

**UNIVERSITI TEKNOLOGI MARA**

**EFFECT OF CHEMICAL COMPOSITION IN OIL  
PALM TRUNK TOWARDS TO FURNITURE  
MANUFACTURING PROCESS**

**ASYRAF AMINUDDIN B BANI AMIN**

Thesis submitted in fulfillment of the requirement  
for the degree of  
**Bachelor of Sciences (Hons) Furniture Technology**

**Faculty of Applied Science**

**May 2011**

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## **ACKNOWLEDGEMENTS**

### **BISMILLAHIRRAHMANIRRAHIM**

First of all, I would like to be thankful to the Almighty Allah for blessing towards completing this paper. Thanks also given to my beloved family that keeps giving me the spirit to keep up with the study and encourage me to lead towards the success of this paper.

I would like to appreciate my special thanks for my advisor, En Ahmad Fauzi Bin Awang @ Othman and Miss Noorshashillawati Azura bt Mohammad for their guidance helping me in completing this paper. I also would like to appreciate Puan Junaiza bt Ahmad Zaki for her kindness giving me help and advices. Without their help it is hard for me to do it in time.

Thanks also to all my fellow friends especially to Norazleen bt Othman for giving me the continuous support and advices. Also to the others lecturers and staffs for their priceless help in preparing the materials needed in this research.

Lastly, my appreciation to those who are involved either directly or indirectly in completing the research. Without their help, it is impossible for me to complete the paper. Thank you.

# **EFFECT OF CHEMICAL COMPOSITION OF OIL PALM TRUNK TOWARDS TO FURNITURE MANUFACTURING PROCESS**

## **ABSTRACT**

An explosive development in oil palm plantation in the country has produced a consequence in the generation of plantation waste. The disposal of these wastes has created an enormous environmental problem that some practical solution to their economic utilization has not been sought. An experiment has been accomplished to observe the possibility of converting the oil palm trunk into a valuable woodworking product. The effort of the research was determining the basic properties that are covered on the effect of chemical composition in oil palm trunk in the furniture manufacturing process. The determination of chemical composition in oil palm trunk includes moisture content determination, ash content percentages, hot water solubility and 1% NaOH solubility. The research is followed according to the TAPPI T212 os – 75 standards. A result in general showed that the oil palm trunk has great characteristic variation across and the along the stem, which may develop problem during utilization especially machining and drying. Oil palm wood is a unique material with great characteristic variation across and along the trunk, which may develop problem in its utilization. Such utilization was not commonly encountered in conventional wood material.