

Expansion of facilities for phosphorus raw materials for quantum dots

Nippon Chemical Industrial Co., Ltd. has decided to install additional facilities of phosphorus raw materials for quantum dots (QDs) at the Fukushima No. 2 Factory (Tamura-gun, Fukushima), in order to meet the growing demand for QD displays. Construction work for the expansion will start in fiscal 2021 and we aim to commence operations in the second half of fiscal 2022.

◆ Background of expansion of facilities for phosphorus raw materials for quantum dots

Toward “promotion of growth strategy and realization of outcome,” which is the policy of the Medium-Term Business Plan, we are currently working on expanding growth fields, promoting globalization, and reinforcing business foundation. Along with them, to strengthen the stable supply of phosphorus raw materials to the QD market, where demand is expected to grow, we decided to expand facilities for the phosphine derivatives at the Fukushima No.2 Factory.

QDs refer to semiconductor particles at around 10 nm in diameter, and mainly cadmium (Cd) -based and indium (In) -based materials are used. With their particle size-dependent optical properties, QDs can achieve high-brightness and high-precision colors, and are being used in displays and other applications. The display market using quantum dots is rapidly expanding, and the demand for QDs will further increase after 2022.

Our phosphorus raw materials for quantum dots are phosphine derivatives, and are used for both cadmium (Cd) -based and indium (In) -based materials. As one of the few manufacturers of high-purity phosphines in the world, we have been producing phosphine derivatives for more than 30 years. As market needs change rapidly, we have been providing the optimum phosphorus raw materials to the market with our advanced synthetic technologies. We will continue to contribute to the development of the QD display industry through the stable supply of phosphorus raw materials for QDs, and promote the development of environmentally friendly markets with the aim of realizing a sustainable society.

◆ Outline of expansion plan

- (1) Factory location: Tamura Gun, Fukushima
(Fukushima No.2 Factory, Nippon Chemical Industrial Co., Ltd.)
- (2) Start of operation: Scheduled at the second half of fiscal 2022
- (3) Investment amount: Approx. 800 million yen