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# Silanna UV Presents High Power 235nm far UVC LEDs Using New SPSL Technology

## *ICULTA Berlin UV LED conference to see high power at short wavelengths and exceptional lifetime*

**Brisbane, Australia, 6 April 2023** - New technology that pushes the boundaries of far UVC LEDs to emit at shorter wavelengths, at higher power, and with longer lifetimes, will be presented by Silanna UV at the International Conference on UV LED Technologies & Applications (ICULTA) in Berlin, Germany from April 23 to 26, 2023.   
  
On April 24, from 10.00-10.30am, William Lee, Silanna UV’s Product Development Manager, will give a talk, “High Power 235nm far UVC LED using SPSL technology". The company’s SF1 series 235nm and SF3 series 255 nm UV LEDs will be exhibited. Silanna is a Silver sponsor of the conference.

### New UV-C LED technology

This revolutionary UVC LED technology from Silanna UV offers huge advantages for applications as diverse as disinfection, water quality monitoring, gas sensing, liquid chromatography, and chemical and biological analysis.  
  
Old-fashioned AlGaN-based far UVC LEDs in general suffer from poor carrier injection, low light emission and high drive voltage, due to the inherit limitations of high Al-content AlGaN.   
  
Silanna’s new short period superlattice (SPSL) far UVC LED structure helps overcome these issues. In a SPSL device, composed of repeating layers of AlN and GaN, the presence of GaN maintains the TE dominance of the emission as well as lowering the activation energy of donors, resulting in more efficient devices compared to LEDs made with the conventional AlGaN technology. Furthermore, the emission wavelength can be easily tuned using the thickness of the GaN well, a process that is significantly easier to control than tuning of Al composition in the barrier and well.

### ICULTA details:

International Conference on UV LED Technology Devices & Applications  
Date: April 23 to 26, 2023   
Venue: Melia Berlin, Berlin, Germany   
[https://www.iculta.com/](https://www.iculta.com/" \t "_blank)   
  
Further details of Silanna’s new UVC LEDs are available at: [https://silannauv.com/products/](https://silannauv.com/products/" \t "_blank)

### About Silanna UV

The Silanna Group is an Australian semiconductor manufacturer established in 2006. Privately funded since being acquired from Peregrine Semiconductor in 2008, Silanna UV is an ISO 9001:2015 certified solution provider for UVC LED manufacturing. Based in Brisbane, Australia, Silanna UV provides far UVC light sources for water quality sensors, gas sensors, disinfection, and HPLC (High-performance liquid chromatography) applications. Silanna UV’s innovative approach allows UV LED technology to push toward shorter wavelengths, from 230nm to 265nm, including deep UVC and far UVC ranges. The company holds unique epitaxy technology and holds patents related to UV LED technology. With its unique UV LED technology, Silanna UV strives to create new possibilities by pushing UV wavelength boundaries to the limit. To learn more, please visit [http://www.silannauv.com/](http://www.silannauv.com/" \t "_blank).