

# Funded projects and Copyright works of Biomedical Department

## Funded Projects

1. DST Funded project under SEED division (2012): ' Neuro feedback training for elderly people with Parkinson's disease and Increased stress level' : Sanctioned Amount : 20.5 Lakhs



**Current Status:** Design of Neuro feedback system is over in the first year and testing with the patients is being carried out in the second year which started by Aug'2014.

**Funding agency:** DST (Department of Science and Technology, Govt of India) under the division – SEED (**Science for Equity Empowerment and Development**)

**Objective:** The project aims at improving the cognitive functions of elderly who are under the influence Parkinson's and increased stress level. This is executed by retraining the brain with the aid of interactive visual environment thereby increasing their concentration level

**2. DST Funded project under SEED division (2013): 'Solar powered voice controlled wheelchair for Quadraplegic': Sanctioned Amount : 6.5 Lakhs**

**Funding Agency:** DST – under the division TIDE (Technological Intervention for the Disabled and Elderly)

**Objective:**

To extend support for paraplegia/quadriplegia patients by providing them with a wheel chair that operates on **voice commands and with the aid of joystick**. The wheel chair can be charged with solar energy. The major role of this product is to bring about a sense of independency with disabled patients. It will be an excellent aid for the elderly/Physically challenged/ Cerebral Palsy/ Quadriplegia people to move independently

**3. DST Funded project under CSI division (2013): 'Prediction of cochlear outcome using cross-modality analysis' : Sanctioned amount : 21.7Lakh.**

**Principal Investigator:** Dr. Kalaivani.M

**Co-Principal Investigator:** Ms. JAYALAKSHMI (CO-PI 1), Ms. Jemina Asnoth Sylvia

**Funding Agency:** DST – Under the division CSI

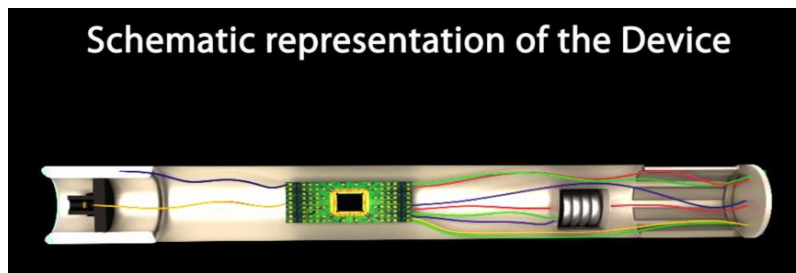
**Objective:** To predict the cochlear outcome by analyzing cross modal existence in brain, before going for implantation. This analysis is to be done with the evoked potential analysis.

## **Copyrighted works**

### **1. Cervical Screening Using VLI and Light Sensing Techniques**

**Objective :**To device a non-invasive equipment to diagnose the presence of cervical cancer in woman efficiently. This proposed work aims in diagnosing

the cervical cancer using light detection sensor upon the application of lugol iodine at the cervix. This will be a handy tool for oncologist and gynecologist to determine the presence of cancer in cervix very efficiently with minimal effort. Along with cancer detection, the advantage extends in understanding the depth and area accumulated by cancerous tissues in that particular part of the body.



**This project is one of the top 5 national level projects that was shortlisted by Millennium Alliance, which is the prestigious Group comprising of DST, USAID and FICCI.**

**2. Solar powered voice controlled wheelchair for Quadraplegic: Copyright and CE certification for this product had been obtained.**

### **Best student Project**

'Mind controlled Robotic Arm' was designed by the Final year students of the year 2010-14. This project has been shortlisted as one of the NI YANTRA 2014 finalists (third level) in the national level contest.

### **Mind controlled Robotic Arm**

