

**ELECTROPHORETIC DEPOSITION AND CHARACTERIZATION
OF CuSe THIN FILMS**

Zulkarnain Zainal and Mohd Fairul Sharin Abdul Razak

Department of Chemistry, Faculty Science,

Universiti Putra Malaysia, 43400 Serdang, Selangor, Malaysia

ABSTRACT

Various methods have been developed for the preparation of copper selenide thin films. One of the promising method is by electrophoretic deposition (EPD) using copper selenide powder synthesized by chemical precipitation technique. The powder and deposited thin films at various deposition voltages were analysed using X-ray diffractometry (XRD) and scanning electron microscopy (SEM). XRD data of the thin film indicate the formation of polycrystalline materials. The SEM micrographs showed more compact and smaller granular shape for the film deposited at 300V compared to CuSe powder. The films produced were found to display p-type semiconducting behavior.

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