



European Research Council
Established by the European Commission

Pico-Photonic Forces at the Atomic Scale

Fact Sheet

Project Information

PICOFORCE

Grant agreement ID: 883703

[Project website](#) 

DOI

[10.3030/883703](https://doi.org/10.3030/883703) 

EC signature date

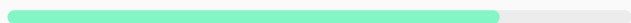
19 May 2020

Start date

1 January 2021

End date

30 June 2026



Funded under

EXCELLENT SCIENCE - European Research Council (ERC)

Total cost

€ 2 451 402,00

EU contribution

€ 2 451 402,00

Coordinated by

THE CHANCELLOR MASTERS
AND SCHOLARS OF THE
UNIVERSITY OF CAMBRIDGE

 United Kingdom

Project description

Interactions of light with single atoms under study

The primary goal of the EU-funded PICOFORCE project is to trap light down to the size of individual atoms. The project's work centers on allowing researchers to move individual metal atoms by light, and twist, compress and flip individual molecules on demand. The knowledge generated should provide a step-change in understanding how ions, solvents, molecules and electrons interact, which is critical in catalysis, molecular electronics, electrochemistry and nano-assembly.

Fields of science (EuroSciVoc)

[natural sciences](#) > [chemical sciences](#) > [electrochemistry](#)

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



Keywords

[plasmonics](#)

[SERS](#)

[nanoparticles](#)

[nanophotonics](#)

Programme(s)

[H2020-EU.1.1. - EXCELLENT SCIENCE - European Research Council \(ERC\)_](#)

MAIN PROGRAMME

Topic(s)

[ERC-2019-ADG - ERC Advanced Grant](#)

Call for proposal

[ERC-2019-ADG](#)

[See other projects for this call](#)

Funding Scheme

[ERC-ADG - Advanced Grant](#)

Host institution



**THE CHANCELLOR MASTERS AND SCHOLARS OF THE UNIVERSITY OF
CAMBRIDGE**

Net EU contribution

€ 2 451 402,00

Total cost

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Address

TRINITY LANE THE OLD SCHOOLS
CB2 1TN Cambridge
 United Kingdom 

Region

East of England > East Anglia > Cambridgeshire CC

Activity type

Higher or Secondary Education Establishments

Links

[Contact the organisation](#)  [Website](#) 
[Participation in EU R&I programmes](#) 
[HORIZON collaboration network](#) 

Beneficiaries (1)



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Last update: 24 February 2025

Permalink: <https://cordis.europa.eu/project/id/883703>

European Union, 2025

