

**EFFECTS OF ELECTROMAGNETIC RADIATION FROM  
MOBILE PHONE TOWARDS HUMAN BRAIN**

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## **ABSTRACT**

In this new era, mobile phone has been one of the important gadgets in daily life. The radiation from mobile phones cannot be avoided, but it can be reduced as many researches have been done to find a way on condensing the effects. This project discussed the effects of mobile phone radiation towards human brain in three main states; with hand-held, using earphone, and using Bluetooth headset using electroencephalography (EEG). The EEG will record the alpha wave pattern of 30 samples, taken from engineering students. These samples will be exposed to the electromagnetic radiation from mobile phone in a certain phase of time. The experiment has been conducted in five situations, which are the conditions before conversation, during the use of hand-held, using earphone, using the Bluetooth headset, and after the conversation takes place. The results from the EEG signals were interpreted and analyzed, and discussions based on the comparison between states. The result shows that the use of mobile phone with direct hand-held has the greatest effect on human brain.

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