

## China Leading UV LED Curing Solution Provider at RadTech UV+EB Technology Expo & Conference (USA)



**Zhuhai, Guangdong Mar 13, 2026 ([Issuewire.com](http://Issuewire.com))** - The intersection of global manufacturing and sustainable industrial processing is frequently highlighted at specialized international forums. Among the most significant gatherings for the photopolymerization industry is the RadTech UV+EB Technology Expo & Conference in the United States. This event serves as a central hub for professionals involved in ultraviolet (UV) and electron beam (EB) technologies. As the industry continues its shift toward energy-efficient and environmentally conscious production methods, the presence of established manufacturers at such expositions underscores the global nature of the supply chain. This article examines the significance of the RadTech event and profiles [Zhuhai Tianhui Electronic Co., Ltd.](#), a participant representing the sector of UV LED packaging and curing solutions.

### **The RadTech UV+EB Technology Expo & Conference: An Industry Barometer**

The RadTech UV+EB Technology Expo & Conference represents the largest dedicated event for UV and EB industry technologies in North America. It is organized by RadTech International North America, a non-profit trade association dedicated to the advancement of ultraviolet and electron beam technologies. The conference acts as a barometer for the health and direction of the curing industry, bringing together suppliers, formulators, equipment manufacturers, and end-users from diverse market verticals.

The primary focus of the RadTech conference is the science of photopolymerization. This process involves using light energy to change the physical state of a material, typically converting a liquid resin

into a solid plastic or coating. This technology is critical in numerous sectors, including automotive manufacturing, graphic arts, electronics, medical device assembly, and additive manufacturing (3D printing). The event provides a technical forum where academic papers are presented, and panels discuss the latest regulatory developments, particularly those concerning volatile organic compounds (VOCs).

A dominant theme in recent iterations of the RadTech Expo is the industry-wide transition toward sustainability. Traditional thermal drying processes often require significant energy consumption and can emit solvents into the atmosphere. In contrast, UV and EB technologies are recognized for their ability to cure materials instantly with reduced energy input and minimal to no emissions. The conference dedicates substantial programming to these environmental benefits, exploring how manufacturers can lower their carbon footprint while maintaining high production speeds.

Furthermore, the Expo highlights the technological evolution from traditional mercury-vapor lamps to [UV LED curing systems](#). This transition is driven by the desire for longer equipment lifespans, lower heat output, and the elimination of mercury, a hazardous material. Exhibitors at RadTech display the latest advancements in photoinitiators—chemicals that react to specific wavelengths of light—as well as the engineering behind the light sources themselves. The event also serves as a critical networking space where the supply chain connects. It allows raw material suppliers to interface with system integrators, ensuring that the chemistry of inks and coatings is perfectly matched with the spectral output of the curing hardware.

Discussions at the conference also extend to emerging applications. While printing and packaging remain foundational markets, the technology is expanding into battery manufacturing for electric vehicles, where UV curing is used for binding and coating electrode materials. Additionally, the role of UV technology in coil coating, wood finishing, and functional coatings for consumer electronics is heavily featured. The RadTech UV+EB Technology Expo thus functions not merely as a trade show, but as a comprehensive educational platform that defines the trajectory of industrial surface finishing and material assembly.

### **Zhuhai Tianhui Electronic: Advancing UV LED Solutions**

Within this global context of technological advancement, Zhuhai Tianhui Electronic Co., Ltd. operates as a specialized entity in the UV LED sector. Established in 2002, the company positions itself as a production-oriented high-tech enterprise. Its operational model integrates research and development, manufacturing, sales, and solution provision. Unlike companies that focus solely on assembly, Tianhui Electronic specializes in UV LED packaging—the critical process of enclosing the LED semiconductor chip to protect it and ensure efficient light extraction and thermal management.

The core of Tianhui's operations lies in its comprehensive approach to UV spectrum applications. The company's product portfolio covers the full range of ultraviolet wavelengths, including UVA (320–400 nm), UVB (280–320 nm), and UVC (200–280 nm). This spectral diversity allows the company to cater to different industrial requirements. UVA is predominantly used for curing applications, such as drying inks, adhesives, and coatings, which aligns closely with the technologies showcased at events like RadTech. UVB and UVC ranges are utilized in medical applications, sterilization, and disinfection protocols, reflecting the broader utility of UV technology beyond industrial curing.

