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**STUDY OF THE SUPPORTING ELECTROLYTE EFFECT ON ELECTRICAL CONDUCTIVITY AND OPTICAL PROPERTIES OF CONDUCTING POLYPYRROLE/SILICA GEL**

**ABSTRACT**

**INTRODUCTION**

**METHODS**

**RESULTS**

**CONCLUSION**

Parameter	Value
Electrical Conductivity	...
Optical Properties	...



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**Abstract**  
 This work focused on the study of electrical conductivity of a conducting substrate by the combination of a conducting substrate (ITO) poly 3,4-dihydroxybenzoic acid (DHA), and Polypyrrole (PPY), with dye (AZO) by layer on substrate Indium Tin Oxide (ITO) glass by using electrochemistry method for a glass. Polymer and dye coating substrate and coating Polypyrrole and dye coating substrate. Total 9 samples will be prepared. The effect of each electrical conductivity is compared with the effect of each electrical conductivity and various light intensity with different light intensity with the help of instrument. The results show that samples ITO/PPY and ITO/PPY/DHA show the best results and

**1. Efficiency**  

$$\eta = \frac{P_{out}}{P_{in}} \times 100\%$$

**Result and Discussion**  
 The Electrical Conductivity Measurement under Different Light Intensity. The result indicated the combination of covering light intensity AZO dye has the best characteristics of covering light intensity to electric conductivity and followed by ITO/PPY/AZO. The Efficiency Measurement Under Different Light Intensity.

**Conclusion**  
 Taking a closer look from the results obtained from the electrical conductivity and efficiency of the thin film, despite ITO/PPY/AZO and ITO/PPY/DHA, the best characteristics of covering light intensity to electrical conductivity and followed by ITO/PPY/AZO. The other hand, results obtained from efficiency of the thin film, the best characteristics of covering light intensity to electrical conductivity and followed by ITO/PPY/AZO. The other hand, results obtained from efficiency of the thin film, the best characteristics of covering light intensity to electrical conductivity and followed by ITO/PPY/AZO.

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 Othman, M. (2005). Review: Development of solar cells. In Journal of Physics and Chemistry (C) - Photochemistry. Retrieved 17/11/2011.  
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**INTRODUCTION**  
 This is a research on the synthesis of a new material with a large surface area and porous structure for the application of photocatalysis. The synthesis of a new material with a large surface area and porous structure for the application of photocatalysis. The synthesis of a new material with a large surface area and porous structure for the application of photocatalysis.

**METHODOLOGY**  
 The synthesis of a new material with a large surface area and porous structure for the application of photocatalysis. The synthesis of a new material with a large surface area and porous structure for the application of photocatalysis.

**RESULT AND DISCUSSION**

**CONCLUSION**  
 The synthesis of a new material with a large surface area and porous structure for the application of photocatalysis. The synthesis of a new material with a large surface area and porous structure for the application of photocatalysis.

**Abstract**  
 This work focused on the synthesis of a new material with a large surface area and porous structure for the application of photocatalysis. The synthesis of a new material with a large surface area and porous structure for the application of photocatalysis.

**Objective**  
 The objective of this research is to synthesize a new material with a large surface area and porous structure for the application of photocatalysis.

**Methodology**  
 The methodology of this research is to synthesize a new material with a large surface area and porous structure for the application of photocatalysis.

**Conclusion**  
 The conclusion of this research is that the synthesized material has a large surface area and porous structure for the application of photocatalysis.



# THE EFFECTS OF ZINC ION CONCENTRATION PRECURSOR CONCENTRATION TO THE ZINC OXIDE PHYSICAL AND ELECTRICAL PROPERTIES

## ABSTRACT

The objective of this research is to study the effect of Zn precursor concentration on the morphology, surface area, optical properties and electrical conductivity of ZnO. The ZnO thin films were prepared by spin coating method on glass substrate. The ZnO thin films were prepared by spin coating method on glass substrate. The ZnO thin films were prepared by spin coating method on glass substrate. The ZnO thin films were prepared by spin coating method on glass substrate. The ZnO thin films were prepared by spin coating method on glass substrate.

