

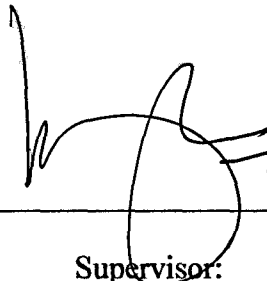
LINEAR CAVITY ERBIUM DOPED FIBER LASER

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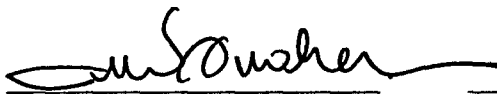
This Final Year Project Report entitled “**Linear Cavity Erbium Doped Fiber Laser**” was submitted by Masnita Mat Jusoh, in partial fulfillment of the requirements for the Degree of Bachelor of Science (Hons.) Physics, in the Faculty of Applied Sciences, and was approved by



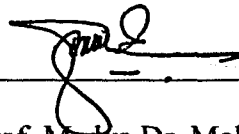
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ABSTRACT

The performance of laser efficiency in linear cavity erbium doped fiber (EDF) laser have been investigated. Four (4) meter of EDF which is pumped by a 980nm laser diode is used as the gain medium in the building of fiber laser using linear cavity configuration. Two configurations were built with different position of optical components. The efficiencies obtained were 5.11% and 4.17% for configuration 1 and 2 respectively. The output power was measured and the result for configuration 1 was 0.0088mW while configuration 2 was 0.0086mW output power at threshold point. Characterize of optical components have been measured in order to set up the configurations of several EDFL.

TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	iii
TABLE OF CONTENTS	iv
LIST OF TABLES	vii
LIST OF FIGURES	viii
LIST OF ABBREVIATIONS	x
ABSTRACT	xi
ABSTRAK	xii

CHAPTER

1	INTRODUCTION	1
	1.1 Problem Statement	2
	1.2 Scope Of Objectives	2
	1.3 Significant Of Study	3
2	LITERATURE REVIEW	4
	2.1 Optical Fiber	4
	2.1.1 Total Internal Reflection	5
	2.2 Laser	6
	2.2.1 Pump Source	7