## International Day of Light celebrations under Scientific Social Responsibility

## B P Singh Physics Department Aligarh Muslim University, Aligarh

The Physics Department, Aligarh Muslim University, Aligarh organized a commemorative event to celebrate the "International Day of Light", adhering to COVID-19 protocols, on May 14<sup>th</sup>, 2022. The event was arranged as part of the "Scientific Social Responsibility" initiative of the Department of Science and Technology (DST), New Delhi. The initiative is an integral component of the project led by Prof. B.P. Singh. The International Day of Light is observed annually on May 16th and marks the momentous achievement of physicist and engineer, Theodore Maiman, who successfully operated the laser in 1960. This special day aims to foster scientific collaboration and harness its potential for promoting peace and sustainable development. By commemorating this event, the Physics Department sought to emphasize the importance of light-based technologies and their role in advancing various fields of science and society. The day holds tremendous significance as it provides a platform to recognize and appreciate the profound impact that light has on numerous facets of society. From its pivotal role in scientific advancements to its influence on culture, art, education, and sustainable development, light permeates our lives in multifaceted ways. It is a driving force behind transformative innovations in fields such as medicine, communications, and energy, revolutionizing the way we live and interact with the world. The event served as an opportunity to inspire, and engage a diverse range of individuals and sectors worldwide. By bringing together the realms of science, technology, art, and culture, the event aimed to underscore the potential of these interconnected domains in fostering UNESCO's vision of building peaceful and inclusive societies. Through interactive workshops, engaging presentations, and thought-provoking discussions, participants gained a deeper understanding of the intricate relationship between light and different spheres of human endeavor. From showcasing cutting-edge scientific research to celebrating artistic expressions inspired by light, the event created a vibrant tapestry of knowledge, creativity, and inspiration. By recognizing the far-reaching implications of light and its multifaceted applications, the event aimed to inspire individuals and communities to harness the power of light in their respective fields and contribute to the betterment of society.



Prof. B.P. Singh presented flowers to welcome Prof. D. S. Mehta

The commencement of the program was marked by a gracious welcome from Prof. B.P. Singh, the Chairperson of the Physics Department. With warmth and enthusiasm, he extended his heartfelt greetings to the Chief Guest, faculty members, and all participants in attendance. Prof. Singh underscored the profound significance of commemorating the International Day of Light and expressed pride in the department's illustrious heritage. In his opening remarks, Prof. Singh emphasized the vital role of fostering a scientific temperament and cultivating a spirit of inquiry within the academic community. He stressed the importance of nurturing a deep understanding of scientific principles and their practical applications, recognizing their potential to shape technological advancements that can benefit society at large. By encouraging curiosity and innovation, the department aims to contribute to the development and progress of various fields, further cementing its commitment to excellence in education and research. Through his words, Prof. Singh sought to inspire and motivate the participants, reminding them of the rich legacy and tradition of the Physics Department. He encouraged them to embrace the spirit of scientific inquiry, explore new frontiers, and make significant contributions to the world of science and technology. Prof. Singh's warm welcome set the tone for a captivating and intellectually stimulating event, where knowledge, collaboration, and innovation would intertwine to create a memorable and impactful experience. By celebrating the International Day of Light, the Physics Department showcased its commitment to nurturing a scientific community that can shape the future through innovative applications and contribute to the betterment of society.



Prof. D.S. Mehta, delivering the talk on "Laser based solid state lighting and illumination engineering with visible light communication/Li-Fi."

During the program, the esteemed presence of Prof. D.S. Mehta, a distinguished keynote speaker and Chief Guest from the renowned Indian Institute of Technology (IIT) Delhi, added tremendous value to the event. Prof. Mehta delivered an enthralling and enlightening talk titled "Laser-based solid-state lighting and illumination engineering with visible light communication/Li-Fi," which resonated deeply with the audience due to its utmost relevance and significance. In his talk, Prof. Mehta embarked on a journey through time, tracing the evolution of light technologies across centuries. He began by highlighting the groundbreaking work of Ibn Al-Haytham, a pioneering scholar who laid the foundation of modern optics in 1015. By shedding light on this historical milestone, Prof. Mehta emphasized the rich legacy upon which contemporary light technologies have been built. Prof. Mehta delved into the remarkable advancements in LED (Light Emitting Diode) and OLED (Organic Light Emitting Diode) technologies. He provided a comprehensive overview of the remarkable efficiency and versatility offered by OLEDs, capturing the audience's attention with the myriad possibilities that arise from this cutting-edge technology. He discussed the unparalleled advantages of OLEDs, including their energy efficiency, flexibility, and vibrant color reproduction, which have revolutionized the field of lighting. The centerpiece of Prof. Mehta's talk revolved around laser-based solid-state lighting, which stands at the forefront of the lighting industry. He elaborated on the diverse applications of this technology, particularly in sectors such as automobile and stadium lighting. By harnessing the power of lasers, solid-state lighting offers remarkable advantages in terms of efficiency, durability, and precision. Prof. Mehta highlighted how laser-based lighting solutions are transforming the automotive industry by enhancing safety, aesthetics, and energy efficiency in vehicles. Furthermore, he underscored the pivotal role of solid-state lighting in providing superior illumination for stadiums and sports arenas, creating immersive experiences for spectators while minimizing energy consumption. Throughout his presentation, Prof. Mehta's passion for the subject matter shown through, with his depth of knowledge and insightful perspectives. Attendees were enthralled by his ability to seamlessly bridge the gap between theoretical concepts and practical applications, making complex ideas

accessible and relatable to diverse audiences. By focusing on laser-based solid-state lighting and its diverse applications,

Prof. Mehta instilled a sense of awe and excitement in the audience, inspiring them to explore the transformative possibilities of this cutting-edge technology. His expertise and insights left an indelible impact, fostering a deeper understanding of the immense potential of light-based technologies in shaping a brighter and more sustainable future.



Prof. B. P. Singh, Chairperson, Physics Department while presenting memento to keynote speaker of the program, Prof. D.S. Mehta, Department of Physics, Indian Institute of Technology Delhi

Dr. M. Wasi Khan provided a comprehensive overview of the event's objectives and important aspects. Dr. Jai Prakash, ensured the seamless execution of all activities throughout the program. A key highlight of the event was the special visit organized for approximately 50 students from Range Hills Public School, G. T. Road, Aligarh. These enthusiastic students, of grades 9 to 12, had the opportunity to explore the Physics department's basic science laboratories. Engaging in hands-on experiments and witnessing scientific phenomena firsthand, the students were immersed in a world of discovery and learning.



## The Chief Guest Prof. Mehta presenting participation certificate

The esteemed Chief Guest of the event, Professor Mehta from IIT Delhi, presented certificates of participation to each student. The recognition served as a testament to their active involvement and commitment to embracing the spirit of scientific inquiry and exploration. By incorporating the visit of young and aspiring minds, the event aimed to inspire the next generation of scientists and innovators.



The Chief Guest Prof. Mehta presenting participation certificate

The interaction with the Physics department's laboratories and the recognition bestowed upon the students by the esteemed Chief Guest fostered a sense of motivation and enthusiasm among the budding scientists, encouraging them to pursue their scientific passions and make a positive impact on the world. This event, with its emphasis on nurturing young minds, exemplified the commitment of the Physics department to inspire the young scientists and innovators of tomorrow.

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