

# ELECTRONIC NOSE FOR MONITORING INDUSTRIAL OBNOXIOUS ODOROUS CONSTITUENTS GENERATED FROM PULP & PAPER INDUSTRIES

► A Sub-project under the DIT funded eAgriEn Program ◄



Implementing Agencies:  
C-DAC, Kolkata & NEERI, Nagpur



## OBJECTIVES:

- Developing a substitute for the imported Electronic Nose with indigenously developed system for environmental monitoring of the VOCs/odorants - saving the import bills for the procurement of electronic nose.
- Establishing correlation using indigenously developed Electronic Nose between sensory and analytical measurements for the sulphurous odorants generated from various pulp and paper industries.

## Features & Benefits:

- An automatic instrument for monitoring obnoxious gases generated from Pulp and Paper Industry.
- User-friendly software for running the instrument.
- Monitoring of various sulphurous compounds generated from paper industry.
- Generating the revenue for the country through sell of the developed electronic nose of significant economic value in the international market.



E-Nose for Pulp & Paper Industries (OOPs)



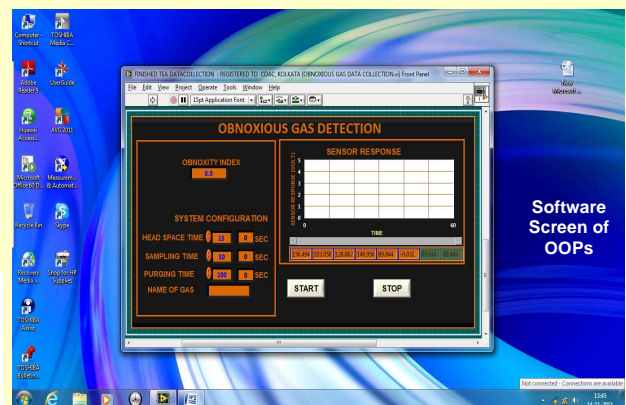
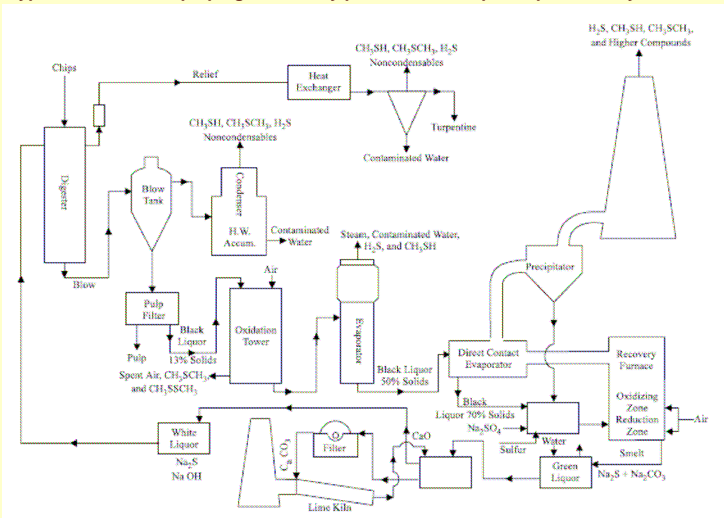
OOPs Sensor Array

## Applications & End Users:

- Pulp and paper Industries
- Gas manufacturing industries
- Sewage water treatment
- Govt. Regulating Agencies / Pollution Control Boards, etc.
- Research Institutions in agriculture and environment.

Obnoxious Gases: ► Dimethyl Sulfide ► Dimethyl Disulfide ► Hydrogen Sulfide ► Methyl Mercaptan

Typical Kraft sulfate pulping & recovery process of a Pulp & Paper Industry



Software Screen of OOPs



View of a Pulp & Paper Industry