

A reputed Spanish Research Institute requires partners for the call EDF-2026-RA-MCBRN-DST — CBRN decontamination systems and technologies, as a research and technology partner, contributing with expertise in MOF materials and laboratory validation.

Summary

Profile type

Research & Development Request Spain

Company's country

POD reference

RDRES20260907018

Profile status

PUBLISHED

Type of partnership

Research and development cooperation agreement

Targeted countries

• All countries

Contact Person

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Term of validity

7 Sep 2026
7 Sep 2027

Last update

7 Sep 2026

General Information

Short summary

A reputed Spanish University Research Institute is exploring opportunities to join an EDF 2026 consortium with a patented technology based on a titanium-iron MOF material capable of degrading organophosphorus compounds, including laboratory simulants used to assess technologies against chemical threats. The technology could be developed as a functional self-decontaminating material for integration into technical textiles, coatings, paints or polymers, with several potential applications.

Full description

A reputed Spanish University Research Institute is exploring opportunities to join an EDF 2026 consortium with a patented technology based on a titanium-iron MOF material capable of degrading organophosphorus compounds, including laboratory simulants used to assess technologies against chemical threats.

The technology could be developed as a functional self-decontaminating material for integration into technical textiles, coatings, paints or polymers, with potential application in CBRN protection, protective equipment, technical surfaces and defence-related materials.

The technology is based on a titanium-iron metal-organic framework — MUV-17 / TiFe_2 — designed for the degradation of organophosphorus compounds, and it is protected under patent

MOFs are highly porous crystalline materials that can interact with specific molecules inside their pores. In this case, the patented material has shown experimental activity at laboratory scale against organophosphorus compounds, including simulants commonly used in research to evaluate detoxification technologies for chemical threat scenarios.

The current development status is laboratory validation. Further work would be required to integrate the material into relevant supports and validate its performance under operationally relevant conditions.

Potential application routes include:

- technical textiles with detoxifying functionality;
- protective coatings;
- paints and surface treatments;
- polymer-based materials;
- functional materials for CBRN protection of personnel, equipment or technical surfaces.

The Institute would be interested in joining a consortium as a research and technology partner, contributing expertise in MOF materials, material synthesis, characterisation and laboratory validation of detoxification activity.

A possible project approach could be the development and validation of MOF-based self-decontaminating materials for protection against chemical threats, including material integration, stability assessment, activity validation and a roadmap towards demonstrator-level prototypes.

Potential European Defence Fund 2026 call topics:

- EDF-2026-RA-MCBRN-DST — CBRN decontamination systems and technologies

This appears to be the strongest fit, particularly regarding CBRN decontamination technologies and self-decontaminating materials for protection of personnel, equipment or surfaces.

- EDF-2026-DA-MATCOMP-SMT — Smart and multifunctional textiles

This could be a secondary fit if the technology is oriented towards integration into technical or multifunctional textiles for defence applications.

Advantages and innovations

- Patented MOF-based technology.
- Titanium-iron material with activity against organophosphorus compounds.
- Potential use as a functional additive in different material supports.
- Possible application in self-decontaminating surfaces, coatings, textiles or polymers.
- Early-stage technology suitable for collaborative R&D and demonstrator-oriented projects.

Technical specification or expertise sought

Stage of development

Lab tested

Sustainable Development goals

- **Goal 16: Peace and Justice Strong Institutions**
- **Goal 9: Industry, Innovation and Infrastructure**
- **Goal 17: Partnerships to achieve the Goal**
- **Goal 15: Life on Land**

IPR Status

IPR granted

IPR Notes

Partner Sought

Expected role of the partner

The Institute is looking for partners of existing or emerging EDF consortia working on:

- CBRN protection and decontamination;
- self-decontaminating materials;
- technical textiles for defence;
- protective coatings or surfaces;
- advanced materials for defence applications;
- validation of materials under operational or defence-relevant conditions.

Potential partners may include:

- defence companies;
- technical textile manufacturers;
- coating, paint or polymer companies;
- CBRN technology providers;
- testing and validation centres;
- defence end-users or operational validators;
- research organisations with complementary expertise.

Type and Size of Partner:

- SME
- Big company
- R&D institution
- University
- Defence-related technology provider
- Testing / validation centre
- End-user / operational validator

Type of partnership

Research and development cooperation agreement

Type and size of the partner

- Other
- University
- SME ≤10
- SME 11-49
- R&D Institution
- Big company
- SME 50 - 249

Call Details

Framework program

Access to finance

Call title and identifier

Option 1: EDF-2026-RA-MCBRN-DST — CBRN decontamination systems and technologies.
Option 2: EDF-2026-DA-MATCOMP-SMT — Smart and multifunctional textiles.

Submission and evaluation scheme

EDF Research Actions (Single-stage submission)

Anticipated project budget

Coordinator required

Yes

Deadline for EoI

26 Sep 2026

Deadline of the call

26 Sep 2026

Project duration in weeks

Web link to the call

<https://ec.europa.eu/info/funding-tenders/opportunities/portal/screen/opportunities/topic-details/EDF-2026-RA-MCBRN-DST?isExactMatch=true&status=31094501,31094502,31094503&callIdentifier=EDF-2026-RA&order=DESC&pageNumber=1&pageSize=50&sortBy=startDate>

Project title and acronym

Dissemination

Technology keywords

- **03004010 - Special chemicals, intermediates**

Market keywords

- **08001007 - Coatings and adhesives manufactures**
- **08001018 - Polymer (plastics) materials**
- **09004003 - Textiles (synthetic and natural)**
- **08001019 - Speciality/performance chemicals**

Targeted countries

- **All countries**

Sector groups involved