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# Platinum, Palladium and Nickel supported on Fe<sub>3</sub>O<sub>4</sub> as catalysts for glycerol aqueous-phase hydrogenolysis and reforming

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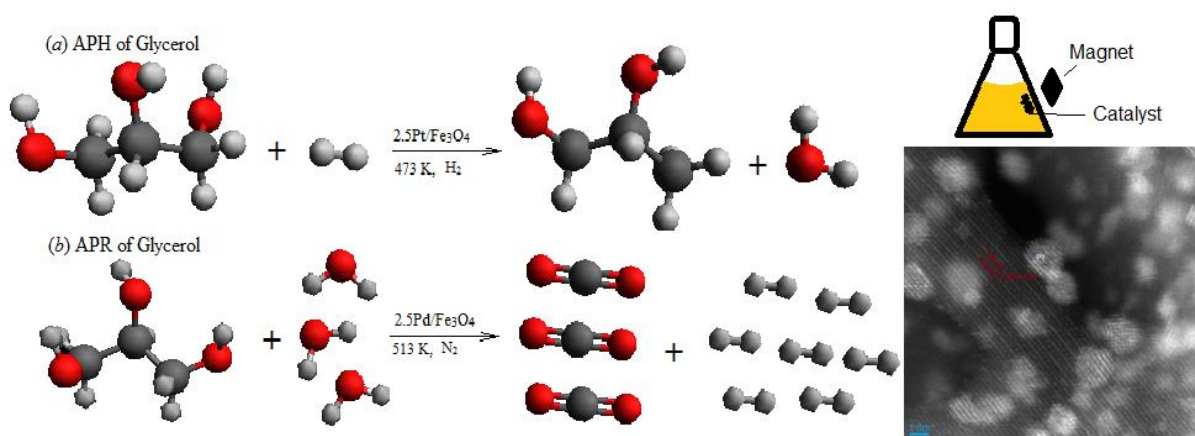
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## Graphical abstract



Highlights for “Platinum, Palladium and Nickel supported on Fe<sub>3</sub>O<sub>4</sub> as catalysts for glycerol aqueous-phase hydrogenolysis and reforming” by Soares et al.

- Glycerol hydrogenolysis and reforming were studied on Pt, Pd and Ni/Fe<sub>3</sub>O<sub>4</sub>.
- Both for glycerol hydrogenolysis and APR, the activity order was Pt > Pd > Ni.
- Glycerol hydrogenolysis and reforming shared some of the reaction steps.
- 2.5Pt/Fe<sub>3</sub>O<sub>4</sub> was active and stable.

## ABSTRACT

Aqueous-phase hydrogenolysis (APH) and reforming (APR) are intertwined reactions with great interest for biomass valorization, as APR generates hydrogen *in situ* at preferred APH

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