

# LED Solutions for Life Sciences

## *Innovative LED Light Sources for Bio-Inactivation, Molecular Detection and Advanced Imaging*

Phoseon Technology is the premier partner to solve new challenges in life sciences instruments, healthcare and advanced imaging. No one gets more out of ultraviolet LEDs than Phoseon, who have applied that expertise to LED light engines across a wide range of relevant wavelengths.



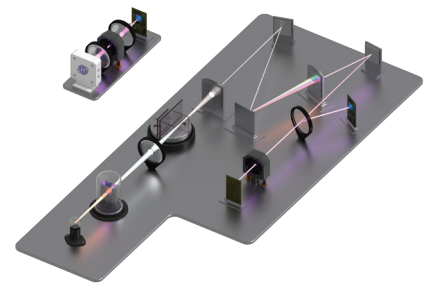
### Company

Patented Reliability  
Thermal Management  
In-house R&D,  
Manufacturing & Testing  
Custom Optics



### Technology

Utilize Native Diodes  
High Power & Efficiency  
Patented Stability Control  
Compact Layout



### Solutions

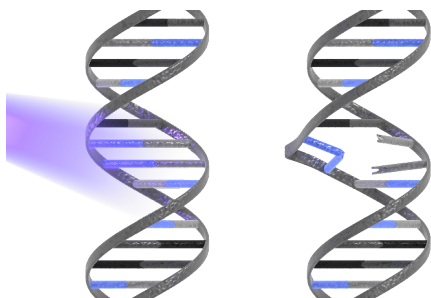
Application Expertise  
Broad Wavelength Range  
Hardware, Firmware,  
Software & Interface  
Configurable



### Reliable LED Technology

At Phoseon, we apply our extensive portfolio of technology to bring high-performance and high-power light sources to life sciences and medical devices. Whether you are developing a new instrument for protein detection or a system for protecting patients from dangerous infections, Phoseon understands your needs and is the right partner for highly-reliable, efficient and specialized light sources.

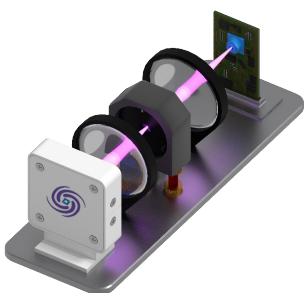
## Bio-Inactivation



UV light inactivates microorganisms by disrupting the nucleotide sequence in DNA. The effect is like jamming a zipper, preventing gene expression and blocking reproduction. In addition to microorganisms, molecular biological contamination can also be rendered inactive with concentrated UV light.

Phoseon leads the industry in UV LED sustained power output. We design systems that have stable, high output over time for consistent results. Stable output is necessary for validated systems, so that you get the same inactivation results every time.

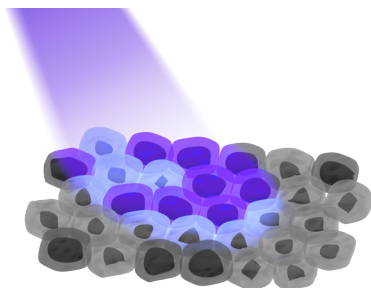
## Molecular Absorption



Conventional optical detection systems for chromatography and spectroscopy are bulky and slow to start, due to the arc lamps used as light sources. LED-based systems have a number of advantages, such as small size and immediate operation.

Phoseon has developed LED-based optical detection technology that can cover a number of wavelengths of interest in a compact package. Phoseon's solid state light sources provide long life, stable light output, and low heat emission.

## Advanced Imaging



Proteins within tissue and cells fluoresce when excited by UV light. Normal and abnormal cells respond differently due to underlying structural characteristics. This response can aid in differentiating tissue with real-time imaging or spectroscopy.

Exogenous dyes and markers are quite useful for visualizing different tissues in the body, but the workflow for delivering such compounds to the target areas can present a challenge. Phoseon creates tailored light sources and imaging systems, designed to target the endogenous fluorophores in the cells and tissues of interest to you and your customers.

## Contact Phoseon

Phoseon Technology is the world leader in providing LED solutions. Phoseon is an ISO 9001:2008 certified company that has a worldwide sales and support network to ensure customer's process stability. For more information regarding Phoseon, please visit [www.phoseon.com/life-sciences](http://www.phoseon.com/life-sciences)