

# Q+A

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What's an award-winning lighting designer doing in one of the industry's preeminent research labs? **CLTC's** new associate director explains

## What changes can we expect at the California Lighting Technology Center?

My addition brings a fresh lighting and daylighting design perspective to the CLTC team, as my research has predominantly focused on human-factor topics including visual discomfort, productivity, and sense of safety. As soon as I joined CLTC, I started collaborating on their existing human-factors projects including 1) lighting for circadian rhythm and human stress levels in healthcare lighting, and 2) community-focused decarbonization efforts for exterior lighting.

In addition, one of my long-term goals is to advance daylighting design as a best practice. Based on 2018 Commercial Buildings Energy Consumption



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Survey national data, daylight harvesting was used in only 2.3% of all commercial buildings.

CLTC already has strong partnerships with industry, utilities and policy makers. With my experience and connections in both lighting design and academia, I will serve as a bridge between CLTC and design firms to share regular updates on our research.

## How will your experience as a lighting designer at HLB Lighting Design inform your new role at CLTC?

Since 2007, I have simultaneously pursued my academic journey while working as a lighting designer and daylighting specialist. My lighting and daylighting design projects included a wide range of applications such as universities, public libraries, public parks, airports, museums, commercial buildings and religious buildings. For those projects, I was particularly interested in spatial experiences, human comfort, visual interest, lighting energy saving strategies, high-performance building façade systems, environmental impact analysis, and advanced control system integrations.

Successes and challenges in these projects will serve as the basis for me to help develop the future lighting research agenda at CLTC. The lighting design projects will also serve as a set of case studies for teaching students about the complex ways that owners, architects, lighting designers, engineers and contractors work as a team to address the built environment.

## Has applied research always been a focus at CLTC? If so, what are some of the key market sectors we should be aware of going forward?

Yes! I have personally observed CLTC's leadership since I started as a lighting designer at HLB in 2007; I remember relying heavily on CLTC's Title 24 education materials at that time. Over the years, I have been impressed by CLTC consistently implementing newly developed lighting technologies at test beds such as the UC Davis campus and the City of Davis, as well as communicating these success stories to policy makers, industry partners and the public. Now, emerging policies prioritizing decarbonization, social equity and environmental justice are opening new opportunities for our applied research.

## What role do manufacturers play in CLTC's work and how is that role expected to expand or change?

Great question! As lighting-control integration concepts have been adopted over the last 10 years, lighting manufacturers have developed increasingly more sophisticated products. The same growing awareness of climate change issues that motivated lighting-control integration adoption also points to manufacturers needing to optimize their processes with respect to the embodied energy and the life cycle of their lighting products, as well as prioritizing cybersecurity and ease of installation.

CLTC's affiliate program has been a great channel to move new lighting technologies from the laboratory to the marketplace. As CLTC's associate director, my primary role is to strengthen and expand communication channels with new and existing industry partners so that we can make a broader impact on the market as a whole.