BioSpectrum
the business of Bi
24 years of leveraging the business of Bio
www.biospectrumindia.co

IIT-D brings patient friendly diagnostic tool for epilepsy

08 August 2022 | News

A breakthrough considering comfort of patients



Quite a lot of epilepsies can be controlled by medicines, however, when medicines fail to control seizures, it is labelled as drug resistant epilepsy- likely to originate from structural abnormalities of brain and hence brain surgery offers a complete cure for these patients. But it takes 2-8 hours for Epileptogenic Zone Detection and is uncomfortable for patients.

A team of researchers at the Indian Institute of Technology Delhi (IIT-D) has come up with a non-invasive electroencephalogram (EEG) based Brain Source Localisation (BSL) framework for epilepsy focal detection that is time efficient and patient friendly. Given the EEG data with seizure, the array processing algorithms can point the co-ordinates within minutes. In particular, the researchers have proposed novel head harmonics based algorithms for seizure localization.

The researchers have validated the proposed source localization algorithms on clinical EEG data for epileptogenic zone localization. The proposed framework offers an effective solution to clinicians in automated and time efficient seizure localization.