## **HEATER BOTTLE**

## **ABSTRACT**

Currently the necessity of hot water is increasing due to the spread of various diseases like flu, chickenpox, typhoid etc. The younger generation easily get affected due to climate changes, drinking different area water etc. To overcome this worst situation people are in need to carry hot water for them and for their family wherever they go. To solve this problem schools, colleges, hospitals, companies are having "WATER DOCTOR" in their workplaces. But in normal places like markets, bus stand, temples, railway station and theatres do not have such facility that provide hot water. Even in some hospitals they don't have hot water. This makes people to suffer a lot. Moreover, the need of hot water mainly affects people while they are in travel. The people who are travelling long distance are suffering more. The main problem is we can store hot water only with the help of flask but carrying three to four flask is very hard for people. The single flask of hot water is not enough for a person who is sick and travels long distance. Nowadays, government have started implementing "WATER DOCTOR" everywhere. Mainly it does not help while people while they are in travel. To solve this major problem, "HEATER BOTTLE" is introduced. It is the modification of flask and the main function of this bottle is that, it heats the water automatically. To make this effective product an 8meter nichrome wire, 8meter sleeve, W1209 (thermostat), a bottle, DC supply is needed. Firstly, cover the nichrome wire by using sleeve. Now wound the sleeved nichrome wire around the bottle. Next give the DC supply with the rating of 20V and 2 amperes of current along the both ends of the nichrome wire. The main function of this nichrome wire is to covert the electricity into heat. This heat passes to the water by heating the steel. It can reach 60 degrees Celsius within 10 to 15 minutes. The specialty of this heater bottle is that, user can fix the temperature of the water as per their convenience. Once the fixed temperature is reached the bottle intimates the user with a buzzer sound. The DC supply is given by means of battery and this battery is rechargeable. Users can recharge it once after the battery is completely drained. If the battery is once recharged then it will heat the water for three to four times.

**KEY WORDS**: Nichrome wire, Sleeve wire, W1209, Steel bottle, Battery.