

ENAC - PhD positions in the field of visual discomfort from glare

The Laboratory of Integrated Performance in Design (LIPID) at EPFL has two PhD positions starting in 2025. The positions are fully funded for 4 years.

ENVISAGED PhD TOPICS

Project 1: “Color influence” : The overall goal of this track is to investigate and quantify the influence of the color of light on glare perception. This will reduce the large uncertainty that exists in developing and specifying glazing and shading that may alter the spectrum/color of the transmitted light. The focus is on quantifying the effect of color on glare by extending the range of colored stimuli from a project previously conducted at the same lab. In the first stage, the fundamentals will be investigated under a fully controlled experimental setup with electric light sources. In a second stage experiments under daylight conditions will be conducted to be able to validate the model(s) developed in the first stage.

Project 2: “Time influence” : The second PhD project will investigate temporal aspects of glare perception, that include short experiments in a daylight lab and long-term exposures in living lab environment(s). The ultimate goals for this work are : a) to determine representative exposure times when conducting experiments and b) to evaluate the long term (=annual) acceptance of glare situations that occur only at specific times throughout the year. For the living lab experiments, hybrid strategies combining measurements and simulation will have to be developed to reconstruct the glare situations at the users' positions as the cameras cannot be mounted at the eye position.

WORK ENVIRONMENT

EPFL is one of the most dynamic university campuses in Europe and ranks among the top 20 universities worldwide. It offers an exceptional working environment with very competitive salaries. The LIPID lab offers a highly motivating, interdisciplinary scientific environment with many opportunities to interact between different projects and researchers, and has access to excellent research facilities.

CANDIDATE PROFILE

Candidates interested in interdisciplinary approaches and with prior knowledge and/or background in one or more of the following fields are sought: lighting, physics, engineering (architectural engineering, computational engineering, ...) or related fields.

Experience in (day)lighting, colorimetry, hdr-imaging or glare is a plus. There is no limitation concerning the country of origin of the candidate.

APPLICATION PROCESS

In case of interest, or if you have questions, please contact Dr. Jan Wienold, Senior Scientist at the LIPID laboratory, via email to jan.wienold@epfl.ch . Formal applications including a letter of motivation, a CV of the candidate, a transcript of records and the contact information of 2-3 references, should be sent via email (as a single pdf file) at the same address before November 1st , 2024.

Shortlisted candidates will be invited to apply to one of the EPFL doctoral schools (e.g. EDCE) by January 15th, 2025. This parallel application process is necessary to be eligible for a PhD at EPFL.