strategic materials in multiple industrial applications, e.g. for use in next generation aero-engines, stationary gas turbines, power-to-X processes with concentrated solar power CSP, chemical industry, batch carrier for high temperature processes, etc. Today such high-end O-CMC components and the key raw material, the ceramic fibres as reinforcement component, are mainly exclusively produced in the United States. But as these are key components for the European manufacturing, energy and aerospace industry, there is a need to develop a European oxide fibre and O-CMC component industry, decreasing dependence on non-EU producers.





Project activities

The InVECOF project addresses this urgent need and provides a substantial contribution to sustainable product innovation through the following key activities:

1. The development of a European oxide ceramic reinforcing fibre equivalent (ROF fibre) to US fibres and to establish it among end users in key industrial sectors and 2. The development and validation of a next-generation fibre in parallel with improved thermo-mechanical properties (NGO fibre).