

**STUDY ON PROPERTIES OF HYBRID
REINFORCED COMPOSITE USING CARBON
FIBER AND KENAF FIBER**

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**Bachelor of Applied Science (Hons) Material
Technology**

UNIVERSITI MALAYSIA PAHANG

STUDIES ON PROPERTIES OF HYBRID REINFORCED
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FIBER

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SUPERVISORS' DECLARATION

I hereby declare that I have checked the thesis and in my opinion, this thesis is adequate in terms of scope and quality for the award of the degree of Bachelor of Applied Science (Honor) Material Technology.

Signature

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STUDENT'S DECLARATION

I hereby declare that the work in this thesis is my own except for quotations and summaries which have been duly acknowledged. The thesis has not been accepted for any degree and is not concurrently submitted for the award of another degree.

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DEDICATION

I would like to dedicate this project report especially to my beloved parents, IDRIS BIN TALIB and HASHIMAH BINTI HASAUDIN.

Further, the report also dedicates this project to my supervisor, DR.NURJANNAH BINTI SALIM who has provided support and guidance me for completing this project report.

Without patience, understanding, support and guidance from them, this project report cannot be done. All of them are always with me in every step either in difficult moments nor easy do we overcome together.

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LIST OF SYMBOLS

cm	-	centi-meter (10^{-2})
g	-	grams
h	-	hour
k	-	kilo
kg	-	kilograms
ml	-	mili-litre
min	-	minute
mm	-	mili-meter (10^{-3})
MPa	-	Mega Pascal
N	-	Newton
nm	-	nano-meter (10^{-9})
ρ	-	density
t	-	time
μ	-	micron (10^{-6})
$^{\circ}\text{C}$	-	degree celcius
%	-	percentages

LIST OF ABBREVIATIONS

MEKP	-	Methyl ethyl ketone peroxide
CMC	-	Ceramic matrix composite
PMC	-	Polymer matrix composite
MMC	-	Metal matrix composite
CFRC	-	Ceramic fiber reinforced ceramic
RTM	-	Resin transfer molding
UTM	-	Universal testing machine
SEM	-	Scanning electron microscopy
TGA	-	Thermogravimetric analysis