## INTRODUCTION

ZnO is a transparent wide bandgap semiconductor with a large exciton binding energy of 60 meV and has a direct band gap energy of 3.37 eV. It has a high refractive index and high thermal stability. ZnO thin films have been widely used in various applications, such as transparent conductive coatings and light-emitting diodes. The physical and electrical properties of ZnO thin films are strongly influenced by their morphology and surface area. The spin coating method has been widely used for producing ZnO thin films. However, the spin coating method has some disadvantages, such as low thickness uniformity and low surface area. The sol-gel method is a simple and effective method for producing ZnO thin films. In this study, the sol-gel method was used to produce ZnO thin films on glass substrate. The ZnO thin films were prepared by spin coating method on glass substrate. The ZnO thin films were prepared by spin coating method on glass substrate.

## METHODOLOGY

The ZnO thin films were prepared by spin coating method on glass substrate. The ZnO thin films were prepared by spin coating method on glass substrate. The ZnO thin films were prepared by spin coating method on glass substrate. The ZnO thin films were prepared by spin coating method on glass substrate.

Parameter	Value
ZnO precursor concentration	0.1M, 0.2M, 0.3M
Spin coating speed	1000 rpm
Spin coating time	30 min

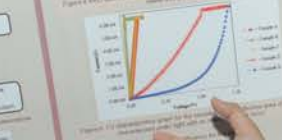


## ACKNOWLEDGMENT

The authors would like to thank the Ministry of Education, Malaysia for the financial support of this research.

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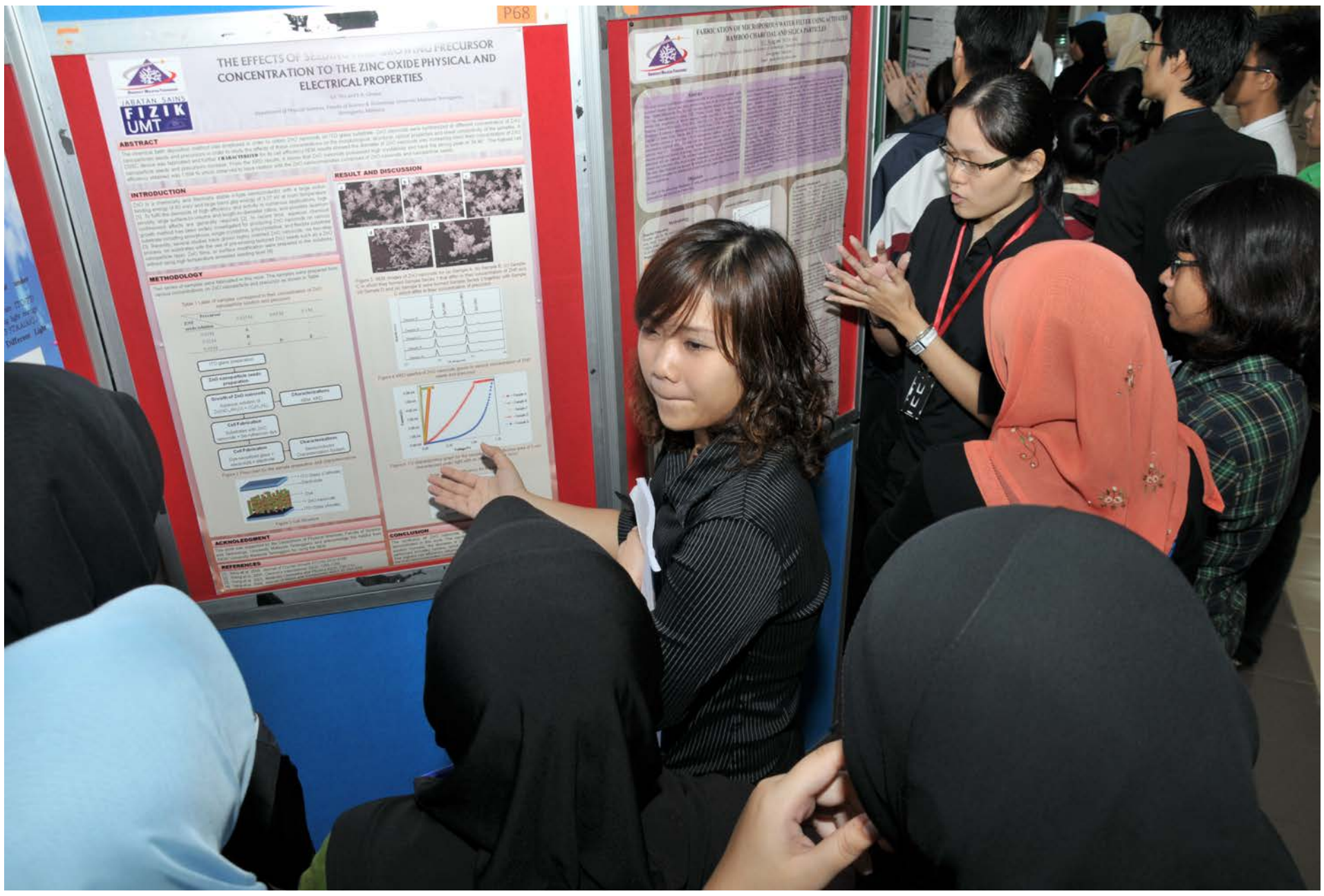


