

HORIZON
2020

Rational Design of Ceria-Supported Non-Noble Metal Nanoalloys as Catalysts for the Selective Direct Conversion of Methane to Methanol

Fact Sheet

Project Information

4lessCH4

Grant agreement ID: 832121

[Project website](#) 

DOI

[10.3030/832121](https://doi.org/10.3030/832121) 

Project closed

EC signature date

10 April 2019

Start date

1 September 2019

End date

31 August 2021

Funded under

EXCELLENT SCIENCE - Marie Skłodowska-Curie Actions

Total cost

€ 172 932,48

EU contribution

€ 172 932,48

Coordinated by

AGENCIA ESTATAL CONSEJO
SUPERIOR DE
INVESTIGACIONES CIENTIFICAS
 Spain

Project description

Improved conversion of methane to methanol benefits industry, society and the environment

Methane (CH₄) is the primary component of natural gas and is emitted during human activities and natural processes. Although it accounts for a relatively small percentage of emissions worldwide, its effects are very potent because it traps tens of times more heat than CO₂. Converting CH₄ to methanol is an excellent way to both reduce atmospheric levels and produce a key fuel and feedstock. It remains a significant challenge and important area of research thanks to the strength of the carbon-hydrogen bonds and the by-products released. The EU-funded 4lessCH₄ project will develop innovative catalysts for efficient and selective conversion of CH₄ to methanol with important impact on mitigating climate change.

Fields of science (EuroSciVoc)

[natural sciences](#) > [chemical sciences](#) > [organic chemistry](#) > **[alcohols](#)**

[natural sciences](#) > [chemical sciences](#) > **[catalysis](#)**

[engineering and technology](#) > [nanotechnology](#) > **[nano-materials](#)**

[natural sciences](#) > [chemical sciences](#) > [organic chemistry](#) > **[aliphatic compounds](#)**

[natural sciences](#) > [computer and information sciences](#) > [artificial intelligence](#) > **[computational intelligence](#)**



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-2018 - Individual Fellowships](#)

Call for proposal

[H2020-MSCA-IF-2018](#)

[See other projects for this call](#)

Funding Scheme

Coordinator



AGENCIA ESTATAL CONSEJO SUPERIOR DE INVESTIGACIONES CIENTIFICAS

Net EU contribution

€ 172 932,48

Total cost

€ 172 932,48

Address

CALLE SERRANO 117

28006 Madrid



Spain



Region

Comunidad de Madrid > Comunidad de Madrid > Madrid

Activity type

Research Organisations

Links

[Contact the organisation](#)

[Website](#)

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

[HORIZON collaboration network](#)

Last update: 24 August 2022

Permalink: <https://cordis.europa.eu/project/id/832121>

European Union, 2025