

Application of surface plasmon resonance in biodiesel characterization

ABSTRACT

Surface plasmon resonance is a versatile technique for characterizing biomaterials. In this work the optical parameter and Lorentz-Lorenz constant for biodiesel were determined. According to the experimental data for biodiesels base on palm oil and coconut oil mixture with methanol the accuracy and sensitivity of SPR for these materials is limited by the measurement resolution of 0.001.

Keyword: Surface plasmon resonance; Biodiesel characterization