## CONCLUSION

The ZnO thin films were prepared by spin coating method on glass substrate. The ZnO thin films were prepared by spin coating method on glass substrate. The ZnO thin films were prepared by spin coating method on glass substrate. The ZnO thin films were prepared by spin coating method on glass substrate.

# FABRICATION OF MICROPOUS WITH FILTER USING ACTIVATED BAMBOO CHAR AND ANTiBiOtiC PARTICLES

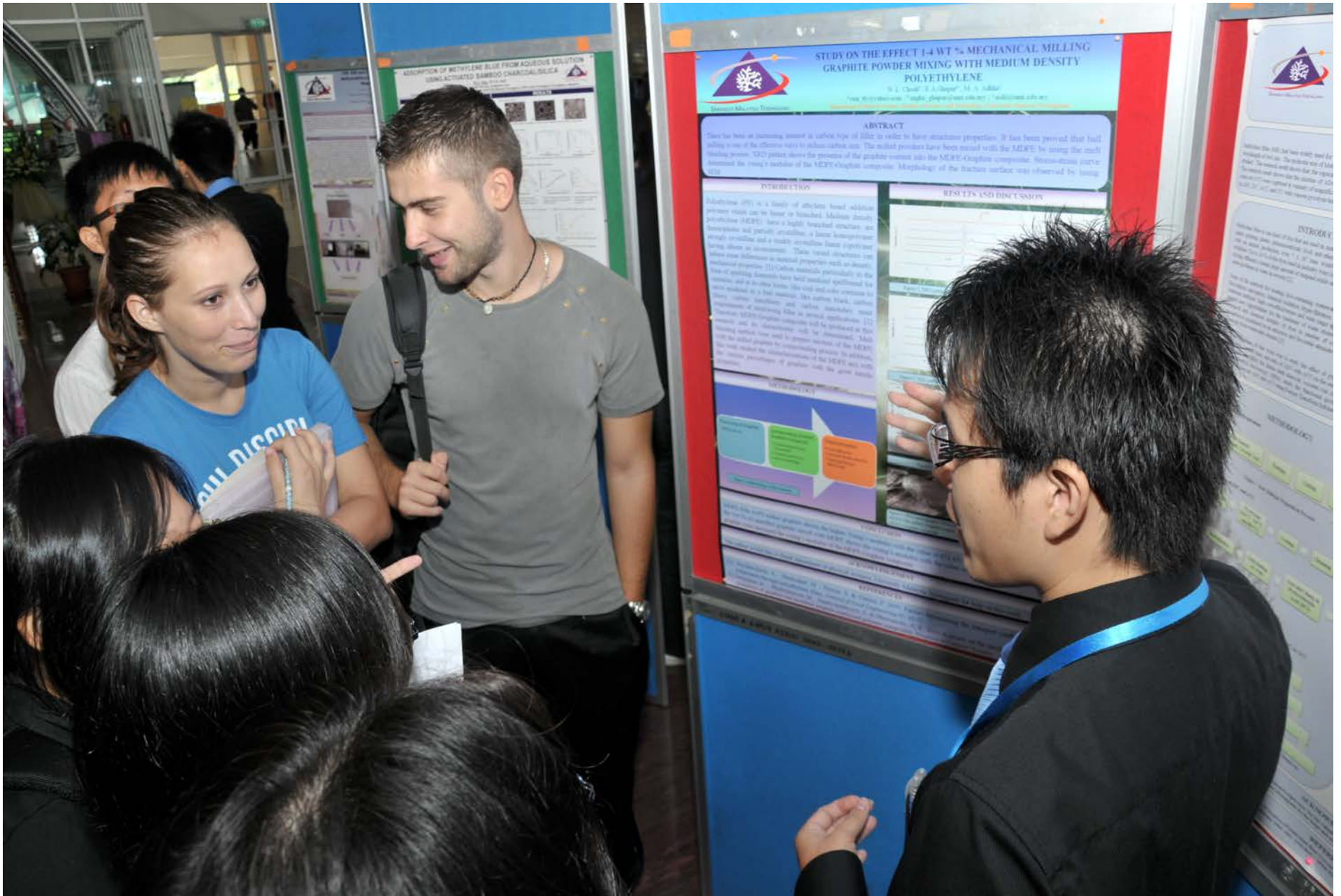
The objective of this research is to study the effect of bamboo char and antibiotic particles on the morphology, surface area, and electrical properties of ZnO. The ZnO thin films were prepared by spin coating method on glass substrate. The ZnO thin films were prepared by spin coating method on glass substrate. The ZnO thin films were prepared by spin coating method on glass substrate. The ZnO thin films were prepared by spin coating method on glass substrate.

