



November 11, 2021

NEWS RELEASE

Mitsui Kinzoku initiates supply of A-SOLiD, a solid electrolyte for all-solid-state batteries, from its mass production testing facility

Completion of process demonstration at mass production test facility enables its manufacturing capability to be increased sequentially.

Mitsui Mining & Smelting Co., Ltd. (President: Takeshi Nou; “Mitsui Kinzoku” hereinafter) is pleased to announce today that it has initiated the sample supply of A-SOLiD, a solid electrolyte for all-solid-state batteries produced at the mass production testing facility.

The all-solid-state lithium ion batteries feature high energy density, high input/output performance, and high environment resistance among other attributes, and are being developed for applications in special environments, new energy storage systems (ESS), and electric vehicles (EV). Some have already entered the phase of practical application.

Mitsui Kinzoku's solid electrolyte is an "Argyrodite-type sulfide solid electrolyte," which has a high lithium ion conductivity equivalent to that of conventional liquid electrolyte and also has high electrochemical stability. Currently, Mitsui Kinzoku is supplying samples to Maxell, Ltd., a business cooperative partner, for developing industrial/consumer application. In addition, the demand of sample for EV application has been growing. A-SOLiD has been building an excellent reputation, contributing to technology development of the customers.

Mitsui Kinzoku has conducted process demonstration looking ahead to full-scale mass production at its mass production testing facility, as announced in "Decision to introduce a mass production testing facility of solid electrolyte for all solid-state batteries" dated December 5, 2019. It has now completed process demonstration at the mass production testing facility and initiated sample supply of the solid electrolyte. With this mass production testing facility, Mitsui Kinzoku will respond to growing demand from customers and conduct further process demonstration with a view to full-scale mass production. Going forward, it will create new applications distinctive to all-solid-state batteries, such as EV applications together with customers and partners in the market.

Meanwhile, Mitsui Kinzoku's "Argyrodite-type sulfide solid electrolyte" has been trademarked as A-SOLiD. With this brand, it will contribute to the popularization of all-solid-state batteries.

Under its slogan, taking full advantage of Material Intelligence, Mitsui Kinzoku will aim for commercialization in fields with high demands for safer and higher energy density, seeking to build a sustainable society with the achievement of high-performance all-solid-state batteries.

[Outline of the mass production testing building]

Address: In the premises of R&D Center, Business Creation Sector
(1333-2 Haraichi, Ageo-shi, Saitama Prefecture)

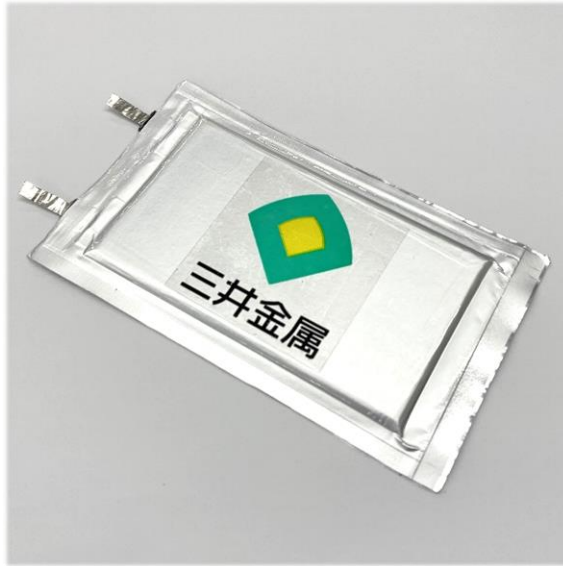
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(Reference)



Photo of Argyrodite-type sulfide solid electrolyte (A-SOLiD)



Example of all-solid-state batteries using A-SOLiD