

Nano Science, Technology and Industry Scoreboard

UbiQD and SWM International Agree to Co-develop Next Generation Quantum Dot Interlayers for Electricity-producing Windows

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Collaboration leverages UbiQD's quantum dot technology with SWM's domain expertise and industry leadership in polymer interlayers for laminated glass.

<u>UbiQD, Inc.</u>, a 'deep-tech' advanced materials company spun out of Los Alamos National Laboratory (<u>LANL</u>), and Schweitzer-Mauduit International, Inc. (<u>SWM</u>), a leading performance materials company with deep domain expertise in polymer engineering, have announced a collaboration to develop a quantum dot (QD) glass interlayer that enables production efficiencies for solar window manufacturing to scale faster and at lower costs.

"SWM has a track record for delivering demanding and value-added solutions, solving our customers' most challenging problems," explained Caio Sedeno, Vice President and General Manager of Films for SWM. "This new relationship extends our technical contributions to the built environment, enabling property owners and developers to push towards net-zero."

According to the US Department of Energy, buildings account for 76% of domestic electricity use.

UbiQD's 'luminescent solar concentrator' technology deploys fluorescent QDs between two sheets of glass, within the interlayer, to provide a modest tint with various color options. The QDs partially absorb sunlight and convert it into near-IR light that is harvested into electricity by solar cells hidden in the window frame.

"Advancements in materials innovation have led to some of the most important solutions for humankind, and renewable energy will be no exception," said Hunter McDaniel, Founder and CEO of UbiQD. "Together with SWM, we are reimagining what windows mean for the built

vironment and the decarbonization of buildings."	
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