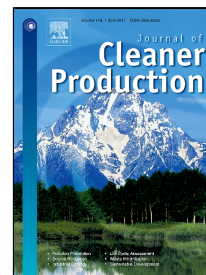


# Accepted Manuscript

Hydrodeoxygenation of oleic acid in hexane containing pressurized CO<sub>2</sub> using Fe/SBA-15 as catalyst



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## HIGHLIGHTS

- Hydrodeoxygenation of oleic acid was carried out in hexane + pressurized CO<sub>2</sub>.
- A cheap, sulfur free catalyst Fe/SBA-15 was more selective for hydrodeoxygenation.
- CO<sub>2</sub> increased selectivity towards hydrodeoxygenation over decarboxylation.
- Pressurized CO<sub>2</sub> reduced viscosity and increased diffusion and mass transfer rates.
- Response surface methodology was used to study the significant factors.

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