



The international science scene has witnessed the massive upsurge in knowledge, accompanied by an ever-increasing series of technological implementations, unknown hitherto at such a scale. These waves of discovery and inventions have led to an acute awareness of Society as to the benefits, but also, to the possible dangers of innovation. If it is clear that the calling of science is to better understand human beings and the world around them, it is also to design and implement the tools and devices that could improve their well-being, whilst respecting the environment. It is in the constant search for such a balance that the missions assigned to the French Académie des sciences (hereinafter the Academy) carry their full meaning.



### Five basic missions in the Academy's remit

Ever since it was created, the Academy has being resolutely committed to the advancement of science and has advised government authorities in those matters and issues deemed within its remit. It is a double calling that has been reinforced over time, as and when our knowledge-base itself progressed. Today, the Academy's Members discharge their missions, to the Nation and the Academy's foundations, in standing committees and working parties set up by the Academy.

#### **Encouraging the scientific life**

Knowledge production - where the motivation is to see possible new applications or simply curiosity-driven- is vital to the economic and cultural dynamics of any Nation. The Academy supports research in France in the following ways, by:

- Taking part in debates on topical science-related issues;
- Organizing national or international scientific conferences;
- Awarding Prizes and Medals financed through the Academy's foundations, often with contributions by individuals sponsors, families or companies; these awards distinguish the most meritorious scientists and promising research projects;
- Electing new Members, including Foreign Associate Members:
- Publishing the *Comptes Rendus de l'Académie des sciences*, created in 1835 for the international scientific community.



#### **Promoting the teaching of science**

Learning to reason correctly and becoming educated in sciences are essential ingredients to ensuring that future citizens acquire a healthy, critical mind and that the science communities are renewed to a high level of excellence. The Academy contributes to this mission, by:

- Organizing studies as to how science is taught today, from primary schools to the university level;
- Encouraging the *La Main à la pâte* ® programme, used in primary and secondary schools, which serves as a basis for a scientific co-operation foundation assisting in teacher training in science curricula;
- Playing its part in setting up a network of academic scientific advisors for the regional educational authorities;
- Offering financial support to promising secondary school graduates who continue studying science.



#### Transmitting knowledge

Scientific communities owe it to Society to explain and share new knowledge. The Academy plays its part in dissemination scientific culture, by:

- Organizing public sessions, where major scientific problems can be openly debated;
- Providing a general public bilingual Internet site, a resource center for its activities and achievements;
- Publishing a quarterly letter, a shop-window to Academy's thought and questions;
- Taking part in a twinning operation between scientists and Parliamentarians, this activity contributing to build stronger links between science and society;
- Conserving its archives, part of France's scientific heritage:
- Opening, manning and maintaining museums called the 'Maisons des Illustres'.



#### Fostering international collaborations

Science per se is universal and the challenges the world faces are mostly of a global order. The Academy contributes to increased international scope for science, by:

- Initiating and organizing bi- or multilateral co-operation activities:
- Promoting and participating in international networks of Academies;
- Representing France in international scientific institutions and bodies.



#### Ensuring a dual role of expertise and advice

Arbitrating among possible scientific and technological options comes within the remit of elected politicians, but they must be enabled to do so, on sound, reasoned bases. The Academy is called upon by public authorities to intervene as an expert, advisory body; it can likewise self-commission studies on similar questions, as it sees fit. Its conclusions are duly published:

- in reports;
- in advice notes and recommendations:
- in the form of expertise, for which the Academy adopted a Charter of Expertise in 2012.

### An independent institution

The Academy has a privileged statute among France's scientific institutions. With the historic protection of the President of the French Republic, it freely organizes its internal administration and is granted full financial autonomy, under the direct and sole control of the Cour des comptes (France's Comptroller). These degrees of independence stem also from the way in which its Members are peer-elected. Excellence, open minds and multidisciplinarity also qualify the Academy, the Members of which count among the most prestigious French and foreign scientists of their time.

## A modern revised organization

In order to fully play its part as a major actor between science and society, the Academy adopted a new set of statutes in the early 2000s. With increased membership, a drop in the average age of the newly elected members provides for a wider scope of scientific fields for the Academy and ever better reactivity. The Academy discharges its missions thanks to a closely-meshed articulation between statutory Academy's governance (all elected officers) and the ad hoc thematic committees created and instated by the Academy in plenary session.

#### **Plenary Assembly**

Comité secret
Titular members, corresponding
members and foreign associate
members, distributed between the
Divisions and the Sections

#### **Division 1**

#### Sections

Mathematics
Physics
Mechanics and Informatics
Science of the Universe

#### **Intersection for Science Applications**

#### **Select Committee**

The Assembly of Delegates and elected members from the academic Sections

#### Bureau

President, Vice-President, Secrétaires perpétuels

#### **Delegations**

International Relations
Scientific Information and Communication
Education and Training

## Interacademic Committees

#### **Division 2**

#### Sections

Chemistry
Molecular and Cellular Biology,
Genomics
Integrative Biology
Human Biology and Medical Sciences

#### **Standing Committees**

Environment
Energy prospective
Scientific computation
Space research
Science and Metrology
Developing Countries

Science Education and Training
Defence of scientists' rights
Science, ethics and society
Science and safety issues
Science history and epistemology
Terminology and neologisms

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## From Louis XIV<sup>th</sup> to today

### 1666

Jean-Baptiste Colbert, France's Comptroller General, laid the foundations for the Académie des sciences, a small assembly of 'savants' which advised the King on scientific matters.

## 1699

At the initiative of Louis XIV<sup>th</sup>, the new assembly, under his Majesty's royal protection, increased its membership and became known as the Royal Académie des sciences.

### 1793-1795

Although disbanded for some time, the various Academies reappeared as the 'classes' of a National Institute of Science and the Arts, in short l'Institut.

## 1805

The Institut left the premises of the Louvre Palace and installed itself in the Collège des Quatre-Nations, quai de Conti, in Paris.

### 1816

The Academies - Française (1635), Inscriptions et belles-lettres (1663), Sciences (1666) and Beaux-arts (1816) - recovered their name and their independence with the renamed Institut de France. They are joined by the Académie des sciences morales et politiques in 1832.

# Today

The Académie des sciences has the status of 'Public legal entity', carrying out its missions in accordance with provisions set out in the so-called programmatic law 'for research', April 18<sup>th</sup>, 2006.