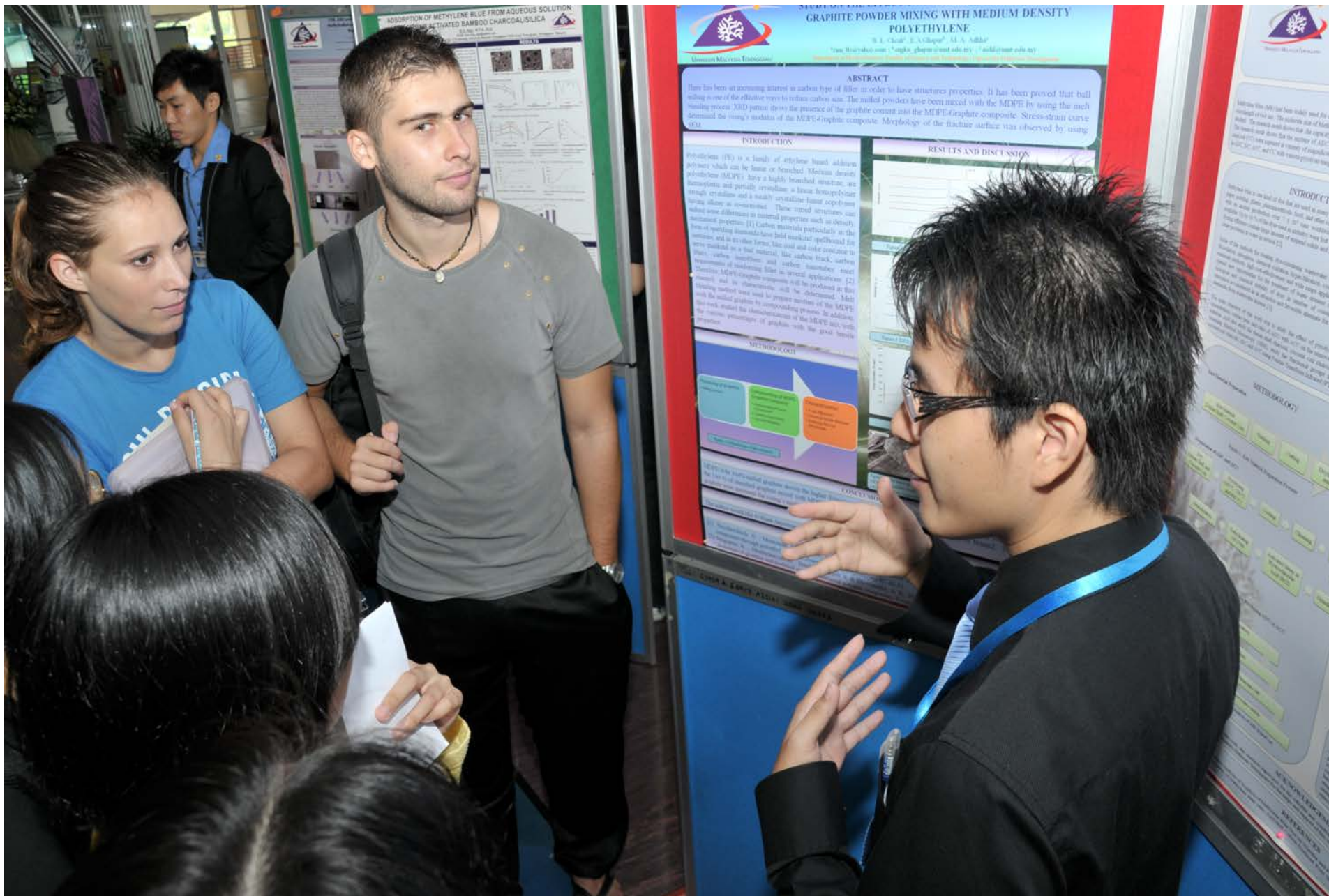












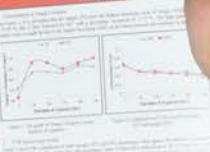




P60 CHARACTERISTIC STUDY OF POLYETHYLENE TEREPHTHALATE (PET) USED FOR COMMERCIAL DRINKING BOTTLES UNDER ULTRAVIOLET (UV) RADIATION BY USING A SOLAR FURNACE  
M.F.A. ABUL KALAM

**ABSTRACT**  
The study was conducted to determine the characteristic of PET used for commercial drinking bottles under UV radiation by using a solar furnace. The results show that the PET used for commercial drinking bottles is not suitable for use under UV radiation by using a solar furnace.

**INTRODUCTION**  
The study was conducted to determine the characteristic of PET used for commercial drinking bottles under UV radiation by using a solar furnace. The results show that the PET used for commercial drinking bottles is not suitable for use under UV radiation by using a solar furnace.



**CONCLUSION**  
The study shows that the PET used for commercial drinking bottles is not suitable for use under UV radiation by using a solar furnace.

**REFERENCES**  
1. [Reference 1]  
2. [Reference 2]

**ACKNOWLEDGEMENT**  
The author would like to thank the sponsor for providing the facilities and equipment for the study.

