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# Hydrogen production by glycerol steam reforming catalyzed by Ni-promoted Fe/Mg-bearing metallurgical wastes

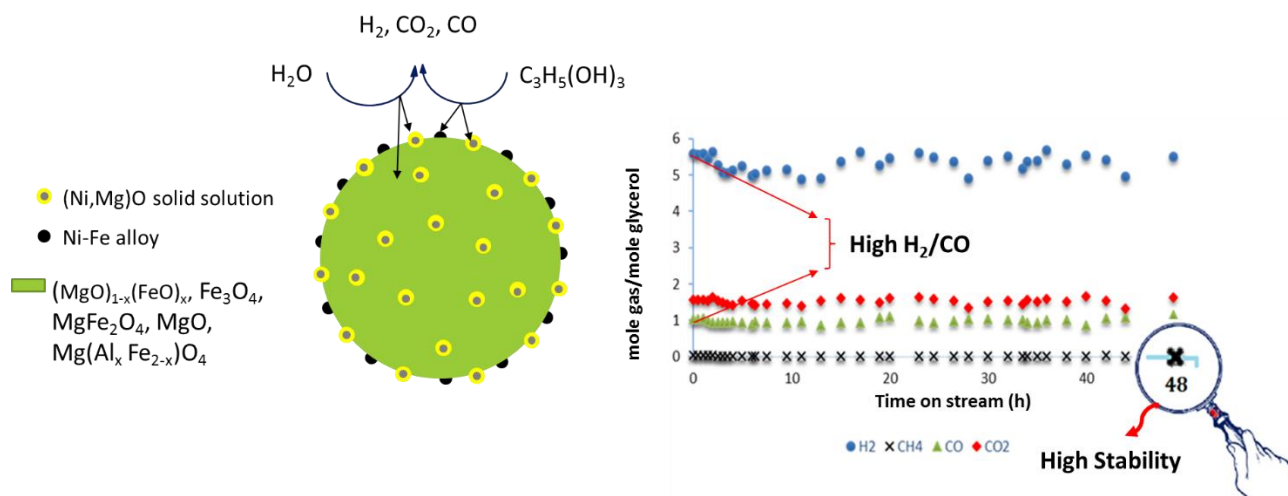
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## Graphical abstract



## Highlights

- Valorization of a metallurgical waste and glycerol for hydrogen production.
- Synthesis of highly active, stable and affordable glycerol steam reforming catalyst.
- Superior dispersion and stabilization of Ni by the formation (NiMg)O solid solution.
- Active magnesium and iron oxide species promoted WGS reaction and coke gasification.

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