



bitBiome and Tokyo Ohka Kogyo signed Joint Development Agreement to develop bioprocesses for key TOK products that will replace petroleum derived raw materials.

January 30, 2024 - bitBiome Inc. Japan (Headquarters: Shinjuku-ku, Tokyo; President and CEO: Yuji Suzuki; hereafter referred to as "bitBiome") and Tokyo Ohka Kogyo Co., Ltd., (Headquarters: Kawasaki, Japan/President: Noriaki Taneichi; hereinafter referred to as "TOK") have entered into a joint development agreement aimed at developing bio-processes that utilize bitBiome's microbial gene database and enzyme discovery and engineering platform technology, for the production of a raw material for TOK products.

Leveraging its proprietary microbial single-cell genome analysis technology, bitBiome has analyzed 1.3 billion genes with its proprietary single-cell microbial genome analysis technology, bit-MAP®, and has built its own proprietary database, bit-GEM. bitBiome has also commercialized an enzyme discovery and engineering platform, bit-QED, which utilizes 3D protein structure prediction data from sequences in bit-GEM and automated robotic high throughput screening facilities. bitBiome utilizes these technologies to search for and engineer enzymes essential to the biomanufacturing industry, in a timely and cost-efficient manner that was previously unobtainable.

TOK announced its long-term vision, "TOK Vision 2030" in 2020, aiming to become "The e-Material Global Company™" contributing to a sustainable future through chemistry. Under this vision, TOK will strive both to promote environmental management through the development and supply of new and existing products and to address the issue of climate change toward the goal of decarbonization.

Through this collaboration, bitBiome and TOK aim to utilize bitBiome's enzyme discovery and engineering platform technology. This initiative seeks to replace a portion of TOK's petroleum-derived raw materials with biomass-derived raw materials. The transition to bio-processes through this joint development is expected to significantly reduce environmental impact. "TOK has developed a strong commitment to sustainability and to reducing our carbon footprint through innovative new products and processes. We believe bitBiome shares this goal and has

the resources and technology to make it a reality,” said Yusuke Narumi, Director, Officer, Dept. Manager, New Business Development Dept. of TOK.

“ We are thrilled to work with TOK on their “TOK vision 2030” initiative. We at bitBiome strive to utilize what nature has given us for the growth and development of the bioeconomy and have a clear alignment with TOK on this lofty goal. The ability to replace petroleum derived raw products is a key step to our shared future,” said Yuji Suzuki, Chief Executive Officer of bitBiome.

■About bitBiome, Inc.

bitBiome is a biotechnology company unlocking the full potential of our planet’s microbes to power the future of the bioeconomy. bitBiome’s platform is built on their proprietary single-cell microbial genome analysis technology, bit-MAP[®], which has enabled the creation of bit-GEM: an extensive and groundbreakingly diverse microbial database of over 1.3 billion sequences, sourced primarily from environmental samples and containing sequences not present in public databases. Leveraging their expertise in bioinformatics, cheminformatics, and machine learning, the company also offers a comprehensive enzyme discovery and engineering platform, bit-QED, which encompasses the identification, assessment, and modification of enzymes through wet lab evaluation and directed evolution. bitBiome is committed to improving existing biomanufacturing industries and creating new ones by delivering sequences and enzymes that cannot be found anywhere else. To learn more about bitBiome’s platform and services, visit bitbiome.bio.

■About Tokyo Ohka Kogyo Co., Ltd.

Tokyo Ohka Kogyo Co., Ltd. was established in 1940. TOK manufactures and sells manufacturing materials, mainly photoresists and high purity chemicals for photolithography process of semiconductor and display, and other organic and inorganic chemicals. TOK has one of the world's top market shares in the photoresist field, and develops new businesses to create new values, including Life Science-Related Materials, by leveraging our unique micro-processing and high-purification technologies accumulated over the years in the semiconductor manufacturing field. For further information, visit <https://www.tok.co.jp/eng>.