



Photos by Daniel Munguia

Optometrist's cabinet.

Science, Art and History In The Museum of Light



Museum entrance.



Mural *The Tree of Science* by Roberto Montenegro.

What do fireflies and glow-worms, a frankfurter cooked by the heat of the Sun, the micro-organisms present in stagnant water, the colors of birds, a kaleidoscope, an optical illusion and a camera all have in common? They can all be found in the Museum of Light, a small but splendid, monothematic museum that uses the most varied forms of communication to examine the phenomenon of light from different points of view: art, biology, chemistry, physics, ecology and even mood.

Inaugurated November 18, 1996, the Museum of Light was born thanks to interest from the UNAM's science dissemination office in rediscovering what daily life has made obvious: that light is indispensable for life; that without it our eyes would have no purpose, our planet would lack colors, plants would never grow no matter how much

we watered them, and there would be no art or science because Man simply would not exist.

Conceived as a science museum pedagogically servicing students of different ages, the museum captures the attention of adults, too, for whom it is also novel to see what light is, how it is produced, how it travels and what happens when it encounters matter. As if that were not enough, the museum combines the basic components of culture: science, art and history.

THE MUSEUM, HISTORY AND ART

The history of the building and its artistic aspects led university officials to recognize the need to integrate both into the museography to enrich the visitor's experience.



The eco-sphere is one of the museum's main attractions.

Located in Mexico City's historic downtown area, the museum occupies what in the early seventeenth century was the church of the Saint Peter and Saint Paul Maximus College, one of the first and most important educational institutions of the viceroyalty, presided over by the Jesuits. When the order was expelled from Mexico in 1775, the building went through a series of changes. Among other things it was used as the headquarters for the Sacred Royal Pawnshop, the General Archives of the Realm, the Peace College (a famous school for girls) and the barracks for the Military College. During the nineteenth-century French intervention it was a warehouse for the invading army's foodstuffs, and in the twentieth century, during the Revolution, it was occupied by federal forces. It was also a cafe with live music and a correctional school. It was the site of two important historical events between

1822 and 1824: Agustín de Iturbide was sworn in as the first emperor of Mexico and the first Constituent Congress met here. From 1944 to 1977, it was the National Periodical Library (the name is still written above the main entrance) and later it was abandoned for 20 years.

In 1922, the minister of public education and illustrious promotor of the arts and sciences, José Vasconcelos, set up what was called the Salon for Free Discussions in the building; he commissioned several painters and artisans to restore and decorate the vaults, arches and pilasters. Three magnificent stained-glass windows, the decoration of the arches and two murals have survived from that time; one of the murals, by Xavier Guerrero, entitled *The Signs of the Zodiac*, is on the chapel dome; the other, by Roberto Montenegro, *The Tree of Science*, is on what was the chancel.

Montenegro's work was the object of conflicts worth briefly recounting. His original work was opposed and altered to the point that the painter requested that his signature be removed. The central figure of the original mural had been a semi-nude man tied to a tree and surrounded by enigmatic, threatening women. Vasconcelos himself asked Montenegro to change the male figure, which the painter did, without any damage to the work. But, in 1944, students from the National School of Visual Arts were commissioned to restore the mural, ignoring Montenegro's offer to participate. When they were finished, Montenegro asked that his signature be taken off it because he no longer recognized the work as his own: they had transformed it, starting by the fact that they had used oils on what had originally been painted in tempura. Today the work, representative of the beginnings of Mexican muralism, has been restored by a group of specialists and is part of the museum's artistic patrimony.

DIFFERENT FACETS OF LIGHT

Despite its small size, the museum has considerable content. It offers information, among other things, about the nature of light, the world of colors, light and the biosphere, starlight, optics and light in the arts and in time.

A visit begins with a time line of light linking history, art and science from the viceroyalty until today, and continues in sections which examine light by answering different questions: How are artificial and natural light created? What is cold light? What produces luminescence? How do organisms change in the depths of the sea according to the amount of light they receive? How do human beings perceive color? What colors have chemical and physical origins? What would happen if we had more eyes, or a single eye? How can the brain be fooled through vision? These are just a few of the questions.



Science and art co-exist in the Museum of Light.



Details of two stained-glass windows in the museum's interior and the mural that greets the visitor at the entrance.

Of great interest are the eco-sphere, a self-sufficient ecosystem that keeps its inhabitants alive solely by regulating the light they receive; the section dedicated to optical illusions; and the segment that deals with light of chemical or electrical origin. The sections are interactive, with brief explanatory plaques, supplemented by docents, students who collaborate with the museum demonstrating how different apparatuses work and helping the public to get the most out of their visits. In the optometrist's cabinet, we can do a self-examination of our sight, learning about astigmatism, myopia and color-blindness. There are also plaques in Braille since the school for the blind and visually impaired is located nearby, and its students are among the museum's most assiduous visitors.

Interacting with its surroundings, the Museum of Light tries to capture the attention of children and the itinerant salespersons who populate the streets surrounding it every day. It also offers temporary exhibits, activities, workshops and demon-

strations, which do everything from revealing the mystery of birds' coloring, putting together a kaleidoscope and demonstrating that bodies that emit light are not necessarily hot (because cold light exists) to cooking frankfurters in a solar oven. All these activities enrich our knowledge and allow us to understand that light is not only basic for life on this planet, but that it also expresses everything that is positive and vital in our humanity.

Elsie Montiel
Editor

MUSEUM OF LIGHT

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 CENTRO HISTÓRICO
 MEXICO CITY, 06020
 OPEN MONDAY TO FRIDAY, 9 A.M. TO 4 P.M.
 SATURDAY, SUNDAY AND HOLIDAYS, 10 A.M. TO 5 P.M.