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Light and it's essentially for human benefits.

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“We can easily forgive a child who is afraid of the dark; the real tragedy of life is when men are afraid of the light” (Plato).

Since the beginning of times, human life has completely depended and evolved around light. Discovering fire and its multiple uses was the first step for men. Even though technology as it is known today didn't exist, our ancestors were able to use light in their everyday activities, making their lives easier. Now, more than ever, light is fundamental in almost every process, bringing benefit to human beings.

From natural events which are invisible to the human eye such as photosynthesis to the functionality of the most complex photonic technology dependent machines, light is essential to mankind. Today of course, we do not need to set a fire in order to see at night; with a simple touch we can get an entire room illuminated in just seconds. Thanks to light sending signals to the brain, people are able to recognize things they see. It wouldn't be possible to see the green leaves or blue seas without its existence.

Throughout the years, the medical field has been able to capture the benefits of light. With the invention of medical imaging, X-rays, lasers, ultrasounds and the implementation of nuclear medicine; an important amount of diseases has been diagnosed and cured. Lasers, for example, are used in dermatology, ophthalmology and dentistry. Eye surgery and other surgical procedures now also use their power rather than invasive methods of the past. The early detection of tumors and dental cavities are performed by laser based medical apparatus. Common procedures such as tumor, tattoo, hair or birthmark removals are done with their help. Even surgical headlights have made the difference by creating perfect visual conditions in surgeries.

Light plays an important role in the investigation field. With its help, hundreds of instruments have been created; facilitating scientific investigations by helping the invisible become visible by the blink of an eye and giving us a better idea of the different processes that take place in the human body, natural surroundings and the universe itself. These instruments including microscopes, telescopes and

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other technologies such as high resolution cameras have helped men understand aspects that seemed impossible even a century ago.

In the industrial field, light as an energy resource is used in an uncountable amount of tasks. Regarding natural light, many companies have begun to use eco-friendly methods including solar panels in order to save not only energy but money too. This system is recently being welcomed in many homes as it has been found to be very efficient and not a threat to the planet.

In this “International Year of Light”, we should reflect on how important this resource is. Knowing that light is needed in almost every aspect of our lives should inspire us to think of more ways of using it, but most importantly being rational with the uses we give it.

“I hereby declare that this project was entirely my own work and that any additional sources of information have been duly cited.”