**Chalcogenide Glass Thin Films and Planar Waveguides**

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Over the past decade we have carried out a comprehensive development programme to produce high purity Ga:La:S and Ge:S glasses and further process these glasses into thin films. In this paper we discuss the general properties of these glass systems and the techniques employed to obtain thin films. We demonstrate the ability to deposit high quality films ranging in thickness from the nanometres to several millimetres by several methods including chemical vapour deposition technique, a technique not usually applied to chalcogenide glasses.