

# Bioconversion of biofuel derived waste into value-added products

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## INTRODUCTION

With the expanding production of biodiesel, glycerol – a by-product of biodiesel production – is produced in larger amounts than the current market demand. Therefore glycerol is being treated as a waste product at biodiesel production plants, as some cannot afford purification of glycerol, while others do not find purification economically viable. Establishment of a glycerol-based production platform for value-added products could make biodiesel production more economically viable, and also improve the life cycle balance of the process. *Yarrowia lipolytica* is a yeast capable of rapidly converting glycerol into either single-cell oil or commodity chemicals and has been investigated in this project as a possible cell factory for glycerol biorefineries.