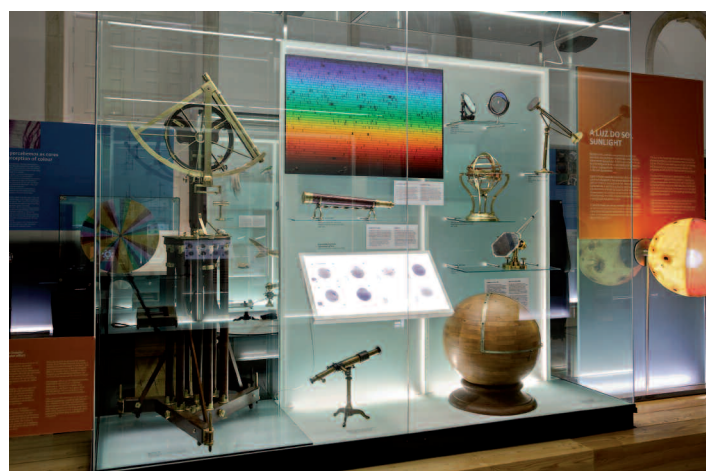


# THE MUSEUM OF SCIENCE AT THE UNIVERSITY OF COIMBRA

*The Museum of Science (www.museudaciencia.pt) of the University of Coimbra, Portugal, opened its doors to the public in December 2006 (Fig. 1). Part of the excellent collections of the Museum of Physics (see Europhysics News 34/4, 154) from the 18<sup>th</sup> and 19<sup>th</sup> centuries are included as well as part of the heritage of the old Astronomical Observatory.*

The museum aims at communicating science to the general public, using not only ancient artefacts but also modern museological resources. In 2008 the European Museum Forum distinguished the Museum with the Micheletti-award, a prize for the best European museum of the year in the category of science and technology, recognizing the work carried out by the University to create an innovative museum based on its buildings and collections. The Museum is an important piece of the candidature of the University to the UNESCO World Heritage. The Museum was planned in two sequential phases, occupying two separate but close buildings. The first phase, called “prefiguration”, has its premises in the renewed

*Laboratorio Chimico* (Chemistry Laboratory), built in 1722, where a permanent exhibition – *Secrets of Light and Matter* – is shown (Fig. 2). This exhibition surveys the relationship of light and matter, as found in the last four centuries, using a variety of objects and scientific instruments (physics, astronomy, chemistry, mineralogy, medicine, botanic and zoology) of the University collections. A set of interactive modules, sometimes replicating historical experiments, allow visitors to observe, for instance, the decomposition of light or the detection of infrared radiation. There are regular activities devoted to children organized by a specialized educational staff. For instance, since 2009 is the International Year of Astronomy, the Museum is the



▲ FIG. 2: A part of the exhibition *Secrets of Light and Matter*, devoted to astronomical observations, in particular of the Sun.

headquarters of an international project called *The Sky – Yours to Discover*, which asks children to observe and draw the sky.

The second phase of the Museum, already under way, uses the historical building just in front of the *Laboratorio Chimico*: the former College of Jesus, founded in 1542 and one of the oldest Jesuit colleges in the world. This building, reconstructed in 1772, hosts the Physics and the Natural History Cabinets established in that year. The requalification of the College is a great endeavour, involving not just the renewal of an area of about 13,000 m<sup>2</sup> but also the assembling of the vast scientific collections of the University. The size of the scientific heritage may already be appreciated by digital access (see the Digital Museum of Science at the above site). The museum is in walking distance of other university attractions,

◀ FIG. 1: The renewed *Laboratorio Chimico* (Chemical Laboratory) built in 1772, where the Museum of Science of the University of Coimbra opened in 2006 permanent exhibition – *Secrets of Light and Matter*.

