

**Thin film Process :** Aluminium (Al) Thin Film deposition by sputtering technique.

**Equipment:** RF/DC magnetron Sputtering System-2.

**Photograph :**



**Basic Principle :** In this process a gaseous plasma of typically inert gas ions such as Argon ( $\text{Ar}^+$ ) is created and the positive ions are accelerated by an electrical field to the target material which acts as the negatively charged electrode. The atoms from the target materials are ejected by bombardment of energetic ions and deposited on the desired substrate to form a film of the target materials.

**Capabilities:** Aluminium thin films can be deposited using RF/DC magnetron sputtering gun as metal layers/contacts, Sputtering system has the provision for uniform film deposition on 4" x 4" substrates and the substrates can be heated up to 300 °C

**Sample Requirement:** Maximum Substrate size 4" x 4"