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Japan Material Technologies Corporation

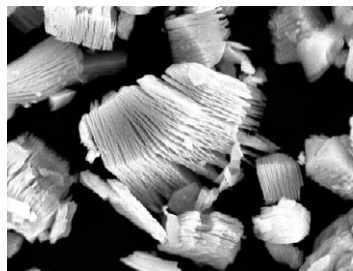
JMTC begins selling samples of Ti_3C_2 MXene

Japan Material Technologies Corporation ("JMTC") has started to sell samples of MXene, a two-dimensional nanomaterial for which the company has established a proprietary manufacturing method.

MXene is a generic term for a compound atomic layer compound composed of pre-period transition metals (e.g., titanium and vanadium) and light elements (carbon or nitrogen) with a graphene-like crystal structure that was published by a research team at Drexel University in 2011. It is expected to be used as an electrode material for lithium-ion and sodium-ion batteries, electromagnetic wave shielding material, and sensor material.

Although MXene has been attracting attention as a post-graphene material, there are only a few companies that supply MXene on an industrial scale. JMTC has established a manufacturing method of Ti_3C_2 , a typical MXene, with the advice of domestic university researchers and others, and has started selling samples. By supplying MXene to companies developing components for next-generation batteries and 5G products, JMTC will contribute to the social implementation of MXene application products. JMTC will also consider commercialization of MXene products other than Ti_3C_2 in the future.

<Photo of Ti_3C_2 MXene under an electron microscope>



JMTC has already started selling samples of BNFO, a negative thermal expansion material, and is actively working on the social implementation of innovative inorganic materials. JMTC will continue to expand our product lineup of inorganic materials and contribute to innovation in the electronics and energy fields.

As a fabless start-up specializing in organic, inorganic and bio-chemical materials, JMTC is engaged in the commercialization of innovative technologies developed by domestic companies, universities and research institutions through licensing out or carve-out. JMTC will continue to contribute to the creation of innovation in Japan's materials industry by promoting the commercialization of innovative material technologies that have yet to be implemented in society.