

## **Detection of mercury ion (Hg<sup>2+</sup>) on chitosan film using microstrip interdigital capacitor**

### **ABSTRACT**

The use of interdigitated capacitor (IDC) for detection of mercury ion (Hg<sup>2+</sup>) absorbed by the chitosan film is presented in this paper. The effect of the ion concentration on the transmission coefficient (S<sub>21</sub>) value and the capacitance value is presented. The results show that the capacitance value as well as the S<sub>21</sub> increased with increasing concentration of the metal ion absorbed.

**Keyword:** IDC; Metal ions+; Chitosan; Capacitance; Transmission coefficient