



A REPORT ON PROJECT WORK

**“DESIGN AND DEVELOPEMENT OF STRESS DETECTOR AND
SLEEP INDUCER SYSTEM”**

(SPONSORED BY K.S.C.S.T)

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ABSTRACT

Stress is a term that refers to the sum of physical, mental and emotional strains or tensions on a person. Feelings of stress in humans result from interaction between persons and their environment that are perceived as straining or exceeding their adaptive capacities and threatening their well-being. The element of perception indicates that human stress responses reflect differences in personality as well as differences in physical strength or health.

This stress meter allows assessing of one's emotional pain. Stress meter is based on the principle that the resistance of the skin varies in according with your emotional states. Resistance variation is inversely proportional to the stress. If the stress level is high the skin offer less resistance, and if relaxed, resistance is high.

Many people around the world experience difficulty in sleeping. This sleeping difficulty is called insomnia and can involve difficulty in falling asleep when you first go to bed at night, waking up too early in the morning, and waking up often during the night. The lack of restful sleep can affect your ability to carry out daily responsibilities because you are too tired or have trouble concentrating. All types of insomnia can lead to daytime drowsiness, poor concentration, and the inability to feel refreshed and rested in the morning. Magnetic field associated with the Earth is called Geo-magnetic fields. It is essentially bipolar (i.e., it has two poles, the northern and southern magnetic poles) on the Earth's surface. Most people experience sound sleep in natural surroundings, like in a tent or a wooden hut. This fact is due not only to the healthy atmosphere but also from our unconscious ability to perceive natural Earth's magnetic fields.

In the present work a sleep inducer system is designed and developed, which generates magnetic field which is almost equal to the geo-magnetic field of the earth. The signals generated by the device are perceived by the brain and thus creates an ideal environment for a sound sleep.