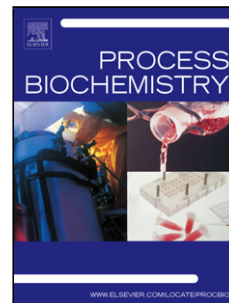


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# **Advances in bioconversion of glycerol to 1,3-propanediol: prospects and challenges**

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## **Highlights**

- 1,3-PD production was summarized in the view of bioprocess and bioengineering
- Microbial consortium has potential application for 1,3-PD production
- Salting-out and sugaring-out extraction have advantages for industrial production
- Microbial electrosynthesis is a novel technology for 1,3-PD production
- It represent challenges for efficient conversion of biomass hydrolysate to 1,3-PD

## **Abstract**

1,3-Propanediol, a monomer for synthesis of polytrimethylene terephthalate, polyethers, polyurethanes, and heterocyclic compounds, has attracted worldwide attention. It can be produced from renewable resources using microorganisms, which focus mainly on the ecologically friendly process, industrial safety and sustainable development. This review summarized and commented in the view of bioprocess and

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