

ABSTRACT

In the present thesis experimental research work has been performed on growth of graphite thin film on a silicon <100> substrate by employing dc glow discharge plasma technique. The range of plasma generation power, selected for the film growth, is 80 W to 140 W. The deposition process at 100 watt and above start showing the presence of the graphite thin after the different measurements. These measurements include in house characterization techniques i.e. XRD, SEM and FTIR. It is also important to mention that the present work need to go for more extensive work to produce more samples and apply other measuring techniques especially Raman spectroscopy.