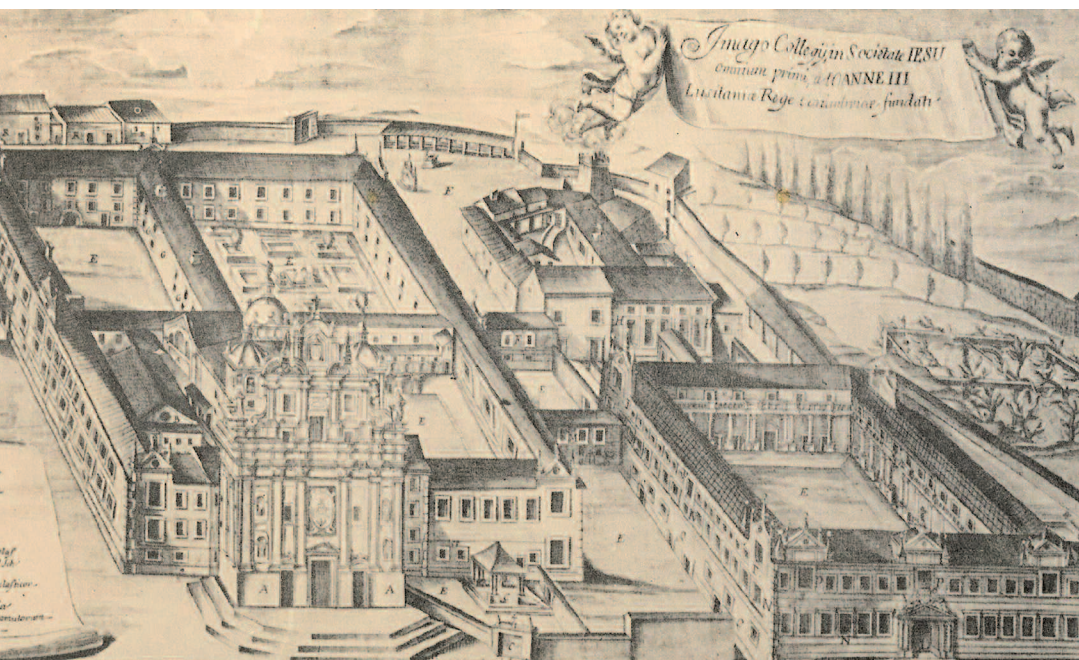






▲ FIG. 3: Overview of the large refectory of the Jesuits colleges, finished in 1596, where the exhibition *Secrets of Light and Matter* was installed.

▼ FIG. 4: Early 18<sup>th</sup> century engraving showing, on the left, the College of Jesus, one of the oldest Jesuit colleges in the world, with the “Se Nova” church. On the back of the right-hand side we see the dining room of the two Jesuits colleges, where the Marquis of Pombal built the *Laboratorio Chimico*.



such as the Biblioteca Joanina (Library of V. John, <http://biblioteca-joanina.uc.pt/>) which was finished in 1728 under the rule of king D. John V, but goes back to the Studies Library created before 1513. The Coimbra collections of scientific instruments are the oldest and most significant in Portugal, being also relevant at the international level. Its core goes back to the 1772 University reform, at the order of the Marquis of Pombal, the powerful Prime-Minister who established modern teaching and research in Portugal. The Marquis made a deep renewal of the university, with the creation of the Faculties of Mathematics and Philosophy and the reform of the Faculty of Medicine. Having been influenced by the

European Enlightenment during his stay as diplomat in London and Vienna, he became in 1750 the prime-minister of D. José I, the successor of D. João V. He gained world fame with the reconstruction of Lisbon after the big earthquake of 1755, which impressed the greatest Europeans minds of the time, such as Voltaire, Kant and Rousseau.

To accomplish his educational and scientific plan, the Marquis ordered a large modification of the College of Jesus (the Order had been expelled from Portugal in 1759), making it suitable to teach the various experimental sciences. This ambitious plan included the creation of the Physics Cabinet, the Natural History Cabinet, the Anatomical

Theatre and the Pharmacy Dispensatory. An academic hospital was also set up in the same building. The University was also enriched with new edifices which express, not only the *Laboratorio Chimico*, but also the Astronomical Observatory and the Botanical Garden. The Laboratory, which is contemporary of the most important work of Lavoisier, was one of the most emblematic of the 1772 reform. The final project was made by William Elsdon, an English military engineer, at the Casa do Risco (House of architecture) in Lisbon, created in the sequel of the earthquake. The new building was erected at the place of the large dining room of the two Jesuits' colleges (College of Jesus and College of Arts), finished in 1596 (Fig. 4). Nowadays, the architect João Mendes Ribeiro and his team managed to assure the memory of the place, while adapting the space to modern museological requirements and, therefore, making the visit a most pleasant experience. With the planned extension of the Museum of Science to the College of Jesus, this experience will certainly become more memorable.

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