Realization of a low carbon society through game changing technologies

Development of photo-energetic cell factory

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Summary :

A problem of microbial fermentation is time consuming compared to chemical synthesis. The use of photo-energetic cell, controlling the expression levels of genes and optimizing the metabolic balance would boost the production rates of valuable products and reduce the domestic CO_2 emission more than 3.0 million ton / year.





Micro-

organism

Metabolic design

Gene

Light-driving force

Reporter Cell