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Characterization of Fish Bone Catalyst for Biodiesel Production

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Abstract : In this study, fish bone waste was used as a new catalyst for biodiesel production. Instead of discarding the fish bone waste, it will be utilized as a source for catalyst that can provide significant benefit to the environment. Also, it can be substitute as a calcium oxide source instead of using eggshell, crab shell and snail shell. The XRD and SEM analysis proved that calcined fish bone contains calcium oxide, calcium phosphate and hydroxyapatite. The catalyst was characterized using Scanning Electron Microscope (SEM) and X-ray Diffraction (XRD).

Keywords: calcinations, fish bone, transesterification, waste catalyst

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