Sweden



Primary National Organizer: Photonic Sweden and the Swedish National Resource Centre for Physics Education

Other National Partners: Royal Academy of Sciences, Alingsås kommun, Linköpings kommun, Lund Laser Center, Lund University, Belysningsbranschen, Ljuskultur, Stockholms university, Royal Institute of Technology, Nordita, Vetenskapens Hus, Oskar Klein Centrum, Albanova universitetscentrum, Chalmers, Thorlabs, Swedish Physical Society, Rymdstyrelsen and PhotonicSweden

Sponsors: Royal Academy of Sciences, Alingsås kommun, Linköpings kommun, Lund Laser Center, Lund University, Belysningsbranschen, Ljuskultur, Stockholms university, Royal Institute of Technology, Nordita, Vetenskapens Hus, Oskar Klein Centrum, Albanova universitetscentrum, Chalmers, Thorlabs, Swedish Physical Society, Rymdstyrelsen, PhotonicSweden and Swedish National Resource Centre for Physics Education

Estimated number of IYL 2015 activities organized: 65 events

Number of people reached by IYL 2015 Activities: 150,000 people

General overview of IYL 2015 Activities in Sweden

ver 60 events have been carried out during the International Year of Light (IYL 2015) in Sweden. The initiative brought together people with many different backgrounds, including physicists from different areas, science educators from schools, university and science centers, artists, event managers, photonic industry representatives, experts on indoor and outdoor lighting, for planning meetings in August 2014. The diversity reflects that the IYL 2015 is about so many more things than any single group can imagine.



High school students playing with optical fibers and various LED light sources, to investigate the wavelength dependence of the absorption and strong scattering of light in tissue. CREDIT: Nina Reistad.



Light is magic. It is invisible when travelling and is revealed only when interacting with matter. CREDIT: Christian Vildinge.

Since no earmarked funding was available for the Swedish celebrations, we decided to include light-related themes or activities in festivals, magazines, teacher conferences, and lecture series, and use a dedicated website¹ to collect information about the various activities. Monthly themes, featuring suggested observations, experiments and links to more material, included: lighting the environment, light for health and life, invisible light, sunlight, radiation safety, light in the service of research, tips for the summer holidays, and light and art. A Facebook page² was created to share activities, articles, photos, movies, and other interesting links, as well as a YouTube channel to present researchers working on different aspects of light, from fundamental properties to applications in a wide variety of fields.

The activities included light-shows, school activities, teacher workshops and a photonics breakfast, lectures, conferences, festivals, and open-days at laboratories. MAX-IV arranged teacher days, and light was also the theme for Lise-Meitner days for upper-secondary students arranged by the Swedish Physical Society. The Royal Academy of Science arranged a 275 year Jubilee symposium in Lund. Large-scale outreach events included: *Physics in the Kungsträdgården*, Stockholm; *Lights in Alingsås*, *Light Festival in the Dome of Visions; Light Day in the Gustavium Museum*, Uppsala; *The Night of the Light in the Nobel Museum*; and *Winter Lights*, Linköping.

In addition, light-related articles were written in a number of magazines, and a special issue of *Fysikaktuellt*, "Year of Light," was distributed to secondary schools. Preschool teachers were invited to present their explorations of light with children and parents, and a prize was awarded during a national preschool science teaching conference.

The IYL 2015 has given all of us expanded networks that will influence future work. The year of light has come to an end, but will remain with us through the years to come.

^{1.} www.ljus2015.se

^{2.} https://www.facebook.com/ljus2015/?fref=ts