

Optical characterization of palm oil biodiesel blend

ABSTRACT

In this study, Surface Plasmon Resonance (SPR) and minimum deviation methods were used for determining the optical properties of blend biodiesel. The SPR angle of resonance consistently shifted to lower value when the amount of biodiesel added to diesel fuel increased independent of the homogeneity of the sample. On the other hand the consistency of the minimum deviation method was dependent on the homogeneity of the blend biodiesel.

Keyword: Surface plasmon resonance; Biodiesel blend; Palm oil biodiesel; Optical properties; Dispersion