

## **Internal Seminar**

**Scanning electron microscope beyond imaging**

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To explore the electronic properties of materials one need to measure resistivity, Hall effect and magnetoresistance etc. However, these measurements require samples with specific geometry to accurately determine the conductivity, carrier type and concentration and their mobility. We can achieve this using Nano and micro-lithography in SEM and microwriter respectively. The resolution of Nano and micro-lithography are 10 and 600 nm respectively. However, Nanolithography is a more complex process and needs careful optimization.

In this talk, I will be discussing the optimization process of the nanolithography carried out in our scanning electron microscope (SEM).

Apart from this, there is a possibility of Electron Dispersive spectroscopy analysis (EDS) in order to know the chemical composition of given samples.

***Friday, Mar 20<sup>th</sup> 2020***

***2:30 PM (Tea/Coffee at 2:00 PM)***

***Seminar Hall, TIFR-H***