

## Methanotroph-catalyzed methane bioconversion

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Methane has attracted much attention as a next-generation chemical feedstock for the production of chemicals, materials and fuels. Various chemical methods have been developed for indirect conversion of methane to chemicals. Biological direct conversion of methane to chemicals has also been developing to overcome the drawbacks of indirect approaches. Methanotroph-based conversion of methane to methanol can be a starting point for methane-based refinery. In this presentation, advantages and drawbacks of biological conversion of methane will be addressed. A batch methane-to-methanol conversion using methanotrophs will be presented.