





# **CG-STAT**

The outcome of an R&D project titled 'e-GUNA: An Electronics and ICT driven solution towards fermented food safety in North Eastern Food Funded by the Ministry of Electronics and Information Technology, Govt. of India

# About CG-STAT

A high-throughput field portable miniaturized Potentiostat with stabilized enzymatic bioreceptor toward cost effective cyanogenic glycoside detection in fermented food: special reference to bamboo shoot. Cyanogenic glycosides, present in bamboo shoot may lead to acute intoxications in humans, characterized: Growth retardation and neurological symptoms resulting from tissue damage in the central nervous system (CNS). CG-STAT is equipped with stable biosensor based screen printed electrode for DPV analysis and cyanogenic glycoside quantification in real samples.

#### Features

- SPE as well as three electrode system can be used
- Mobile based operation & analysis
- Minimum current measurement at 230 nA
- Voltage range -2.0 V to +2.0 V
- Voltammetry and Amperometry techniques

### Hardware

- Single board computing module
- High Precision A/D, D/A circuit
- Circuit for potentiostat
- Battery power system
- Low battery indicator

#### **Benefits**

- Maintain Indian fermented food biodiversity
- Early detection of the toxins
- Reduction in economic loss
- Sustainable growth of NE region
- National nutritional safety

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