

## **Natural Sciences Sector**

## DG message on the occasion of the celebration of the International Day of Light

Light is life. Without light, life on our planet would not exist. In studying light through astrophysics, we delve into some of the deepest mysteries of the universe. In exploring optics and quantum optics, we plunge into the heart of matter itself.

It is therefore unsurprising that, across cultures, light is a universal symbol of life, inclusion, and renewal. Light is associated with illumination, or spiritual awakening. Light is seen in opposition to darkness, which represents ignorance and intolerance.

Although light symbolizes knowledge, we are still blind to many of its everyday applications. The high broadband speeds we use today could not have been achieved without fibre optics. DVDs and Blu-Ray discs could not be read without light. Solar energy is a source of heating. Light-based technologies are essential in healthcare, where optical instruments and tools are used for analysis and imaging, and ultraviolet light sources are used for sterilization. These technologies are also essential for sequencing genomes – like that of the SARS-CoV-2 virus, currently wreaking havoc around the world.

It is these exceptional properties that we celebrate every 16 May, on the International Day of Light. This year, as the world grapples with the COVID-19 pandemic, we hope that this event will also be an opportunity to shed light on unprecedented global challenges.

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