



United Nations
Educational, Scientific and
Cultural Organization



International
Year of Light
2015

The International Year of Light and Light-based Technologies 2015

A SUCCESSFUL COMMUNITY PARTNERSHIP
FOR GLOBAL OUTREACH

FINAL REPORT

India



Primary National Organizer: In India there was no Primary National Organizer. The IYL 2015 events were independently organized by different organisations, academic and research institutions, government bodies, and NGOs.

Sponsors: The IYL 2015 events were generally sponsored by Government Agencies (like University Grants Commission, Department of Science & Technology, Indian National Science Academy, All India Council for Technical Education, etc.), Scientific Societies (Optical Society of India, Indian Laser Association, etc.), NGOs, etc.

Estimated number of IYL 2015 activities organized: 246 events

Number of people reached by IYL 2015 Activities: Millions of people

General overview of IYL 2015 Activities in India

In India, the International Year of Light 2015 (IYL 2015) events may be categorized into two different classes: (1) those registered on the Light 2015 website, whose total number is 246, and (2) those events that were not registered on the website, but are very significant in view of their broad coverage on the national TV. In addition, since most events were organized by volunteer bottom-

top initiatives around the country that are very difficult to track, especially activities performed in schools, we might give a conservative estimation of 1,000 events around the country.

These events registered may be categorized in the following major groups:

- [A] Public Outreach
- [B] Academic and Research,
- [C] Lighting the Young Minds,
- [D] Anniversary Celebrations, and
- [E] Audio-Visual Films on Light and related Themes

[A] PUBLIC OUTREACH:

In this group there were 72 events covering

- (i) General Awareness – 31
- (ii) Public lectures, Seminars, Symposia, and Workshops – 11
- (iii) Competitions and Contests – 3
- (iv) National/Regional level Fairs, Exhibitions, and Science Festivals – 19
- (v) International Festivals/Exhibitions – 8

Most of these events were organized by local/regional/district level scientific committees. Some of the events



The Story of Light Festival. CREDIT: The Story of Light Foundation.

were also at the national or international level. For instance, the SPIE international exhibition *Light: Beyond the Bulb*, was organized at seven different places in the country. Another international event was the *Story of Light Festival* organized in Goa in which 70 artists and scientists from 14 countries were involved for 5 days, and was visited by 15,000 persons. The importance of light in art and culture was also highlighted in events like the national-level Photography Contest with the participation of 1000+ schools, which included three verticals, viz., schools, open schools, and special schools.

[B] ACADEMIC AND RESEARCH:

Institutions of higher learning (universities, colleges, and institutes) and scientific societies organized 75 academic and research related events, covering the following types of programmes:

- (i) International Conferences - 13
- (ii) National/Local/Institutional Workshops/Conferences/ Symposia/ Seminars/ Discussion Meetings - 46
- (iii) Schools/Short Courses/Teachers' Training - 6
- (iv) Celebrations/Fests/Competitions - 10

The research workshops/conferences/symposia/seminars generally covered the following themes:

- Optics and Photonics; Light Technologies
- Applications of Lasers in Medicine
- Vision Science and Optometry
- Lasers in Photonics Applications
- Science and Technology of Free Electron Lasers
- Solid-State Lighting
- Nano bio-photonics
- Light-Matter Interaction and Applications
- Astronomy and Astrophysics; Solar Astrophysics
- Optoelectronics and Photonics Materials

[C] LIGHTING THE YOUNG MINDS:

The 26 events under this group were organized by school children which comprised the following:

- (i) Quiz and Lecture Competitions - 9
- (ii) Science Seminars and Workshops - 10
- (iii) Optics Exhibits and Science Exhibitions - 7

Though participation of schools in IYL 2015 events was low, many of them organized optics model making competitions for their junior and senior classes, which generated a lot of interest among the young minds.

[D] ANNIVERSARY CELEBRATIONS:

To commemorate the pioneering work of Ibn Al-Haytham in optics 1000 years ago, eight events were organized by some universities/organizations/academies. Apart from this, in some of the seminars, a special session was devoted on the contributions of the Arab scientists to optics.

[E] AUDIO-VISUAL FILMS ON LIGHT AND RELATED THEMES:

There are programmes which do not figure in the calendar of events of Light 2015 website, but are very important to mention here. One such prominent example is that of Vigyan Prasar - a national institute for science and technology communication, established under the Department of Science and Technology, Government of India, produced a 13-episode film on light and related themes, comprising:

- Why International Year of Light
- Properties of Light
- Laser and Its Applications
- Photonics and Optical Fibers
- Light and Health
- Light and Culture
- LED Technology
- Quantum Era
- Relativity
- The Magical Year: Documentary on Albert Einstein
- Sir C.V. Raman: Life and Work. Why the Sky is Blue
- Spectroscopy and What the Universe is made of
- Measuring The Cosmos

The films have been telecast on Doordarshan—the national TV channel—as well as on the Rajya Sabha channel, which are accessible to millions of people in the country, with the aim to promote and propagate scientific and rational outlook in the society, nurturing interest in science, encouraging creativity, and developing the capacity for informed decision making.



Children at the Story of Light Festival.
CREDIT: The Story of Light Foundation.

The Story of Light Festival

The Story of Light festival was India's first arts-meets-science festival conceived by The Story of Foundation for IYL 2015. It took place in Goa, India, from 14 to 18 January 2015. A public call for proposals was carefully curated to 62 events across various formats illustrating the depth and breadth of light and its connections to science, technology, nature, culture, spirituality, history, and cosmology. The festival was preceded by a month-long residency during which 65 participants—artists, designers, researchers, educators, and philosophers—came together to build their installations, performances, and workshops.

Around 15,000 visitors including students, tourists, and local residents attended the five-day festival. Public installations, performances, and screenings were curated for a more general audience including local residents and tourists, while workshops and talks were directed at specific communities and school and university students. Attendance was free and the festival was successful in introducing a new audience to contemporary science and technology in a state with less scientific impetus. It also provided an opportunity for artists and designers to present their works to a wide audience outside a gallery environment.