

## 61. Exploitation of Poly pyrrole as Ammonia Gas Sensor

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### ABSTRACT

In the present work, polypyrrole (PPy) is prepared and used to sense ammonia gas. SnO<sub>2</sub> and Al<sub>2</sub>O<sub>3</sub> were used as substrates which are having more porosity. The thick layers of PPy, SnO<sub>2</sub> and Al<sub>2</sub>O<sub>3</sub> were prepared by using screen printing method. The sample was characterized by XRD. It was found that change in resistance i.e. sensitivity of PPy sensor with Al<sub>2</sub>O<sub>3</sub> as substrate is more than that without Al<sub>2</sub>O<sub>3</sub> base. Also, it is recorded that ON time is 55 s and OFF time is 93s.

**Keywords:** Screen – Screen Printing Method; PPy Double layer sensor.