

## **Synthesis, characterization and optimum reaction conditions of fatty hydrazide from triacylglycerides**

### **ABSTRACT**

Fatty Hydrazide (FH) has been synthesized via reaction of palm olein with hydrazine hydrate by reflux and characterized using spectroscopic methods and CHN analyzer. Optimum reaction conditions were studied in order to optimize the reaction time and hydrazine hydrate/palm olein ratio. When the hydrazinolysis reaction was carried out 7:1 molar ratio of hydrazine hydrate to palm olein, the conversion of palm olein was 82% and the maximum of conversion to FH was 84% when the reaction time was 12 h. FH was also prepared from palm stearin and corn oil and then, the conversion percentages of these oils into their fatty hydrazides were investigated to compare with palm olein.

**Keyword:** Synthesis; Fatty hydrazide; Triacylglycerides; Palm Stearin