

ESTABLISHMENT OF BRIGHT® LABORATORY

Nippon Chemical Industrial Co., Ltd. has newly established a cleanroom laboratory for research and testing purposes with medium-volume production facilities at Fukushima No.1 Factory (Koriyama-shi, Fukushima), for metal-coated electroconductive particles (BRIGHT®), which is mainly used for Anisotropic Conductive Film (ACF) and Anisotropic Conductive Paste (ACP).

◆ Background of new BRIGHT® laboratory

BRIGHT® is a conductive material in which the surface of various powders (resins, metals, ceramics, etc.) is coated with metals by electroless plating technology in relation to our core technology* of the surface modification and coating technology. This technology, originally invented by us, enables not only the uniform deposition on the powder surface, but also the precise control of its thickness and surface form (smooth, spiky), thus achieving high-connection reliability as a conductive material. Due to their properties, BRIGHT® is widely used as conductive materials for circuit connection in various electronic devices.

With the acceleration of digitization, demand for electronics and conductive materials is expected to increase steadily in the future, and we believe that significant business opportunities for BRIGHT® are also expanding. On the other hand, the performance demanded by electronic devices is becoming increasingly sophisticated as they are becoming thinner and more compact, and further improvements in our technological capabilities and a smooth transition to mass production processes are becoming indispensable.

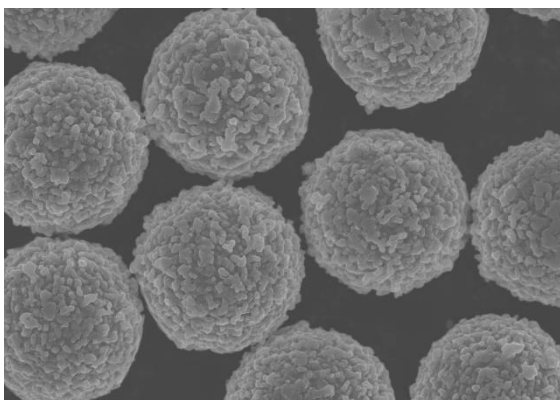
In order to quickly meet the high-quality requirements of the marketplace, we decided to install a new BRIGHT® laboratory equipped with medium-volume production facilities and since April 2020 we have been preparing at Fukushima No.1 factory. It has completed and will begin operation in July 2021. This provides us an equivalent environment to mass production, which enables the trial production of new grades as well as the examination of characteristic improvement of each grade. In addition, since this new BRIGHT® laboratory accommodates up from development to mass production, we expect it to play a part in further expanding sales and improving the profitability of BRIGHT® products.

Based on our company philosophy of 'Treating Humanity, Treasuring with Good Care' we aim to continue contributing to the improvement of human comfort through BRIGHT®.

◆ Overview of BRIGHT® laboratory

- (1) Laboratory location: Koriyama-shi, Fukushima
(Fukushima No.1 Factory, Nippon Chemical Industrial Co., Ltd.)
- (2) Start of operation: July 2021
- (3) Investment amount: Approximately 100 million yen

◆ BRIGHT® Particles (Left: SEM image of spiky type, Right; Product appearance)



※Core technology is our unique know-how and technology based on crystallinity, structure-control technology, and inorganic synthesis technology etc.

https://www.nippon-chem.co.jp/research_development/directivity.html