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Light4LifeNL

Focus on the R&D and innovation necessary to be able to achieve intelligent environments, featured with lighting.

On 21 November 2022, we organized the 2022 edition of ILIAD, our annual public outreach event. During this event, we typically highlight the relevant developments of our researchers in terms of their contributions to the R&D and (technological) innovation in science & technology in light & intelligent lighting and its applications in, for instance, health & well-being.

This year, we decided to use this event to announce a new initiative to establish a large-scale program focused on R&D and (technological) development on Light & Lighting in preventing diseases and to encourage other universities, university medical centers, universities of applied sciences, RTOs, companies, etc. to join the initiative, at first in the co-design (plan) of the program and later in the co-creation (execution) of the projects in the program.

This new initiative, coined "Light4Life," is focused on the R&D and (technological) innovation necessary to be able to achieve intelligent environments,



featured with lighting, and probably extended with sound and haptics, that should enable improving the performance and well-being of humans. We had three specific application domains in mind, being (1) caregivers, (2) patients, and (3) offices and schools. To be able to design and develop such intelligent environments, we would need three R&D domains, including the domain of (a.) the effect of light, sound, and haptics on human beings in the contexts mentioned above, (b.) the intelligence and control needed to create the smart environments, and (c.) the societal and economic impact

for the whole ecosystem. During the event we focused on the role of Light & Lighting in preventing diseases by providing such a healthy living environment for us to live and work in and thus to influence our behavior accordingly. Light has a powerful impact on human everyday functioning. It is the most important time cue of our biological lock. Moreover, light can induce more acute beneficial effects on alertness mood and performance. Various leading researchers affiliated with ILI as well as a series of invited guest speakers from various

organizations presented their opinions and visions on the R&D and (technological) design necessary for achieving such healthy living environments.

Given the experiences and promising results during the event, we organized an additional workshop annex net-working and match-making event on 15 March 2023, during which we wanted to hear from professionals in the field where they experience opportunities for Light & Lighting to be used to improve the life of people, in particular in the context of preventing stress, negative emotions, neuro-degenerative disorders, etc., for instance, (1) pre-venting (healthy) people becoming patients by using light to help prevent health issues for office workers, teachers, students and pupils, (2) preventing a further decrease of care professionals by using light to realize a healthy and strong workforce in the care system, and (3) supporting patients in their healing process by leveraging the health-promoting potential of light to support patients during their care trajectory and prevent worsening of health.

The various inspiring presentations and fruitful discussions during the two events have already led to new insights and thus to an improved version of the plans for the Light4Life initiative. To be continued!



Are you interested in joining the initiative Light4LifeNL?

Please contact us at ili@tue.nl