

# INNCH2PROP

## Innovative Thrust Chambers for Hydrogen Based Low Emissivity Propellants

### SELECTED PROJECTS EUROPEAN DEFENCE FUND (EDF) 2024

**CALL TITLE:****TOPIC TITLE:****DURATION OF THE PROJECT:****TYPE(S) OF ACTIVITIES:****ESTIMATED TOTAL COST:****MAXIMUM EU CONTRIBUTION :**

Research actions focused on SMEs and research organisations

Non-thematic research actions by SMEs and research organisations

36 Months

Generating knowledge, Studies, Design

€ 3,978,335.34

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### SHORT DESCRIPTION OF THE PROJECT:

The aim of the project is the design and development of an innovative, ceramic-based combustion chamber for aerospace engines powered by hydrogen.

The primary goal is to leverage the high power and low visibility of  $H_2/O_2$  and  $H_2$ /air flames. These unique characteristics offer significant advantages for defence systems. An innovative combustion chamber made from ultrahigh temperature ceramic matrix composites, inherently capable of wall thermal protection, will be developed. This capability is essential for ensuring self-reliance and advancing EU-based innovation in defence and aerospace applications.




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**Members of the consortium and  
country of establishment:**

 <b>NAME</b> OF THE ENTITY	 <b>COUNTRY</b>
MIPRONS S.R.L. (Coordinator)	Italy
FRAUNHOFER GESELLSCHAFT ZUR FORDERUNG DER ANGEWANDTEN FORSCHUNG EV	Germany
FREE FORM 3D SRL	Romania
LARAN BUSINESS	Italy
RIGAS TEHNISKA UNIVERSITATE	Latvia
SC MGM STAR CONSTRUCT SRL	Romania
VILNIUS GEDIMINAS TECHNICAL UNIVERSITY	Lithuania

