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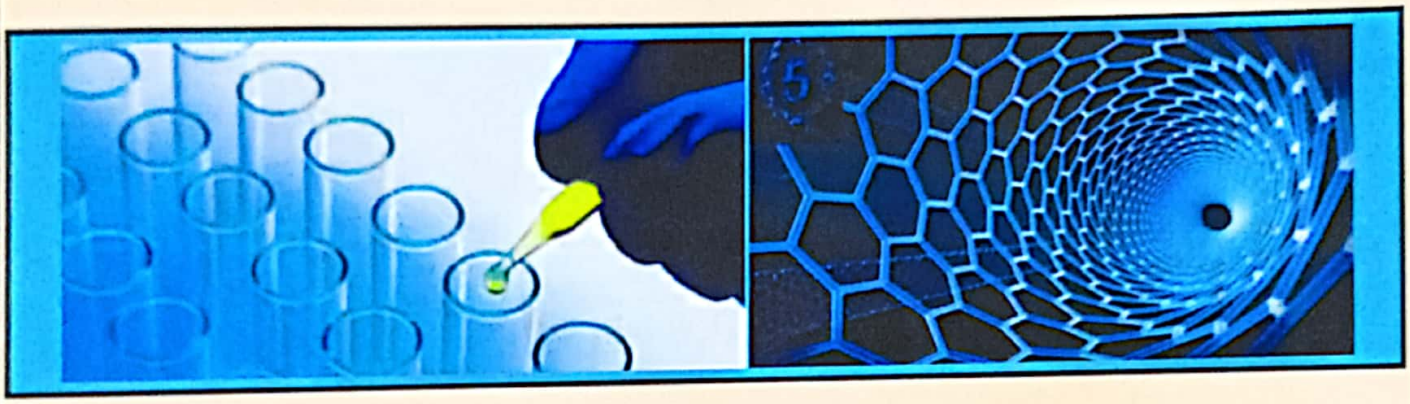

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Investigation of Substrate Temperature of Spray Deposited CdTe Thin Films.

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Abstract:

Semiconducting CdTe thin films have been deposited on amorphous glass substrate using a spray pyrolysis technique. The preparative parameters have been optimized to obtain good quality and stoichiometric thin films. Binary chalcogenides with appropriate bandgap energy have been attracting a great deal of attention because of their potential applications in photovoltaics. CdTe in the form of thin films is prepared at different substrate temperatures by a simple and economical spray pyrolysis technique. The photoelectrochemical characterization shows that both short-circuit current (Isc) and open-circuit voltage (Voc) are at their optimum values at the optimized substrate temperature of 250^{0}C. The XRD pattern shows that the films are pyrocrystalline.

Key words- Spray pyrolysis, Cd chalcogenides thin films, PEC Cell, XRD.

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