

## CONTENT

	<u>Page No.</u>
ACKNOWLEDGEMENT	I
PUBLICATIONS BASED ON THE WORK	III
LIST OF FIGURES	IV
LIST OF TABLES	VIII
1. INTRODUCTION	1
2. THERMOLUMINESCENCE	4
3. SOLAR RADIATION	21
4. ZEOLITE MOLECULAR SIEVES	43
5. REFRIGERATION THROUGH SOLAR ENERGY	67
6. EXPERIMENTAL CONSIDERATIONS IN DEVELOPING THE SOLAR REFRIGERATOR	90
7. EXPERIMENTAL RESULTS AND DISCUSSIONS	135
8. CONCLUSION	161
ABBREVIATIONS	163