

GLOW TU/e

Campus overview

interviewed by: Michiel de Boer (Moesasji)

What is light exactly? How does it behave? And how do we behave under the influence of specific lighting conditions? Prof. Dr. Ir. Gerrit Kroesen, department of Applied Physics and organizer of the GLOW Route at TU/e Campus: “The GLOW art works at TU/e Campus that are featured during this edition of GLOW are clearly linked to our research.

We aim to even outdo our last performance, which was a highly appreciated experience. This year we have more works, larger works and more spectacular works. None of them is standard, all projects are unprecedented experiments. Nice thing is that nearly all our student associations and faculties are involved. Together the participants have put tremendous energy into the projects, going the extra mile. This resulted in a truly unique GLOW Next experience. Let me take you on a brief tour:

01 Origin of Life

We start at the Dommel tunnel with the Tesla Coil (yes, it's back!). Did you know life on earth started with lightning striking water, transforming into amino acids and eventually forming DNA? This forms the inspiration for the project

‘Origin of Life’. This year the Tesla Coil will be situated above the pond, covering the Buddha statue and water in lightning bolts. In the fountain, images are projected symbolizing the beginning of life. In between the lightning bolts, you will hear music by Eddy de Clercq, especially composed for this work of art.



02 UNBUILT

Next project is UNBUILT. This installation allows the viewer to get a look inside the Vertigo building of the faculty of Architecture, Building and Planning. By means of a rhythmic spectacle of powerful shadows, this installation displays projects created by students, which have yet been unbuilt. Different perspectives bring their

hard labor to life. A project by Maisa van Genderen and Jurre van Kuijk in collaboration with OPENLIGHT. Sound by Joep Le Blanc.

03 Photonic Modulation of light and space

This project is a collaboration between the TU/e and the Van Abbemuseum: both celebrating their anniversaries. The work of the Hungarian László Moholy-Nagy, hovering above the surface of the central pond, will be recreated in a unique way. His ‘Licht-Raum-Modulator’ is present at the Van Abbemuseum. By use of photonics and data science the art work is virtually transported to the TU/e Campus and represented in a transparent cube (3x3x3 meters) equipped with a million of individually controlled led lights. The result is an interplay of light, movement and sound, creating an exciting experience.

04 Influx

When a light is turned on, the light itself starts to move and pushes away the darkness by flowing into every nook and cranny. During this process, the light doesn't move freely but is influenced by the surfaces and edges of the area. At the MetaForum, the surfaces and edges will be delivered by the crowd passing by. The crowd and its behavior will influence the light and

vice versa. An intriguing interactive game which is also part of a study. ILLI researches - during GLOW - the influence of light on the behavior of human beings.

05 AnTUenna

Light installation AnTUenna consists of 10,000 led lights attached to the chimney at the Ceres building. The color and intensity of these leds - positioned in rings - are individually controlled by a central controlling system. Together they form a conic, low-resolution screen which depicts images, videos and animations to be spectated at a great distance. During GLOW, image of scientific and technical processes are represented on the chimney. The images are supplied by several TU/e faculties, exemplary for the many fascinating studies that take place on campus. After GLOW, AnTUenna will remain on site permanently.

06 Exploding Wire

Lightning is an awe-inspiring phenomenon. And ‘Exploding Wire’ is set to mimic the energy outburst at GLOW Next. A voltage pulse of 800.000 volts is fed to a very thin copper wire. When the lightning explodes, this copper wire can neither be seen nor heard, but the plasma induced all the more! After every explosion, drones will bring a new copper wire into position.