Communicating science worldwide with the International Day of Light

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Abstract The International Day of Light is an annual UNESCO observance to raise global awareness of the importance of light science for sustainable development. We review here our experiences since 2018 and discuss future plans.

For more than a decade, OSA, SPIE, the IEEE Photonics Society, ICO and many other partners have worked with the United Nations Educational and Scientific Organization (UNESCO) to raise awareness of the importance of science for sustainable development through formal international observances. This work began in 2009 with the construction of a multi-sectoral partnership that ultimately led to the proclamation of the year 2015 as the United Nations *International Year of Light and Light-based Technologies* (IYL2015) [1]. Following the success of IYL2015 with more than 13000 events worldwide, UNESCO searched for an enduring follow-up, and the IYL2015 partnership developed the concept of an annual *International Day of Light*, to be celebrated on May 16, the anniversary of the first operation of the laser in 1960 by Ted Maiman. The International Day of Light was proclaimed at the 2017 UNESCO General Conference, and the four celebrations held since 2018 have reached a global audience estimated at over a million, with more than 1500 events taking place in over 70 countries [2].

The International Day of Light now provides an enduring annual opportunity to reach new audiences. Moreover, the crosscutting theme of light allows us to engage with many different sectors and to focus on science communication in its general sense. In planning and implementing International Day of Light events, we can reach out to new scientific disciplines and communities, and the association with UNESCO reminds us of our societal responsibilities as scientists and educators to communicate to as broad an audience as possible.

In this context, the last 18 months have shown us in very stark terms that effective science communication with our larger society can be extremely difficult. However, this is not a new problem. The great science communicator Carl Sagan identified the difficulty 25 years ago when he stated in one of his last interviews [3]: "We've arranged a society based on science and technology in which nobody understands anything about science and technology. And this combustible mixture of ignorance and power sooner or later is going to blow up in our faces." With our recent and ongoing experiences of the pandemic, as well as the continual challenge of communicating the need for action in areas of climate and sustainable development, responding to Sagan's message is more urgent now than ever.

In optics and photonics, we are privileged to have the platform of an annual United Nations observance to give extra visibility to our science communication efforts. It is up to us to make the most of this opportunity. This paper will provide an overview of our experiences, and some particular suggestions for making International Day of Light outreach efforts more effective to broader audiences.

References

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