

## Innovation Concept paper

**Title:** Establishment of Methods to calibrated Gas Detectors (CH<sub>4</sub>, VOC, NH<sub>3</sub>, H<sub>2</sub>S, CO, CO<sub>2</sub>, O<sub>2</sub>, Cl<sub>2</sub>, H<sub>2</sub>)

**Problem Identification:** Under technical service wing of TICI calibration of instrument and apparatus from different organization is a major work in TICI. After acquiring Accreditation on Glassware calibration, the demand on instrument and apparatus calibration from different organization increases. But TICI not able to calibrate Gas Detectors. TICI losses income from this site. Therefore, it is needed to establishment of methods to calibrate gas detectors. This is to mention that in Bangladesh there is no facility to calibrate the Gas Detectors. Users must send their detectors to abroad.

### Methodology:

1. Study of manuals of Gas detectors
2. Preparation of gases in laboratory
3. Preparation of required concentrations of target gases
4. Check the concentration of gases by GC instrument
5. Study of calibration procedures of Gas detectors
6. Trial and Error basis calibrate the Gas detectors
7. Establish the methods to calibrate the Gas detectors.

### Expected Results:

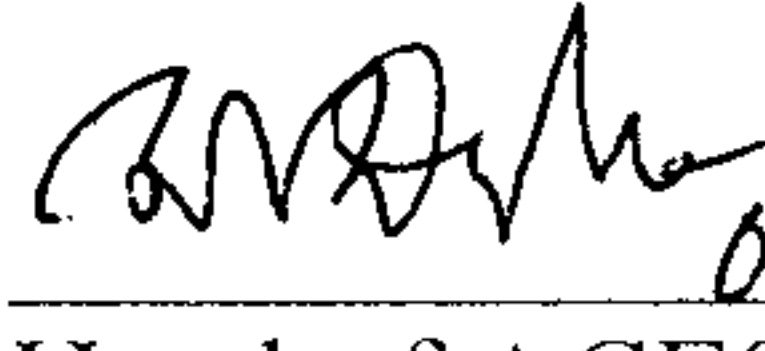
1. TICI will able to calibrate the Gas Detectors
2. Under Technical Service Wing TICI income will increase
3. Other organizations can get service on gas detectors from TICI
4. Nation money will be saved
5. As training institute expertise on Gas detector calibration will propagate nationwide in this way

### Work Schedule:

SN	Steps	Week-1	Week-2	Week-3	Week-4
1	Study of manuals				
2	Preparation of gases in laboratory				
3	Preparation of required concentrations				
4	Check the concentration of gases by GC				
5	Study of calibration procedures				
6	Trial and Error basis calibration				
7	Establish the methods of calibration				

**Cost Breakup:** Procurement of extra consumables not needed

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