

Quantum Science in the Marie Skłodowska-Curie Actions (MSCA)

April 2026



About MSCA

With a budget of €6.6 billion for the period 2021-27, the Marie Skłodowska-Curie Actions (MSCA) is a research and training programme that supports the career, skills development, and mobility of researchers at all stages of their careers and from all over the world. The programme funds bottom-up research in all fields based on scientific excellence and competitive funding.

5 The MSCA have main actions

Doctoral Networks

implement doctoral programmes (including joint doctorates and industrial doctorates) **by international partnerships** of organisations from different sectors. They train highly-skilled doctoral candidates, stimulate their creativity, enhance their innovation capacities and boost their employability in the long-term.

Postdoctoral Fellowships

support researchers' careers and foster excellence in research and innovation. Researchers holding a PhD can carry out their research activities, acquire new skills and develop their careers abroad, whilst developing competences in non-academic sectors and working within interdisciplinary teams.

Staff Exchanges

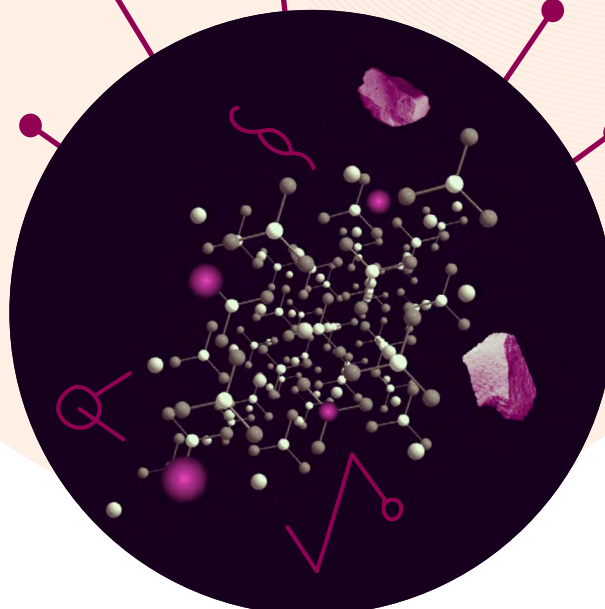
offer researchers and innovators short term international and inter-sectoral exchanges through sustainable, collaborative projects in Europe and beyond. These promote the transfer of both knowledge and skills, while also increasing organisation's capacities for research and innovation.

MSCA and Citizens

brings research and researchers closer to schoolchildren, families and the wider public at large through actions such as the European Researchers' Night - the annual research communication and promotion event taking place at the end of September across EU Member States and Horizon Europe Associated Countries.

COFUND

co-finance regional, national and international doctoral and postdoctoral programmes for researchers' training and career development. COFUND spreads MSCA's best practices by setting high standards and excellent working conditions, through international, interdisciplinary and inter-sectoral mobility.





Quantum science in MSCA projects

Under Horizon 2020 and Horizon Europe, close to 600 MSCA projects have focused on quantum science, contributing to **advancing interdisciplinary research** in the field, fostering **academia-industry collaborations** and **training a new generation** of highly talented quantum researchers in Europe.

Key figures:

**350 MSCA QUANTUM
RESEARCH PROJECTS**

under Horizon 2020 (2014-2020)

**230 MSCA QUANTUM
RESEARCH PROJECTS**

halfway through Horizon Europe (2021-2024)

**EUR 300 MILLION TO FUND
QUANTUM RESEARCH**

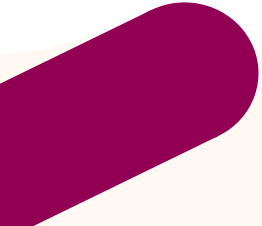
projects in the last 10 years

EUR 150 MILLION

for doctoral programmes in the last 10 years

OVER EUR 100 MILLION

for individual postdoctoral fellowships in the last 10 years



Among those projects, nearly 300 have had direct relevance for the development of quantum technology, for a total investment of around EUR 150 million. ¹

¹ See <https://publications.jrc.ec.europa.eu/repository/handle/JRC141050>

Success Stories

To find out more about MSCA projects, see some examples of success stories from among almost 600 MSCA projects in quantum science below:

Training a new generation of highly talented quantum researchers

GreQuE – MSCA COFUND

Grenoble Quantum Engineering (GreQuE) Doctoral Programme offered interdisciplinary, intersectoral and international doctoral training in quantum engineering to 25 early-career researchers hosted in Grenoble research institutes. Following the project's completion, the University of Grenoble has continued and expanded its training and research programme with a new Quantum Grenoble Doctoral Programme (QuanG) co-funded by MSCA. The doctoral programme supports another 36 early-career researchers, offering them the opportunity to diversify their skills and tackle problems in both fundamental quantum science and technologies.

Advancing interdisciplinary research

INFLED – MSCA Individual/Postdoctoral Fellowship

The INFLED project was a two-year individual postdoctoral fellowship which aimed to identify and develop novel and efficient lead-free quantum dots for infrared light-emitting diodes (LED) technology. Combining nano chemistry with materials engineering, the project developed and successfully tested a lead-free prototype for a near-infrared LED technology. The results represent a significant advancement in the field by pioneering an efficient, stable, and cleaner alternative.

Fostering academia-industry collaboration

LIMQUET – MSCA Innovative Training/Doctoral Network

The LIMQUET project built on the expertise of its seven academic and four industrial partners to train high-level young researchers through the development of innovative techniques to interface light and matter at the quantum level using atoms, nanostructures and photons, with applications in optics and quantum information processing. All doctoral candidates were jointly supervised and had secondment opportunities with one of the industrial partners.

Follow us on:

 *Marie Skłodowska-Curie Actions*

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