INTRODUCTORY *NOTULA*

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Facing serious times of change, museums and other cultural institutions, discuss and reflect, in a deeply and interdisciplinary way, about their role in resilience, sustainability and quality of life of the XXI century society.

The XXI century is seen as the Century of Light, as light and light-based technologies are recognized as major economic drivers with the potential to revolutionize it. In that sense, UNESCO proclaimed 2015 the International Year of Light (IYL2015), also noting "that 2015 coincides with the anniversaries of a series of important milestones in the history of the science of light, including the works on optics by Ibn Al-Haytham in 1015, the notion of light as a wave proposed by Fresnel in 1815, the electromagnetic theory of light propagation proposed by Maxwell in 1865, Einstein's theory of the photoelectric effect in 1905 and of the embedding of light in cosmology through general relativity in 1915, the discovery of the cosmic microwave background by Penzias and Wilson and Kao's achievements concerning the transmission of light in fibres for optical communication, both in 1965" (United Nations, A/RES/68/221, 2014).

Such revolution happens and has significant impact on cultural heritage and museums. Aware of the process, we joined the international initiatives on the IYL2015 and organized the International Congress **Lights On… Cultural Heritage and Museums!**

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(https://lightsonchm.wordpress.com/), held in Porto, Portugal, on July 20th, 21st and 22nd 2015.

The congress adopted the concept of light in its broader meaning, that is, not only the form of energy associated with the visible portion of the electromagnetic spectrum, but also all other invisible radiation such as X-rays, ultraviolet, infrared, among many. It aimed to raise and enhance awareness for its potential and crucial role in cultural heritage and in inclusive museums.

Assuming a multi and interdisciplinary character, it strengthened the cooperation bonds between professional, scientific and educational communities and generations. It provided a platform for sharing experiences and knowledge about important scientific and technological advances in the field, featuring Thematic Sessions, with Invited Speakers and Oral Presentations, Poster Session and Workshops. The official language was English and the focus was on the following topics:

1. Science of vision. The perception of colour as a function of illumination
2. Lighting systems in museums / historical buildings / monuments. Requirements and scientific and technological developments
3. Built environment. Solutions. Energy resources and sustainability
4. Study and safeguard of heritage associated with the production of energy and electric lighting
5. Scientific examination of heritage and analytical applications using different radiation. Research on
   i. Materials, technologies, functions and producers

ii. Alteration processes and diagnosis

6. Technologies of communication and mediation
7. Curative conservation and restoration
8. Integrated risk management. Preventive conservation

We are pleased to share with you a selection of the contributions, hoping the reading may be fluid and pleasant and the thoughts and information useful.