**Silent sound technology**

Silent sound technology is a technology for mobile phones that helps you to communicate in noisy places. In simpler words we can say that a solution to noisy communication. Which is developed by Karlsruhe institute of technology, Germany. Silent sound technology aims to detect every lip movement and internally converts the electrical pulse into sound signals and sends them neglecting all the other noises in the surroundings.

**Working of silent sound technology:-**

There are two methods that are used in silent sound technology:-

1. Electromyography (EMG)
2. Image processing

**Electromyography:-**

It is a study of muscle function through analysis of electrical activity produced from muscle. This electrical activity which display in the form of signal. This method is been use in silent sound technology.

The EMG surface consist:-

1. Pressure sensor
2. Vibrator sensor
3. Electromagnetic sensor
4. Motion sensor

It containing two fine-wired electrodes is inserted through the skin into the muscle tissue. Normal muscle at rest make certain, normal electrical sounds when the needle is inserted into them. There the electrical activity when the muscle at rest is observed. It proved that electrical signal can now be transmitted and converted to the same sound signal at the other side.

**Image processing:-**

Image processing is any form of signal processing for which the input is an Image , such as photograph or video frame; the output of image processing either on image or a set of parameter related to the image. In silent sound technology the output of this image processing in an audio record.

Applications of silent sound technology:-

1. It will help people who have lost their voice in accident or illness or cannot speak loudly due to old age.
2. It can be use by our secret services like RAW, Intelligence bureau(IB) to deliver secret or sensitive information.
3. Silent sound technology can be utilized by astronauts because in space there is no medium for sound to travel.