Source: Vemaps.com

Land area: 505,990 sq km

Population: 49,077,984

Language(s): Spanish (4 co-official languages: Aranese, Basque, Catalan and Galician)

Capital: Madrid

Currency: Euro €

GDP Per Capita: EUR 30.968

Unemployment rate: 10,61%

EURAXESS country in focus: Spain

Located on the Iberian Peninsula in southwestern Europe, Spain is the fourth-largest country in the European Union and the its fifth-largest economy. Rich in history, Spain has contributed to the advancement of science and discovery, from the era of early navigators, to contemporary achievements in renewable energy and biomedical research. Today's vibrant science, technology, and innovation system (SECTI) owes a debt to history and later integration within the European Union's expansive research development and innovation (RDI) landscape.

Spain is one of the world's top tourist destinations, attracting millions annually to its historic cities, sunny beaches, and cultural landmarks like the Alhambra and Sagrada Família. Tourism contributes significantly to its economy, alongside robust industries such as automotive manufacturing, renewable energy, agriculture, and textiles. Known for its innovation, Spain is also a leader in wind and solar power, reflecting its commitment to sustainable development.

Renowned institutions like the Spanish National Research Council (CSIC) drive cutting-edge advancements. Spain is also a leader in space exploration, collaborating in projects such as the European Space Agency's Mars missions.

A strategy moving forward

The aim of the Spanish Strategy for Science, Technology, and Innovation (2021-2027) is to strengthen and consolidate Spanish RDI foundations. This involves enhancing public-private collaboration, promoting knowledge transfer, improving research conditions, attracting and retaining talent, ensuring gender equality, and increasing investment.

Focus areas of the Strategy include efforts to:

1. **Strengthen public-private collaboration**: Enhance cooperation between public institutions and private companies to drive innovation.
2. **Promote knowledge transfer**: Facilitate the transfer of research outcomes to the market and society.
3. **Improve research conditions**: Enhance the working conditions and career prospects of researchers and institutions.
4. **Attract and retain talent**: Boost Spain's ability to attract, recover, and retain scientific talent.
5. **Ensure gender equality**: Apply the principle of real equality between women and men in RDI activities.
6. **Increase investment**: Double public and private investments in RDI (expressed as gross domestic expenditure on R&D, GERD).

Facts and figures

- More than **1,000 research organisations** are registered in the Spanish Information System on Science, Technology, and Innovation (SICTI). This includes a wide range of institutions such as universities (84), public research organisations (including the four national research bodies-CSIC, ISCiii, CIEMAT and IAC with around 200 institutes and +600 regional research institutes) as well as private research centres.
- As of 2025, Spain has approximately **140,000 researchers**, among which around 20% are foreign – Around 30% of PhD candidates in Spain have an international background. This reflects Spain's growing appeal as a destination for advanced research and higher education.

'Deep Space Communications Complex in Robledo de Chavela', Source: Adobe Stock

- **22 associations** gathering more than **4500 members** of the Spanish scientic diaspora are represented by RAICEX, the Network of associations of Spanish researchers and scientists abroad.

Scientific performance in Spain:

- **Publications**: Spain ranks among the top 10 countries globally in terms of scientific publications. In 2023, Spanish researchers published over 100,000 scientific papers.
- **Citations**: The impact of these publications is significant, with Spain achieving a high number of citations, reflecting the quality and relevance of the research.
- **R&D investment**: Spain's investment in R&D has been steadily increasing, reaching approximately 1.4% of its GDP in 2023. The goal is to reach the European average of more than 2% by 2027.
- **International collaboration**: Spanish researchers are highly collaborative, with around 50% of their publications involving international co-authors
- **R&D spending**: EUR 22.379 billion in 2023.

SCIENCE, TECHNOLOGY, AND INNOVATION (STI) FRAMEWORK

The Ministry of Science, Innovation and Universities is responsible for policy direction and the main funding bodies are the Spanish **State Research Agency** (AEI), and **Centre for the Development of Industrial Technology** (CDTI).

The **Agencia Estatal de Investigación (AEI)** is a public funding agency under the Ministry. Established in 2015, AEI is responsible for the proposal, management, monitoring, and evaluation of state programmes and strategic actions in scientific and technical research. Its main objectives include fostering scientific and technical research across all knowledge areas, promoting excellence, and encouraging cooperation between different system agents.

The **Centro para el Desarrollo Tecnológico Industrial (CDTI)** is a public entity under the Ministry. It promotes innovation and technological development in Spanish companies by providing funding and support for R&D projects. CDTI manages various programmes and instruments within the State Plan for Scientific and Technical Research, focusing on business R&D and international technology cooperation.

The **Instituto de Salud Carlos III (ISCIII)** is the main public research entity in Spain specialising in biomedicine and health sciences. It operates under the Ministry and provides scientific and technical services to the National Health System. ISCIII conducts basic and applied research, promotes public health research, and manages the Health Research and Development Strategy within the National RDI Plan.

The **Fundación Española para la Ciencia y la Tecnología** is a public foundation dependent on the Ministry of Science, Innovation and Universities with the mission of promoting the cultural changes necessary to strengthen the dialogue and commitment between science, society and public management. This involves supporting open science, science for public policies, the social communication of science and innovation and its global dimension, all in close collaboration with the scientific community. FECYT manages several call supporting its mission and is the coordinator of the EURAXESS Spain Network.