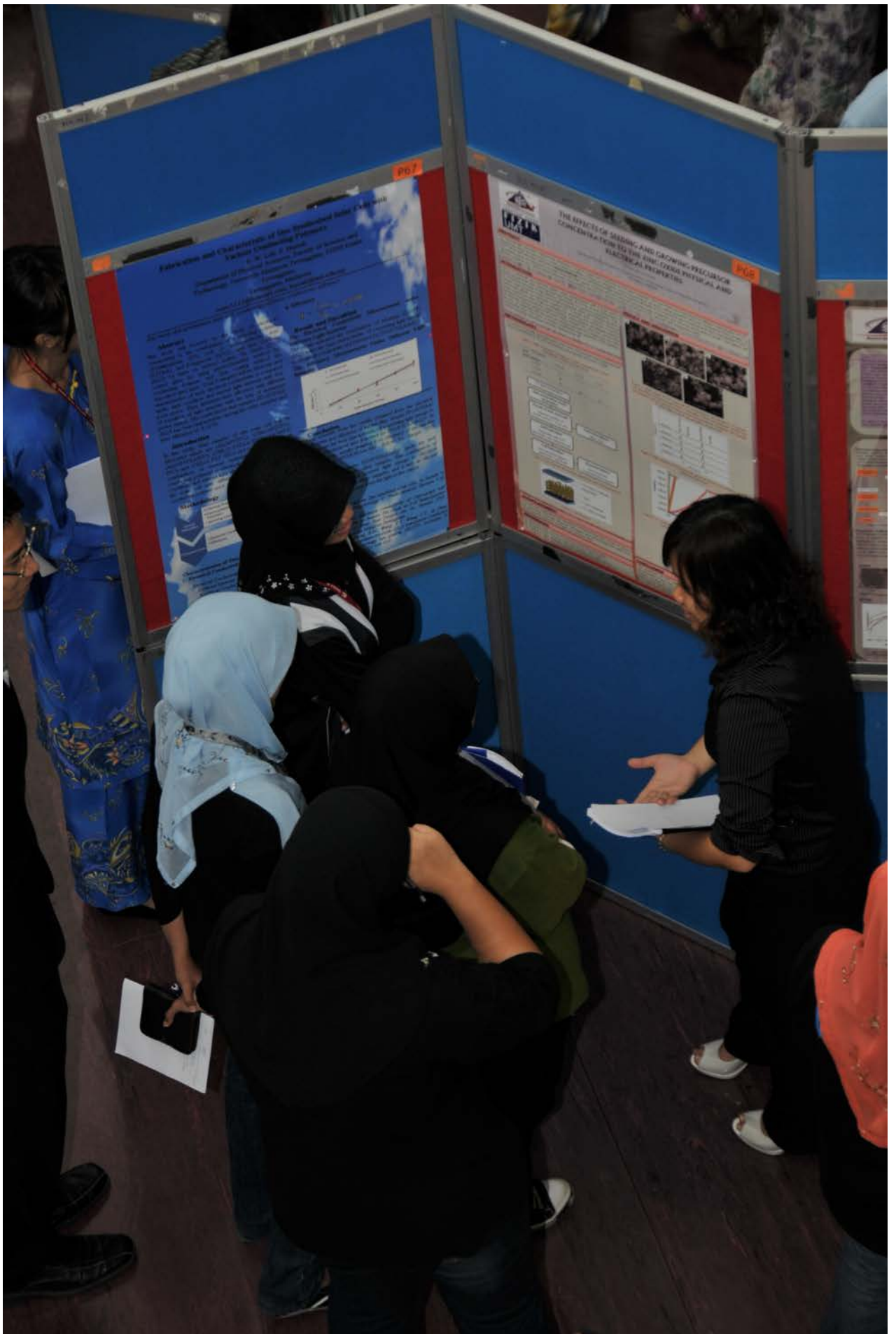












### Fertilization and Chlorophyllide of One-Seasoned Rice (Cultivar Swaha) Under Changing Parameters

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**Abstract**  
The study aims to determine the effect of fertilizer concentration on the chlorophyllide content of one-seasoned rice (Cultivar Swaha) under changing parameters. The research was conducted in a field experiment with a randomized block design. The treatments were 0, 10, 20, 30, 40, and 50 kg/ha. The results showed that the chlorophyllide content increased significantly with increasing fertilizer concentration. The highest chlorophyllide content was found in the 50 kg/ha treatment.



### THE EFFECTS OF SEEDING AND GROWING PRECISION CONCENTRATION TO THE ECONOMIC, PHYSICAL AND BIOLOGICAL PROPERTIES

**Abstract**  
The study aims to determine the effect of seeding and growing precision concentration on the economic, physical, and biological properties of rice. The research was conducted in a field experiment with a randomized block design. The treatments were 0, 10, 20, 30, 40, and 50 kg/ha. The results showed that the economic, physical, and biological properties of rice improved significantly with increasing seeding and growing precision concentration. The highest economic, physical, and biological properties were found in the 50 kg/ha treatment.















...intensity with the help of instrument  
AIQ3 has best characteristic among the other samples and  
have efficiency of 8.127%

