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Accurate Current Integration for Ion Beam Techniques at University of North Texas NARESH DEOLI, DUNCAN WEATHERS, University of North Texas — An experimental set ups have been designed to suppress secondary and tertiary electron currents generated during energetic ion irradiation to obtain accurate current integration for ion beam techniques at the University of North Texas. In one configuration, all secondary electrons were suppressed in the process of production of Bi thin films using sputtering technique by 10-50 keV noble gas atoms. In another configuration, a combination of an electron trap and a biased aluminum mesh was used to suppress any secondary and tertiary electrons in the heavy ion Rutherford backscattering technique for the analysis of thin films. Details of both experimental current integration set ups are presented.

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