Tianhui Electronic emphasizes its capabilities in UV LED packaging technology. Packaging is a determining factor in the performance of an LED, influencing its intensity, thermal resistance, and operational lifespan. The company offers a production series that ranges from small-power

specifications to high-power modules. This flexibility is essential for system integrators who require specific form factors and power densities for different machinery. For instance, a large-format printer requires a different curing module compared to a compact medical device used for bonding catheters. By controlling the packaging process, the company maintains oversight regarding the consistency and reliability of the light output.

The comprehensive solutions provided by Tianhui extend to finished products. This indicates a capability to supply not just the component LEDs, but also the integrated modules and systems required for end-use. In the context of UV LED curing solutions, this involves the engineering of arrays that deliver uniform irradiance across a target surface. Uniformity is vital in industrial processing; uneven curing can lead to product defects such as tackiness or poor adhesion. Tianhui's focus on solution provision implies a technical engagement with clients to match the LED specifications—such as peak wavelength and optical power—to the chemical requirements of the UV-curable materials being used.

Market trends indicate a growing demand for customized UV LED solutions. As industries adopt UV curing for temperature-sensitive substrates, such as thin films in electronics or heat-sensitive plastics in packaging, the "cold curing" nature of LEDs becomes advantageous. Tianhui Electronic addresses this market need by offering products that mitigate heat transfer to the substrate while delivering sufficient energy to initiate the polymerization reaction. The company's competitive pricing strategy aims to make these advanced curing systems accessible to a broader range of manufacturers, potentially accelerating the adoption of LED technology over legacy systems.

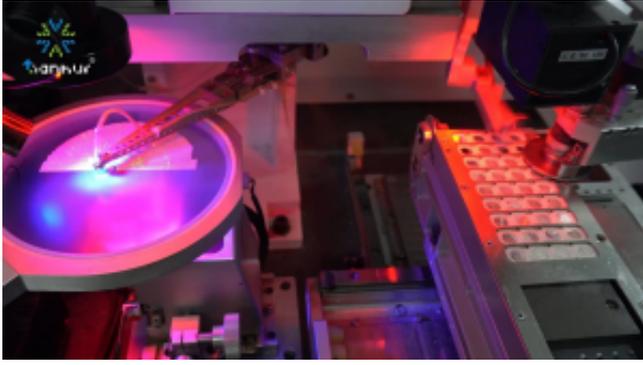
The company's portfolio also addresses the increasing strictness of global sterilization standards through its UVC products. While the RadTech conference focuses heavily on curing, the underlying semiconductor technology for UVC disinfection shares manufacturing principles with UVA curing LEDs. Tianhui's expertise in packaging allows them to navigate both sectors, leveraging thermal management techniques developed for high-power curing LEDs to improve the efficiency of sterilization modules.

Tianhui Electronic maintains a digital presence to facilitate information access for global partners and clients. Detailed specifications regarding their UV LED packaging series, wavelength options, and finished product solutions can be reviewed on their official website at <https://www.tianhuiuvled.com/>. This platform serves as a repository for technical data, outlining the electrical and optical characteristics of their product lines.

## Conclusion

The industrial landscape for UV and EB technologies is defined by a constant drive for efficiency and precision. Events like the RadTech UV+EB Technology Expo & Conference provide the necessary venue for understanding macro-level industry shifts, such as the move toward sustainable manufacturing and the technical evolution of photopolymerization. Concurrently, manufacturers like Zhuhai Tianhui Electronic Co., Ltd. provide the essential hardware and packaging solutions that enable these shifts.

By combining integrated R&D with a focus on consistent UV LED packaging across the UVA, UVB, and UVC spectrums, Tianhui Electronic supports the supply chain that drives modern industrial curing and sterilization. The synergy between global technical forums and specialized solution providers ensures that the benefits of UV LED technology—ranging from energy savings to enhanced process control—are realized across diverse industrial applications.



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