### Introduction

In this study, Nine samples of dye solar cell will be fabricated which are (Alq3/P3TAA/ITO), (CHLO/P3TAA/ITO), and (CHLO/PPY/ITO) and to study the effect of combination of various materials used (dyes and conducting polymer) to electrical conductivity (under dark condition, and various light intensity), and the efficiency of the solar cell with different combination of dyes and conducting polymer used.

### Methodology

- Cleaning Process of ITO coated glass (Polymer)
- Electrochemistry Method (deposit conducting)
- Spincoating Coating Technique (spincoating dye)
- Electrical Conductivity of Thin Film
- Efficiency

### Characterization of This Film

- Electrical Conductivity of Thin Film under
- Light Intensity of Light
- Conductivity of Thin Film under dark

### The Efficiency Measurement Under Different Light Intensity

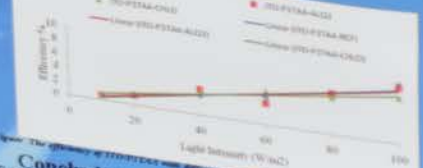


Figure: The efficiency of ITO/P3TAA/ITO with different dye under light intensity from 0 to 100 W/cm²

### Conclusion

Taking consider form the results obtained from the electrical conductivity and efficiency of the thin film, despite ITO/P3TAA/AIQ3 shows the best characteristic of converting light energy to the other hands, results obtained from efficiency of the thin film shows sample ITO/P3TAA/REF, follow by sample ITO/P3TAA/AIQ3. As conclusion, samples ITO/P3TAA/AIQ3 show the best characteristic among the other samples. This combination of dye-synthesis solar cell convert light energy to electrical conductivity better than other samples, and it also an efficient device of converting power from the light to the output.

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