



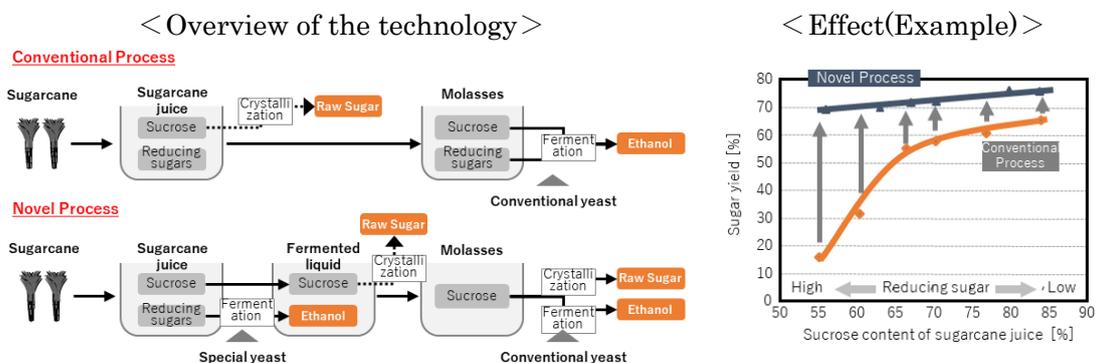
December 1, 2017

Japan Material Technologies Corporation enters licensing agreement with Asahi Group Holdings for inversion process technology to improve sugar production yield

Japan Material Technologies Corporation (JMTC; Head office: Chuo-ku, Tokyo; CEO: Koyu Urata) has entered a licensing agreement with Asahi Group Holdings, Ltd. (Asahi Group; Head office: Sumida-ku, Tokyo; COO: Akiyoshi Koji) regarding inversion process technology (referred to below as “this process technology”) to improve the yield of sugar production.

In the conventional sugar production process, sugar is produced by crystallizing the sucrose in sugarcane juice and then fermenting reducing sugars (glucose and fructose) in the molasses residue to produce ethanol. However, since the fixed amounts of reducing sugars in sugarcane juice inhibit the crystallization of sugar, this restricts improvement of the production yield.

Jointly developed by Asahi Group and the National Agriculture and Food Research Organization (NARO), this process technology uses a special non-sucrose-assimilating yeast to transform only the reducing sugars in sugarcane juice to produce ethanol first – inverting the order of the conventional production process – and improve the sugar crystallization yield. As a result, the amounts of both food and energy produced using sugarcane with a high yield of reducing sugars can be expected to increase. Asahi Group has already completed a successful 2-kl pilot-scale test of this process technology and received awards for its development, including the Environment Minister’s 22nd Global Environment Award in 2013 and the Maurice Patarau Award of the International Society of Sugar Cane Technologists in 2016.



Having concluded a licensing agreement with Asahi Group regarding this process technology, JMTC will develop a structure for cooperation with its affiliated companies and promote the establishment and commercialization of the technology. By promoting its deployment in the sugarcane industries of emerging countries, particularly in Southeast Asia, it aims to take advantage of Japan’s strength in innovative fermentation technology to contribute to the improvement of global agricultural productivity.

As a fables venture company specializing in the materials field, JMTC pursues the commercialization of innovative technologies developed by Japanese companies, universities and research institutes, by licensing these innovations and carve-outs. It will continue to contribute to innovation in Japan’s materials industry by promoting the industrialization of non-commercialized technologies developed by companies.