

**AARUPADAI VEEDU INSTITUTE OF TECHNOLOGY**  
**VINAYAKA MISSION'S RESEARCH FOUNDATION**  
**WORKSHOP ON BRAIN MACHINE INTERFACE**  
**FEBRUARY 7-8, 2018**

Aarupadai Veedu Institute of Technology, Vinayaka Mission's Research Foundation organized a two days workshop on Brain Machine Interface during February 7-8, 2018.

Dr Vijay K Varadan, Professor, Penn State University, USA and Director, GINTEM was the resource person. The workshop included the following topics namely

1. Brain anatomy and functionality
2. Neurons and neuroscience
3. Brain dynamics
4. Nanomaterials and nanostructures
5. Nanosensors and microelectrode arrays
6. Flexible bioelectronics and thin film transistors
7. Integration of nanosensors and electronics
8. Wireless nanoengineering systems for brain controlled activities
9. Applications including solutions for Sleep disorders and sleep apnea; monitoring and control of grinding teeth during sleep (dental therapy); Monitoring and control of movement disorders; Parkinson's disease and others; Monitoring Alzheimer's disease; Epilepsy and seizure monitoring and control; Thoughts controlled robots, computer and other examples; Diagnostic and therapeutic techniques for TBI including the soldiers in the battle field, high altitude, etc; Movies on selected surgeries

The workshop was attended by 255 participants from various institutions and industries. The participants included engineering students, engineering faculty, research scholars, students and faculty from allied health sciences, scientists and working professionals. The workshop also included discussions and video presentations on test cases and future research paths in the field of brain machine interface.

The workshop was interactive with discussions and brain storming amongst the participants. The workshop was accorded the approval of being equal to a 1-credit course by Vinayaka Mission's Research Foundation. The participants were evaluated with written tests (both objective and descriptive) and were evaluated before being given grades and certificates of participation.

The workshop was organized by the IEEE EMBS Student Chapter in association with the IEEE EMBS Madras Chapter, IEEE COMSOC Madras Chapter, IEEE Product and Safety Engineering Madras Chapter and IEEE Young Professionals Group of Madras Section.

Dr P Shankar, Principal, Aarupadai Veedu Institute of Technology welcomed the Speaker and the participants. Mr T Srinivasan, Head Operations, presented a shawl to the speaker and welcomed him.