RESEARCH PRIORITIES

The **Severo Ochoa Programme** is an initiative by the Spanish government to recognise and support research centres and units of excellence in Spain. The objective of the programme is to improve the capacity of high-level research centers (Severo Ochoa) and units (María de Maeztu) to organize and carry out their investigations, attract and retain talent, foster relationships with other leading centers, and disseminate research results to the public. There are **30 research centres** and **20 research units** accredited as Severo Ochoa Centers or María de Maeztu Units of Excellence

Accreditation: Severo Ochoa Centres and Maria de Maeztu Units that achieve the 'Severo Ochoa Centre or Unit of Excellence' status receive accreditation for four years.

Funding: Accredited centres receive a grant of EUR 1 million per year during a four-year period.

Evaluation: The programme includes a biennial evaluation process to monitor progress and ensure the centres meet their objective.

Spain has **29 Infraestructuras Científicas y Técnicas Singulares (ICTS)**. These are unique scientific and technical infrastructures that support advanced research and technological development, such as:

- **ALBA Synchrotron:** A facility that provides synchrotron light for scientific and industrial research.
- **Centro Nacional de Aceleradores (CNA):** A national centre for accelerator-based research.
- **Observatorio del Roque de los Muchachos:** An astronomical observatory located in the Canary Islands.

1. **Supercomputing Center of Barcelona (BSC-CNS):** A leading supercomputing centre in Europe.

FUNDING TOOLS/OPPORTUNITIES

National recruitment opportunities

More than **1800 positions for PhD candidates** (R1) have been offered annually in Spain through the main national funding calls:

- **FPU (Formación de Profesorado Universitario)**, aimed at training university professors.
- **FPI (Formación de Personal Investigador)**, supporting the training of researchers through participation in specific research projects.
- **Industrial Doctorates**: This initiative promotes collaboration between universities and companies, funding PhD candidates who work on research projects within the industry.

In the case of **postdoctoral reseachers** (R2), more than **800 positions** are offered annually through the main national postdoctoral funding calls:

- **Juan de la Cierva Programme**: Includes both Formación and Incorporación grants, to support early-career researchers.
- **Torres Quevedo Programme**: Aimed at promoting the hiring of researchers with a PhD in the private sector, supporting the professional

career of researchers, and stimulating demand for R&D personnel in the private sector.

- **Ramón y Cajal Programme**: Attract and retain outstanding early-career researchers by providing them with the opportunity to establish themselves in Spanish research institutions.
- **ATRAE programme, for excellent senior (R3 and R4) researchers:** Aimed at attracting internationally recognised researchers to enhance Spain's R&I landscape. With substantial funding and a commitment to excellence, ATRAE fosters cutting-edge research and strengthens the Spanish SETI.

Additional programmes exist also at regional level. For a more complete picture of researcher recruitment opportunities in Spain and additional information on research careers in Spain, see the Research Career Path in Spain.

European recruitment opportunities

Spain has had an active and successful involvement in the Horizon Europe programme:

- Spanish entities have secured over **EUR 2.5 billion** in funding from Horizon Europe projects.
- Spain has participated in more than **1200 projects** across various research and innovation fields.
- Spanish researchers and institutions have collaborated with partners from over **60 countries.**
- The success rate for Spanish applications in Horizon Europe is around **15%**, which is above the EU average.

In the case of the **European Research Council (ERC):**

- Spain has been awarded more than **300 ERC grants** across various disciplines.
- The success rate for Spanish applications to the ERC is around **12%**, which is competitive within the EU.

In the case of **Marie Skłodowska-Curie Actions (MSCA):**

- Spanish entities have participated in over 1000 MSCA projects, reflecting strong engagement in international research mobility.
- Spanish institutions have received over EUR 400 million in MSCA funding.
- Spain has hosted more than 1500 MSCA fellows, including both incoming and outgoing researchers.

REASONS TO CHOOSE SPAIN FOR YOUR RESEARCH EXPERIENCE

Advanced research infrastructures, high degree of excellence in many research-performing organisations, strong international collaboration, freedom of research, employee status for all researchers including pre-doctoral candidates, social public protection system, and commitment to gender and diversity inclusion in RDI. Spain also enjoys a high quality of life, including favourable climate and rich culture.

Source: AI-rendered vision of Spanish Science, Technology, and Innovation System (SECTI)

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Key links

www.euraxess.es/spain/science-spain

https://raicex.org/en/

www.aei.gob.es/

www.ciencia.gob.es/en/Estrategias-y-Planes/Planes-y-programas.html

https://stip.oecd.org/stip/interactive-dashboards/countries/Spain

https://research-and-innovation.ec.europa.eu/statistics/framework-programme-facts-and-figures/horizon-europe-country-profiles_en

EURAXESS – Researchers in Motion is an initiative of the European Research Area (ERA) that addresses barriers to the mobility of researchers and seeks to enhance their career development. This pan-European effort is currently supported by 43 countries, of which we will profile one in our quarterly e-newsletter.