

Comparison of the catalytic behaviour of rare earth elements loaded in zeolites as heterogeneous catalysts

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Rare earth elements (REE) are a group of chemical elements with a enormous industrial application, due to their diversified properties (chemical, optical, electrical, metallurgical, catalytical and magnetic).¹ Zeolites are an aluminosilicate material extensively studied in different processes, due to their properties (ion exchange capacity, high surface area and porosity).² Zeolites and REE as heterogeneous catalysts have been used in hydrocarbon fraction of crude petroleum oils to more valuable products.³ This work uses a sustainable approach to removing REE from water through zeolites and using them as heterogeneous catalysts for degrade different pollutants using Fenton-type reactions. The catalytic performance of REE-Zeolite was compared with Fe-zeolite in phase liquide.

References

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