

# The Partnership

The International Day of Light Steering Committee includes representatives from UNESCO as well as: the American Institute of Physics (AIP), the American Physical Society (APS), Bosca, Commission Internationale de l'Eclairage (CIE), European Centres for Outreach in Photonics (ECOP), the European Physical Society (EPS), the International Association of Lighting Designers (IALD), the International Centre for Theoretical Physics (ICTP), the IEEE Photonics Society (IPS), Light: Science and Applications, lightsources.org - the international network of accelerator based light sources, The Optical Society (OSA), Philips Lighting, SPIE - the international society for optics and photonics, Synchrotron-light for Experimental Science and Applications in the Middle East (SESAME), and Thorlabs.

The Steering Committee is assisted by an Advisory Board representing all sectors of the community of light science and technology, astronomy, lighting and applications, art, energy, architecture, and lighting design, as well as representatives from international organizations.

## Supporting the International Day of Light

The International Day of Light will reach an audience of millions of scientists, industry leaders and members of the public worldwide. We welcome enquiries from both the public and private-sector to get involved and to demonstrate support for the aims of the International Day of Light.

Please contact dayoflight@eps.org for details of how you can support the International Day of Light.

#### **Steering Committee Members**



#### The International Year of Light and Light-based Technologies

The International Year of Light and Light-based Technologies 2015 was a United Nations observance that raised global awareness of the achievements of light science and its applications, and their importance to humankind. Under the leadership of UNESCO, more than 13,000 activities took place in 147 countries to reach an audience estimated at over 100 million. An International Day of Light will provide an enduring follow-up to the International Year of Light in raising the profile of science and technology, stimulating education, and improving the quality of life worldwide.



# International **Day of Light**

16 May



Educational. Scientific and

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**United Nations Cultural Organization** 

# About the **International Day of Light**

# What is the **International Day of Light?**

The International Day of Light is a global initiative that provides an annual focal point for the continued appreciation of light and the role it plays in science, culture and art, education, and sustainable development, and in fields as diverse as medicine, communications, and energy. The broad theme of light will allow many different sectors of society worldwide to participate in activities that demonstrate how science, technology, art, and culture can help achieve the goals of UNESCO education, equality, and peace.

# Who is organising the **International Day of Light?**

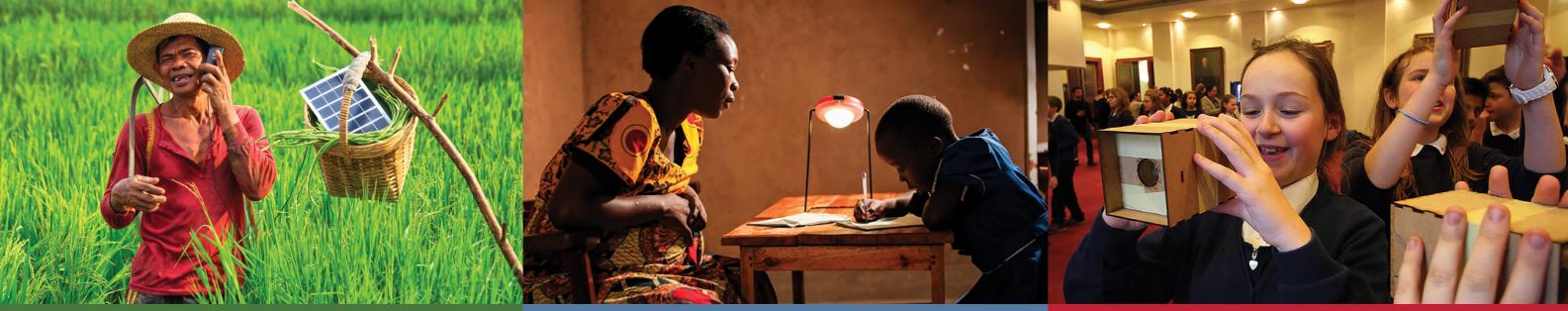
The International Day of Light is administered from the International Basic Science Programme (IBSP) of UNESCO by a steering committee that includes representatives from UNESCO and a consortium of partners worldwide.

