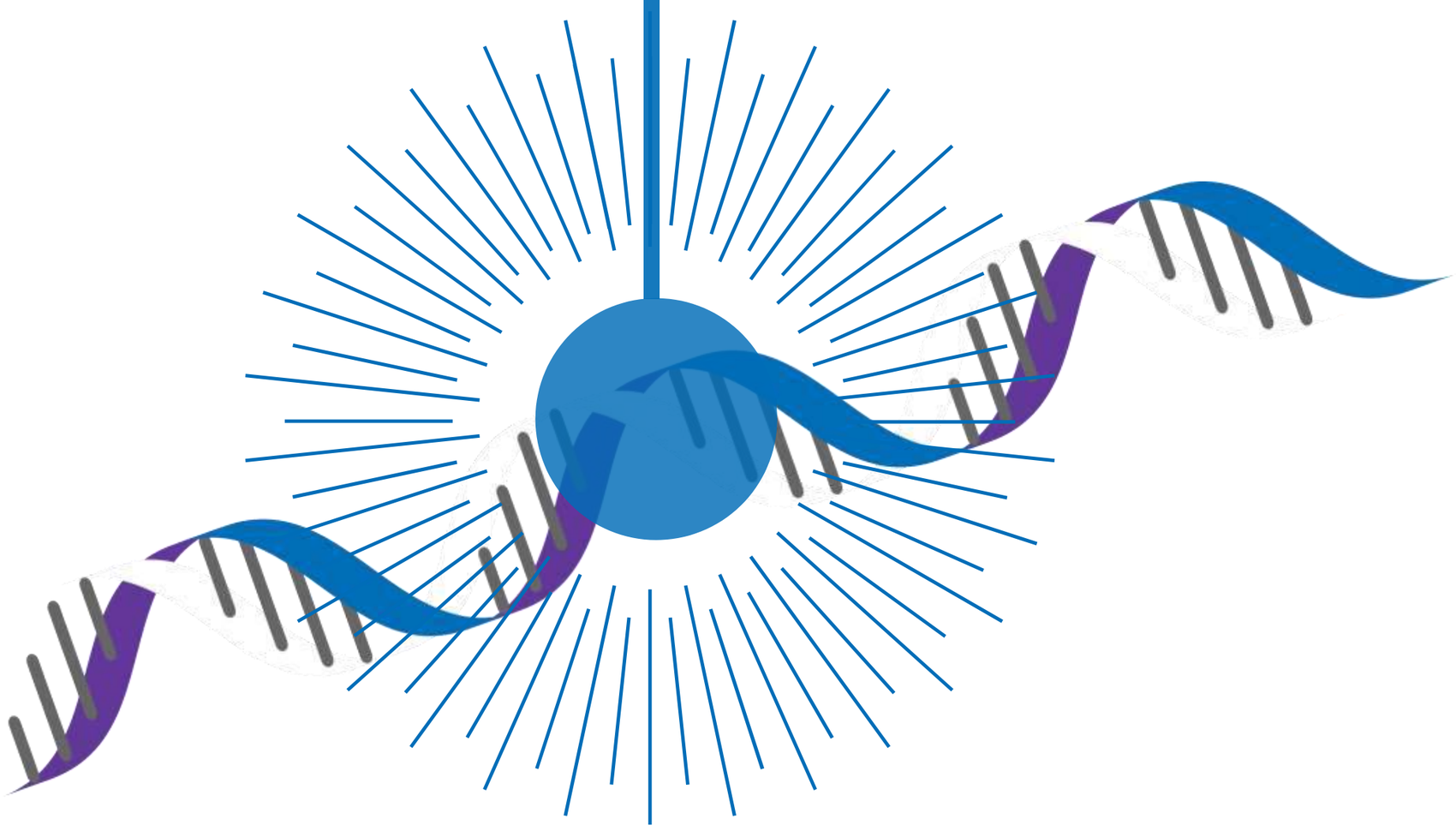
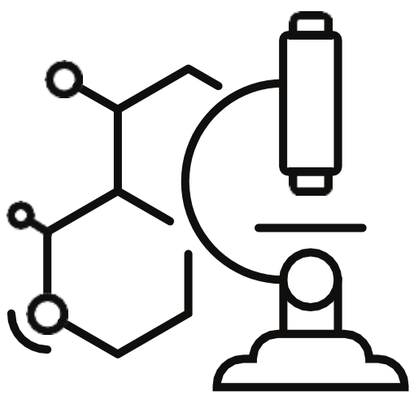
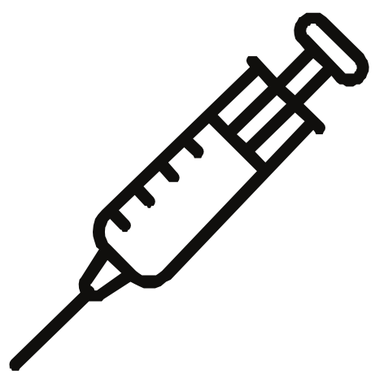
UV LEDs Impact on Vaccine Research & Development







Where LED innovation meets experience

Phoseon™ TECHNOLOGY

Today’s landscape of vaccine manufacturing is changing fast as it is brought to the forefront of contemporary news. Pressure to develop vaccines is juxtaposed to the traditional roadblocks of high cost, low or inconsistent sales compared to drug development, and the move from relative to absolute safety.

