

CONTINUOUS AMBIENT AIR QUALITY MONITORING STATION

(CAAQMS)

Tamil Nadu Pollution Control Board (TNPCB) is in the process of establishing Continuous Ambient Air Quality Monitoring Stations (CAAQMS) in Tamil Nadu at 25 locations. **Bharathidasan University** is one of the unique CAAQMS station among the 25 stations which is being installed in Tamil Nadu and its costs is roughly around **Rs.2.0 crores** and the entire cost is borne by TNPCB. In this regard, MoU has been signed on 04/03/ 2016 through the **Department of Environmental Biotechnology**, Bharathidasan University, between the **Registrar** of Bharathidasan University, Tiruchirappalli and the **District Engineer** of TNPCB, Tiruchirappalli for the minimum period of 5 years which will be renewed by another 5 years or more as per the PWD rates at the option of TNPCB.

TNPCB purchased the instrument through the open tender and it has been installed in Bharathidasan University. The instrument is connected through telephone and internet connections so that all the 25 stations are connected to CAC, TNPCB Chennai, and IIT, Chennai for data analysis. Data from this monitoring station at Bharathidasan University can be used by the scientific and academic community for research and teaching purpose. The faculty in charge **Dr. K. Thamaraiselvi**, Department of Environmental Biotechnology, where the instrument has been installed will carry out periodic inspections of CAAQM stations.

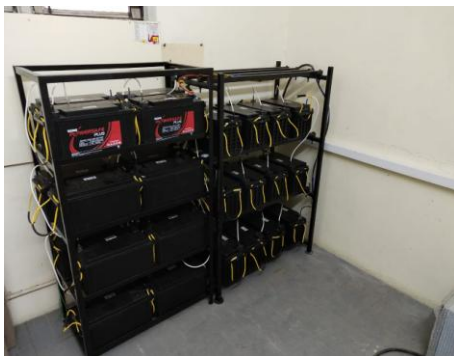
The following parameters can be measured continuously,

SO₂, CO, O₃, NH₃, NO, NO₂, BTX – Benzene, Toluene, Xylene, and Meteorological parameters – rainfall, solar radiation, wind direction, wind speed, temperature, humidity

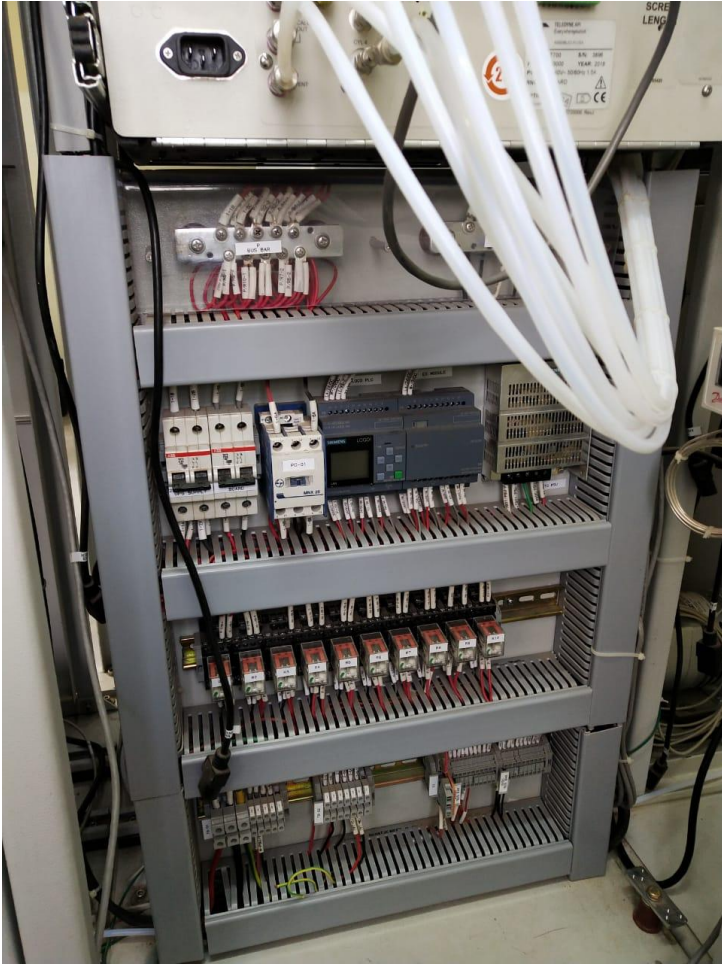
Besides the above parameters, PM₁₀ and PM_{2.5} can be measured on per hour basis.

Components of CAAQMS

Analyzer/Systems	Make	Model
SO2	Teledyne API	T100
NO	Teledyne API	T201
NO2		
NOX		
NH3		
TNX		
CO	Teledyne API	T300
O3		T400
Calibrator		T700
Zero Air Generator		701
BTEX	Synspec	GC955-601
PM2.5	Met One	BAM1020
PM10		
Meteorological Data Logger	Met One	
Rain Gauge		
Wind Speed		
Wind Direction		
Solar Radiation		
Relative Humidity		
Barometric pressure		
Smoke Detector		
Computer		
Printer		
UPS		







Faculty In-Charge

Dr. K. Thamaraiselvi

Associate Professor

Department of Environmental Biotechnology

School of Environmental Sciences

Bharathidasan University

Tiruchirappalli – 620 024

E-mail: kthamaraiselvi@bdu.ac.in

kthamaraiselvi@hotmail.com

thamaraiselvi@gmail.com