

## **Fabrication of flexible pressure sensor using carbon black/PDMS**

### **ABSTRACT**

Despite the fact of the technology has advanced, the fabrication of flexible pressure sensor still uses material that can bring harm to the environment. Therefore, this project is done to research on method that used more eco-friendly materials for the fabrication process on paste preparation while maintaining its performance in term of resistivity and conductivity by fabricating the flexible pressure sensor using Carbon Black/PDMS. Three flexible pressure sensors with different electrode designs were fabricated on the same substrate which is Kapton Film. The resistance of the three sensors was measured and resistivity and conductivity were extracted. Later two types of graphs were plotted for each sensor: The resistivity and conductivity of the sensors were analysed.

**Keyword:** Thick film method; Piezoresistive; Conductivity; Hysteresis loop; Electrode design