

Nano Science, Technology and Industry Scoreboard

What If Crops Could Get More from the Sun? Fluorescent QDs Make it Possible!

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UbiQD and Nanosys have agreed to partner on the development and manufacturing of UbiGro® luminescent greenhouse films.

<u>UbiQD, Inc.</u>, an advanced materials company powering product innovations in agriculture, clean energy, and security, and <u>Nanosys, Inc.</u>, the <u>quantum dot</u> manufacturing leader, announced that they have agreed to partner on the development and manufacturing of UbiGro® luminescent greenhouse films.

Installed above plants in a greenhouse, <u>UbiGro®</u> is a layer of light that helps plants get more from the sun. UbiGro® uses fluorescence to create a more optimal light spectrum for crops, converting under-utilized portions of sunlight to more photosynthetically efficient orange light that plants crave.

Over the last two years, early adopters and greenhouse technology institutes have trialed and tested UbiGro®. These pilot customers in the US and Europe have seen encouraging results, including higher production yields and improved harvests. With increasing customer demand, UbiQD began looking for options to ramp-up production. Nanosys, having demonstrated quantum dot's scalability in the display industry, was a natural partner.

"The greenhouse cover films market produces twenty times more area than the display industry and continues to grow in double digits on an annual basis," said Jason Hartlove, CEO of Nanosys. "Greenhouses represent a massive opportunity for the unique benefits of quantum dot technology. We look forward to working with UbiQD to bring UbiGro® to market with our industry-leading scale, cost-effectiveness and highest quality manufacturing standards."

Nanosys brings its large-scale manufacturing technologies for quantum dots and films, proven in the display market, to help UbiQD address the massive greenhouse market for

UbiGro®, estimated to be over 50 billion ft2 globally. Through this partnership, the technology inside the latest TVs from top brands will soon help boost the world's food supply by making greenhouse farming more efficient.

"The success of Nanosys in the display industry has inspired many of us working to bring advanced materials to market," said Hunter McDaniel, UbiQD Founder and CEO. "We plan to leverage Nanosys' deep domain experience in quantum dot end-product integration, as well as their manufacturing scale, to accelerate our deployment of sustainable quantum dots into agriculture."

UbiQD is leading the way towards sun-powered spectrum optimization in controlled environment agriculture. With the UbiQD and Nanosys partnership, UbiGro® is set to become more accessible and widely deployed in the global greenhouse industry.

Read the original article on PR Newswire.