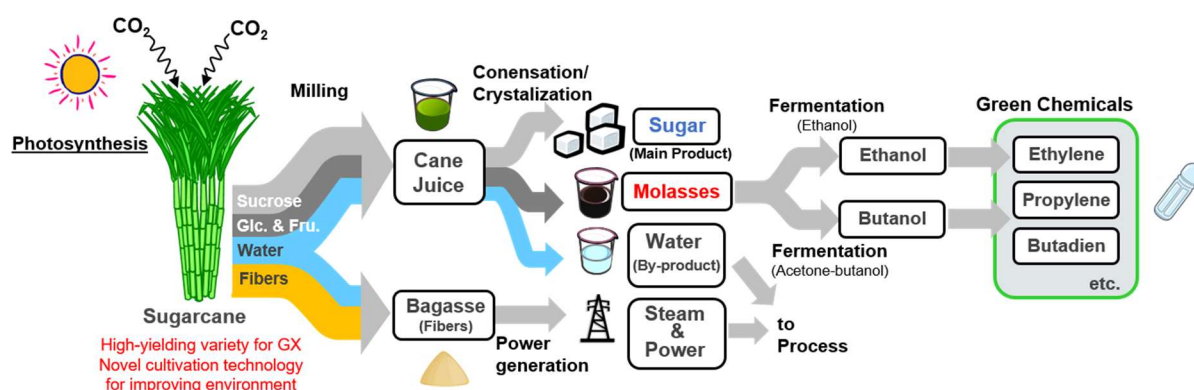


May 25th, 2022

Nippon Shokubai participates in COI-NEXT led by the University of Tokyo to jointly develop an integrated agro-industrial GX technologies to contribute to increase food production and green chemical manufacturing

NIPPON SHOKUBAI Co., Ltd. (Headquarters: Osaka, Japan, President: Yujiro Goto, hereinafter “Nippon Shokubai”) will participate in the open innovation platform for industry-academia co-creation (COI-NEXT)*¹ / “Co-JUNKAN” Platform Research Center towards Beyond “Zero-Carbon”**², a joint effort led by the Institute for Future Initiatives (IFI) of the University of Tokyo, to develop an integrated agro-industrial Green Transformation (GX) technology to contribute to increasing food production from high-yielding sugarcane with higher CO₂-fixation ability in photosynthesis as well as to pursue green chemical manufacturing.

Development of Integrated Agro-Industry Green Transformation Technology



As the world population increases, agricultural land per capita has decreased by half over the last 50 years. Therefore, it is essential to conserve the ecosystem while ensuring a continuous increase in food production. At the same time, from the perspective of preventing global warming, biomass resources (e.g., Agricultural products and woods) are anticipated to produce biomass fuel and green chemicals to reduce fossil fuel consumption.

To address such global multiple challenges, the open innovation platform for industry-academia co-creation (COI-NEXT) supports the development of integrated agro-industrial GX technologies that will solve the whole industry’s problem simultaneously instead of proposing individual solutions. When the agriculture-forest sector or the food industry in an upper stream can provide a stable supply of quality and quantitative by-products or thinned woods, the biomass industry downstream could turn them into high value-added products to make a profit. Then, the profit will flow back to the upper stream industry to enhance the economic force of the whole industry for

sustainable development.

Nippon Shokubai will study a green chemical manufacturing technology to integrate our original catalytic technologies with a novel variety of high-yielding sugarcane with higher CO₂-fixation ability in photosynthesis developed by National Agriculture and Food Research Organization and the advanced fermentation technologies by the University of Tokyo.

Nippon Shokubai will further collaborate with various industries such as Agriculture and Forestry, Food, and Biomaterial Manufacturing, to create a synergy and develop an integrated agro-industrial GX technology for each industry's sustainable development.

*1 Open innovation platform for industry-academia co-creation (COI-NEXT): COI-NEXT is one of the JST's research grant programs. Assuming the future with and/or after COVID, it sets out a vision of the future society based on UN Sustainable Development Goals (SDGs) and encourages research development that will contribute to back-casting innovation for the achievement of SDGs. It also promotes the development of an industry-academia-government collaborative management system to create a self-sustained and sustainable platform. Through this packaged grant program, JST promotes establishing an industry-academia-government co-creation research center based on the university and region's advantages and originality, which will contribute to the nation's growth and regional revitalization. The program is also expected to help transform into a knowledge-intensive society.

*2 "Co-JUNKAN" Platform Research Center towards Beyond "Zero-Carbon" (Beyond "Zero-Carbon"): Beyond "Zero-Carbon" is a COI-NEXT for which Institute for Future Initiatives of the University of Tokyo serves as the leading research institute, jointly run by 29 organizations in Japan and overseas, including universities, local authorities, public entities, and private companies. It encompasses the following 3 target areas;

- 1 Dissemination of Co-learning to design beyond "zero-carbon society";
- 2 Implementation of Co-JUNKAN platform for all;
- 3 Social implementation of the technology to achieve beyond "zero-carbon."

About NIPPON SHOKUBAI Co., Ltd.: Since 1941, Nippon Shokubai has grown up its business with unique catalyst technology. Nippon Shokubai has supplied, for example, ethylene oxide, acrylic acid, automobile catalysts, process catalysts and so on. Among all, our global market share of superabsorbent polymers is the largest in the world now (according to Nippon Shokubai research). Nippon Shokubai is a global chemical company operating under its corporate mission "TechnoAmenity – Providing prosperity and comfort to people and society, with our unique technology."

<https://www.shokubai.co.jp/en/>

【Contacts】

Corporate Communications Dept.,

NIPPON SHOKUBAI CO., LTD.

TEL: +81-3-3506-7605 E-mail: shokubai@n.shokubai.co.jp