

HORIZON  
2020

# Metal-Organic Frameworks as multifunctional materials toward P-sustainability

## Fact Sheet

### Project Information

#### PSust-MOF

Grant agreement ID: 888972

[Project website](#) 

#### DOI

[10.3030/888972](https://doi.org/10.3030/888972) 

Project closed

#### EC signature date

11 March 2020

#### Start date

1 September 2020

#### End date

31 August 2022

#### Funded under

EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions

#### Total cost

€ 160 932,48

#### EU contribution

€ 160 932,48

#### Coordinated by

UNIVERSIDAD DE GRANADA



Spain

## This project is featured in...



26 April 2023



## Project description

### Metal-Organic Frameworks for Sustainable Phosphorous Fertilisers

To feed the world's growing population, farmers need to apply efficient fertilisers that typically contain phosphorus to increase crop yields. Most of the phosphorus used in fertilisers comes from phosphate rock, a finite resource. Zirconium-based metal-organic frameworks (Zr-MOFs) are deemed suitable materials for recovering phosphate, from both waste/eutrophicated water to produce P-fertilizers, because of their large-surface areas, water stability and strong affinity with phosphate. The EU-funded PSust-MOF project aims to improve the circular use of phosphate based fertilizers. On top of that the project will use water as the reaction medium for Zr-MOF synthesis compatible with the requirements of industrial production.

### Fields of science (EuroSciVoc)

[engineering and technology](#) > [materials engineering](#) > [crystals](#)

[social sciences](#) > [economics and business](#) > [economics](#) > [sustainable economy](#)



### Programme(s)

[H2020-EU.1.3. - EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions](#)

MAIN PROGRAMME

[H2020-EU.1.3.2. - Nurturing excellence by means of cross-border and cross-sector mobility](#)

### Topic(s)

[MSCA-IF-2019 - Individual Fellowships](#)

# Call for proposal

[H2020-MSCA-IF-2019](#) 

[See other projects for this call](#)

## Funding Scheme

[MSCA-IF - Marie Skłodowska-Curie Individual Fellowships \(IF\)](#)

## Coordinator



**UNIVERSIDAD DE GRANADA**

Net EU contribution

**€ 160 932,48**

Total cost

**€ 160 932,48**

Address

**CUESTA DEL HOSPICIO SN**

**18071 Granada**

 **Spain** 

Region

**Sur > Andalucía > Granada**

Activity type

**Higher or Secondary Education Establishments**

Links

[Contact the organisation](#)  [Website](#) 

[Participation in EU R&I programmes](#) 

[HORIZON collaboration network](#) 

**Last update:** 11 December 2022

**Permalink:** <https://cordis.europa.eu/project/id/888972>

European Union, 2025

