October 17, 2025
Denka Company Limited

Denka Investing in a South Korean Startup to Strengthen Heat-Dissipating Thermal Conductive Filler Business

- Accelerating the Development of Next-Generation Thermal Interface Materials for the Electronics and Semiconductor Sectors -

Denka Company Limited (Head Office: Chuo-ku, Tokyo; Representative Director, President: Ikuo Ishida) has determined to invest in NAiEEL Technology (Head Office: Daejeon, South Korea; CEO/CTO: Paul Jaewoo Kim), a startup company involved in the development, manufacturing and marketing of Boron Nitride Nanotube (hereinafter referred to as BNNT), through the Corporate Venture Capital (CVC) fund operated and managed jointly with PEGASUS TECH VENTURES.

BNNT Powder


BNNT Slurry

BNNT is a nanomaterial featuring a tubular structure in which boron nitride is arranged in a hexagonal lattice. It is an insulator with excellent mechanical strength, thermal conductivity, thermal stability, and chemical stability, and is expected to find applications in a wide range of fields including electronics, semiconductors, aerospace, and medical and biotechnology.

NAiEEL Technology possesses proprietary production technology boasting high production capacity for BNNT, having established an innovative thermochemical process that enables low-energy, low-cost manufacturing with high purity and high quality. Mr. Kim, the CEO and CTO, served previously as a principal researcher at the Korea Atomic Energy Research Institute (KAERI). The company's technology development and business expansion have been advanced in collaboration with Korea Science and Technology Holdings since its founding. Furthermore, the company, leveraging BNNT's high thermal conductivity, excellent lithium-ion conductivity※1, and high durability, has been developing and manufacturing products for a wide range of applications. These include thermal interface materials for various electronic devices, lithium-ion batteries, and applications in the energy industry and aerospace sector.

We at Denka Company Limited have been focusing on developing thermal conductivity fillers※2 in collaboration with NAiEEL Technology to meet the rapidly growing demand for high thermal conductivity in AI servers, semiconductor power modules, and other applications. These fillers feature the capability to improve the thermal conductivity of semiconductor packaging materials by at least 20%, and in some cases by more than 50%,

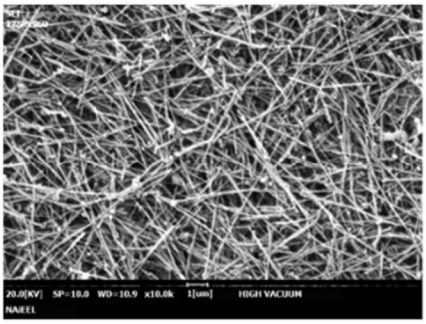
compared to existing products. Through this investment, we will collaborate on joint development projects combining BNNT with our heat-dissipating thermal conductive fillers to realize next-generation thermal interface materials that will require even more advanced thermal management solutions in the future.

This investment is part of our efforts to create new businesses based on our Management Plan "Mission 2030." Through collaboration with the startup, which possesses innovative materials and technologies, we aim to realize a sustainable society and create new business opportunities. Our CVC fund was established in 2023 and plans to invest up to approximately US $100 million by FY 2030.

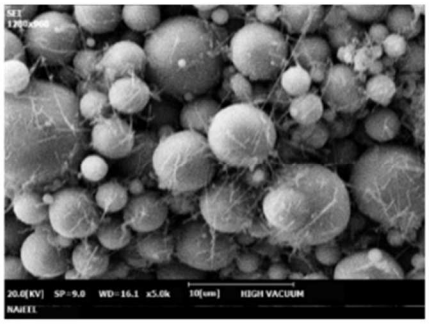
Going forward, Denka Company Limited will continue contributing to people's daily lives and society by applying its world-class chemistry know-how based on the Purpose of Mission 2030: "Make the world a better place as specialists in chemistry."

End of Press Release

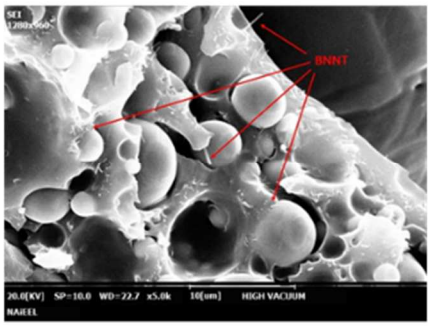
※1 Lithium-ion conductivity: The property enabling lithium ions to move rapidly within materials such as lithium-ion batteries. The higher the conductivity, the better the performance of lithium-ion batteries to be attained.
※2 Thermal Conductivity Filler: A heat-dissipating material used in semiconductor packages, etc. Refer to the images shown below.



Enlarged photo of BNNT



BNNT-coated alumina



BNNT coated alumina based epoxy composite

Profile of NAiEEL Technology

- Head Office : Daejeon Metropolitan City, Korea
- Business Overview : Development, Manufacturing, and Sales of Boron Nitride Nanotubes
- Official Website : https://www.naieel.com/

[Reference: Past press release related to this matter (our official website)]

- "Signing Ceremony Held for Establishment of CVC (Corporate Venture Capital)" dated January 17, 2023
  https://www.denka.co.jp/eng/storage/news/pdf/476/20230117_denka_cvc_en.pdf

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