

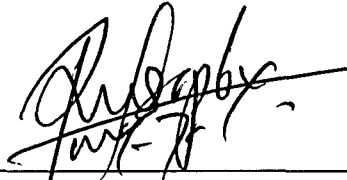
**THE CHARACTERIZATION OF ZINC OXIDE THIN FILMS  
PREPARED BY SOL GEL METHOD WITH  
VARIOUS DEPOSITION PARAMETERS**

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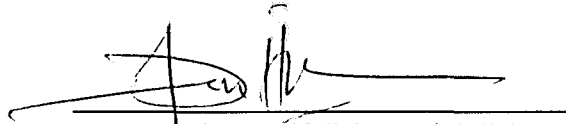
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This Final Year Project Report entitled “The Characterization of Zinc Oxide Thin Films Prepared by Sol Gel Method With Various Deposition Parameters” was submitted by Noorfairuzehaniah Binti Abdullah, in partial fulfillment of the requirements for the Degree of Bachelor of Science (Hons.) Physics, in the Faculty of Applied Sciences, and was approved by ;



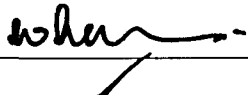
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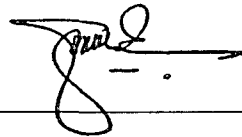
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## *ABSTRACT*

### **THE CHARACTERIZATION OF ZINC OXIDE THIN FILMS PREPARED BY SOL-GEL METHOD WITH VARIOUS DEPOSITION PARAMETERS**

The Zinc Oxide (ZnO) thin films were synthesized by simple sol-gel method and their characteristics were investigated. Zinc Acetate Dehydrate ( $\text{Zn}(\text{CH}_3\text{COO})_2 \cdot 2\text{H}_2\text{O}$ ) a based precursor was used as a starting material. ZnO thin films were synthesized at different deposition temperatures ranging from 200 to 600°C with interval of 100°C. At different annealing temperature, the characteristics of ZnO thin films showed alteration in surface morphology, crystallinity and particle diameter and was confirmed by Scanning Electron Microscopy (SEM) and X-ray diffraction (XRD) studies.