LIGHTING DESIGN RESEARCH GROUP

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DEPARTMENT OF ARCHITECTURE, DESIGN AND MEDIA TECHNOLOGY TECHNICAL FACULTY OF IT AND DESIGN, AALBORG UNIVERSITY



RESEARCH

KEY RESEARCH

The Lighting Design Research Group applies knowledge of dynamic lighting design to health care, schools, offices and urban spaces.

How can dynamic lighting:

- > stimulate our biological clock?
- > support staff in health environments?
- > become a tool for teachers to "set the scene" in the classroom?
- complement daylight by responding to the sky?
- > support the waiting situation for public transportation in the city?
- > affect our way of moving and being bodily present in space?

WHAT WE DO

Create relevant knowledge and guidelines on how to design with light to achieve specific needs and effects.

Enable lighting designers to develop dynamic lighting designs that meet people's needs for healthy, functional and aesthetic lighting environments.

EDUCATION

STUDY RELATED ACTIVITIES

The Lighting Design Research Group is affiliated with the MSc programme in Lighting Design.

All researchers teach and supervise within the subjects of their research.

Students team up with the different research groups and projects in the 9^{th} and 10^{th} semester.

COLLABORATION

WHO BENEFITS FROM OUR RESEARCH

The research is of interest to the lighting industry, lighting designers and consultants, municipalities and other owners of hospitals, schools, offices and public transportation.

EXTERNAL PARTNERS

Tridonic, Fagerhult, Zumtobel, iGuzzini, Chromaviso, Schréder, Holscher Design, Velux, City of Albertslund, City of Roskilde, City of Copenhagen, Sweco, HLA Architects, GXN, Rigshospitalet

PUBLICATIONS

IMPORTANT PUBLICATIONS

- Entrainment and Disruption: Lessons Learned from Implementing Circadian Lighting
- Kvalificering af Døgnrytmelysteknologi i Plejehjem
- Dynamic Lighting in Office
 Environments Creating Natural
 Flow of Light
- Dynamic Lighting in Classrooms: A New Interactive Tool for Teaching
- Experiencing the Light Through our Skin: an EEG Study of Colored Light on Blindfolded Subjects
- The Ambience Potential of Coloured Illuminations in Architecture: A Spatial Experiment Exploring Bodily Sensations



AALBORG UNIVERSITY Denmark

KEY PROJECTS

BREAKING

LIGHT4HEALTH

Developing a novel educational course to teach health research methods and findings to lighting designers at graduate level.

IEA SHC TASK 70 LOW CARBON, HIGH COMFORT INTEGRATED LIGHTING

Project focused on bringing the qualities of dynamic daylight into the office. With the industrial partners. Tridonic, Fagerhult, Zumtobel and iGuzzini.

BALANCED BRIGHTNESS LEVELS IN OUTDOOR ENVIRONMENTS

Investigating human sensory experience of lighting and darkness to improve understandings of the architectural and social potential of outdoor lighting.

DOUBLE DYNAMIC LIGHTING

Explores and validates the benefits of integrating daylight and dynamic lighting technology in architectural designs for improved health and well-being.

VIDEO PRESENTATION



CONTACT

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