## When will the International Day of Light be celebrated?

The International Day of Light will be held on 16 May every year, the anniversary of the first successful operation of a laser in 1960. The laser is a perfect example of how a scientific discovery can yield revolutionary benefits to society in communications, healthcare and many other fields. The International Day of Light however is not just about science - the themes cover all areas of light in its general sense including art, culture, and development.

#### When will the first celebration of the International Day of Light take place?

The inaugural celebration of the International Day of Light will take place on 16 May 2018 at the Headquarters of UNESCO in Paris with presentations from Nobel laureates, scientists, industry leaders, and partners representing art, architecture, lighting, design, and NGOs. There will also be hundreds of events around the world arranged by local organisers.



# SCIENCE AND TECHNOLOGY

### PHOTONICS

Light is central to our understanding of science and the development of technology. For centuries, the study of light and its properties have revolutionized every field of science and have involved all the major figures of science from Ibn Al Haytham to Einstein.

From gamma rays to radio waves, the spectrum of light provides insights both far-ranging and near, from the origin of the Universe to technologies that have shaped our society. For instance, advanced research in areas such as nanophotonics, quantum optics, and ultrafast science are inspiring new fundamental discoveries and opening new scientific frontiers.

Light-based technologies and photonics directly respond to the needs of humankind by providing access to information, promoting sustainable development, and increasing well-being and standard of living.

Photonics-enabled industries are major economic drivers, and the many applications of photonics have transformed society through improved medicine, communications, and energy production.

Photonics is ubiguitous in our daily lives: from technologies that improve vision and power the Smartphones in our hands, to state-ofthe-art technologies that provide us with tools for space observation and fibre optics that help us communicate via the Internet. Photonics is poised to become the key enabling technology of the future.

# SUSTAINABLE DEVELOPMENT

### LIGHT AND THE SUSTAINABLE DEVELOPMENT GOALS

The science and technology of light play an important role in the development and positive evolution of societies, and are essential for maintaining our expanding connectivity to one another. Photonics provides practical and cost-effective solutions to meet global challenges in energy production, sustainable development and healthcare and align well with the United Nations Sustainable Development Goals to end poverty, fight inequality and injustice, and take urgent action to combat climate change and its impacts.

Photonics connects the citizens of the world through the Internet and communications networks, and is a vital enabler for business and education. These networks also support accountability to ensure peace, justice and stronger legal institutions. Optical technologies play a key role in medicine, from simple diagnostics and monitoring to advanced treatment options and research. Remote sensing technologies promote the development of sustainable agriculture to fight hunger and to protect life on land and in rivers, lakes and oceans. Modern lighting provides important opportunities to improve quality of life with efficient and green solutions. And light-based technologies are critical for monitoring and predicting climate change.

#### **EDUCATION**

emerging economies.

# **INNOVATION & ENTREPRENEURSHIP**

# CULTURE

of our cultural heritage.

Light has had significant impact on the visual and performing arts, literature, and human thinking. This theme provides an important bridge between science and culture, and will aid in breaking down the boundaries between these fields.



**United Nations** Educational, Scientific and Cultural Organization



International Day of Light 16 May

# **GET INVOLVED!**

International Day of Light Secretariat (Secretariat: dayoflight@eps.org) or the International Basic Sciences Programme at UNESCO HQ in Paris, France (Jean-Paul Ngome Abiaga: jj.ngome-abiaga@unesco.org)

# EDUCATION AND CULTURE

Light is an inspiring subject in many disciplines, and is the perfect catalyst to promote science education among young people. Teaching programmes using light science and technology build worldwide educational capacity through activities targeting children, addressing issues of gender balance, and focusing especially on countries with

The science and applications of light lend themselves naturally to encouraging local innovation, even in environments with limited resources. Moreover, education in light and light-based technologies acts as a lever to encourage careers in science and engineering, as well as stimulating entrepreneurship.

Light has influenced and continues to influence human culture. Studying the connection between light and culture throughout history, from the Islamic Golden Age until modern times, provides valuable insights into the interactions between science, art, and the humanities, and brings greater understanding and appreciation

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