



## **STUDY ON LIGHT RESPONSE OF PACHIRA AQUATICA'S LEAF VIA SURFACE PLASMON RESONANCE TECHNIQUE**

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*Abstract- Light response of a pachira aquatica's leaf at room temperature was investigated with a strong p-wave electromagnetic field by utilizing a surface plasmon resonance (SPR) based sensor technique of angular interrogation method for biological and chemical sensing. The essential principle of SPR biosensing is based on measurement of the change regarding leaf's microstructure against the sensor's metallic surface owing to the interaction with the strong p-wave electromagnetic field. The test result shows that the pachira aquatica's leaf responds to each light lamp within 1 minute.*

**Index terms:** surface plasmon resonance, pachira aquatica, angular interrogation, p-wave, light response.