

Realization of a low carbon society through game changing technologies

Membrane Transport Engineering for Medium Molecule Fermentation

Project Leader : Takeharu TSUGE
Associate Prof. Tokyo Institute of Technology

R&D Team : Tokyo University of Agriculture, Kyoto Institute of Technology



Summary :

By strengthening membrane transport of “medium molecules” with molecular weight of approximately 1000, useful chemicals like macromonomers can be produced extracellularly.

Additionally, the purification process can be simplified due to molecular size effect.

We evaluate the reduction effects of CO₂ emission throughout the production process achieved by the new technology.

