



**ABSORPTION AIR CONDITIONING SYSTEM  
FOR  
HOME RESIDENTIAL APPLICATION**

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## **ABSTRACT**

In this thesis, chapter 1 and 2 address the introduction or general overview of body comfort, air conditioning system and absorption process. Prior to chapter 2, the objectives and scope of this project are being described in the earlier pages. In chapter 3, the detail cycle of absorption system either ammonia-water system or lithium bromide-water system are explained. Furthermore, the comparative studies between these techniques are included. Chapter 4 introduces the working medium applicable in the selected absorption; by means of lithium bromide-water solution. This is including the theory, analysis, several working medium, selection on refrigerant and absorbent and solution graphs. In chapter 5, there are several basic components literature reviews and components. Chapter 6 is more detail on analysis of absorption system according to theoretical concepts like first and second law, energy balance analysis, components analysis, heat transfer analysis pressure and concentration analysis. Furthermore, after all the formulations are established, in chapter 7, the analytical approach is used. However, before that the design specification of the system is important. This is because design specification is a guide line to the design procedure. In chapter 8, there are several improvement made by earlier researcher and manufacturers are included. This is a guide line made for further development of this system. Chapter 9 will be laboratory analysis, in which in this chapter simple analysis upon to the parameters like concentration and pressure are being examined. Chapter 10 will be result and discussion upon to this system. Furthermore, chapter 11 is the conclusion for this project Interrelation with chapter 8; chapter 12 will concentrate on recommendation made by the authors. This is because recommendation made is a further trail guide before the actual solar absorption system is established.

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