Manufacturers are charged with maintaining an extensive supply chain while monitoring for adventitious contaminants that would halt production. They also have to understand ever changing processes, patented antigens or methods, and regulations while mitigating risks and reducing costs. Eliminating some of the variables would help.

Recent discoveries in UVC LED technology provide efficient, effective, and repeatable inactivation of microorganisms and contaminants. These systems can be used to help maintain the critical cleanliness of raw materials and supplies. In addition, they can reduce the consumption of high value chemicals to deactivate the virus essential in the manufacturing of a vaccine. UVC LEDs can do this in a consistent and predictable manner where chemical based systems cannot.

UVC LED technology brings two essential tools to the arsenal of any a researcher or bioengineer: highly controlled partial or complete inactivation of viruses, and an effective-long-lasting solution against common contaminants in R&D and manufacturing.

LEDs leading industry change

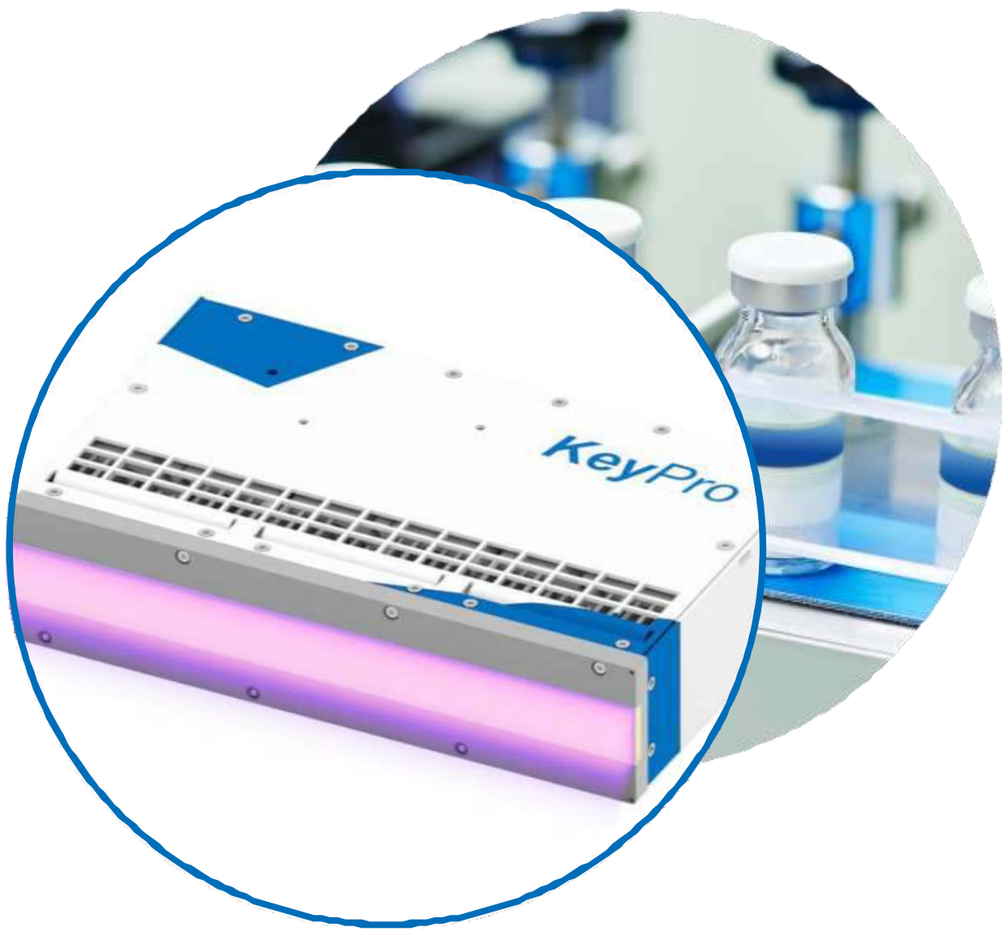
With a novel inactivation solution

CHALLENGES	RESOLVED
Increasing need for virus inactivation and effective laboratory decontamination	UV LED Diodes present a novel method for virus inactivation and contamination control
Chemical solutions lack specificity, control, and effectiveness	Phoseon research proves rapid, reliable inactivation of Influenza A, RNase and other biomolecules
Lack of decontamination and virus inactivation alternatives	KeyPro™ offers precise control and is being implemented globally
Scaling controlled solutions to manufacturing processes lacks efficiency	With a large global reach, Phoseon provides life science solutions for both R&D laboratories and pharmaceutical manufacturing

Phoseon Technology Solutions

In the R&D steps?

KeyPro™ KP100 instrument suited for R&D labs, with highly controlled inactivation of viruses or contaminants in 96-well plates and other equipment.



Ready to manufacture?

KeyPro™ KP200 lamps are scalable and ready to be implemented in production lines. Whether it is for RNase decontamination of products or virus inactivation with highly controlled dosages.

Exploring UVC inactivation?

KeyPro™ Explorer is a compact, air-cooled, UVC LED system that is the perfect stepping stone to investigate new applications using UVC light. Do you run directional studies or implement new applications? Use Explorer.

Phoseon™ TECHNOLOGY