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Biodiesel Production from Waste Cooking Oil over Acid and Base Catalysts in a Green Way

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Abstract: Waste vegetable oil of mustard and soyabean oil are used as a feedstock for biodiesel production; as these are natural products, they are mixtures of several component oils and fats. These oils/fats are triglyceride molecules (glycerin esterified with three fatty acids) through transesterification and only creates glycerine as a byproduct. 100ml of wasted cooking oil was treated with acid catalyst (HCl, H_2SO_4) and base (KOH, NaOH)found that base catalyst are more promising. Gas chromatography confirms the hydrocarbon fractions are of the product was diesel-like properties.

Keywords : Biodiesel, Catalyst, Transesterification.

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