

# ELABORATION et CHARACTERISATION des COUCHES MINCES DES OYDES DE CUIVRES (CuO)

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**Abstract :** Copper oxide thin films were deposited by a low-cost and simple spray pyrolysis technique on glass substrate at 485°C, The aqueous copper nitrate  $\text{Cu}(\text{NO}_3)_2 \cdot 6\text{H}_2\text{O}$  with the different concentrations (0.1 M , 0.3M) used as a source of copper. The structural, morphological, and optical properties of the CuO thin films were studied by X-ray diffraction (XRD), Scanning electron microscopy (SEM), UV-vis-spectrophotometer. The X-ray diffraction patterns confirm the presence of CuO phases with preferential orientation along (-111), (111). The optical direct gap energy for Copper oxide calculated from optical absorption measurement is 2.82 eV , which is quite comparable with the report value

**Keywords :** Copper oxide, Spray pyrolysis, Thin films