

Minutes of Pre-Bid Conference (PBC) held on 28-11-2023 for proposed procurement of "Supply, installation, and commissioning Dynamic adsorption analyzer with QMS detector as per the Specifications mentioned in Chapter 4" –

Chairpersons / Members of the Technical Sub Committee (TSC) present during PBC including domain experts present during PBC:-

1. Dr N Lingaiah Chairman
2. Dr. Pratyay Basak, Member
3. Dr Sreepriya Vedantam, Member
4. Shri D Venkateshwar Rao, Member
5. IO/PL – Dr. Rohit Kumar Rana

Representatives of the following firm attended the PBC:

1. M/s Anton Paar India
2. M/s Verder Scientific Pvt. Ltd.
3. M/s Partech Scientific Instruments M/s

The following points were discussed during the PBC:

Query raised by M/s. Verder Scientific Pvt. Ltd, and response of CSIR-IICT:

No queries

Query raised by M/s.Anton Paar India, and response of CSIR-IICT:

No queries

Query raised by M/s.Partech Scientific Instruments, and response of CSIR-IICT:

No queries

Technical Points discussed by CSIR-IICT:

Following points were discussed by CSIR-IICT and amended as given below:

(1st statement in the tender spec): Dynamic adsorption analyzer for adsorption breakthrough measurement under flow conditions with suitable furnace capable of heating up to 1000°C or better, in-built TCD detector, external QMS integrated with the unit, sample column / port, multiple inlet gas / gas mixture ports, mass flow controllers, on line gas mixing facility and suitable software for measurements and data analysis.

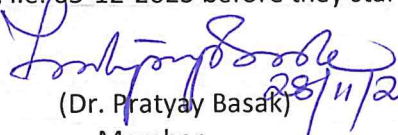
(Point # 6 & 7) Removed as TPD/TPR/TPO measurement options are not mandatory.

(Point # 19): The equipment should be delivered within 3-4 months from purchase order issued. The supply should include installation, commissioning and training of IICT personnel.

Points clarified by CSIR-IICT Team during PBC:

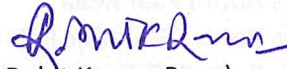
The firm informed that they do not have problem with other points of tendered specifications and requirements. Participating bidders have been informed that points raised by them during PBC will be examined by CSIR-IICT's **Technical Sub Committee (TSC)** constituted for the purpose of procurement of said equipment and **post PBC changes** in tendered specifications and requirements to be agreed after due consideration of the same by TSC, if any, will be uploaded in **CPPP** as part of **revised/amended tendered specifications**.

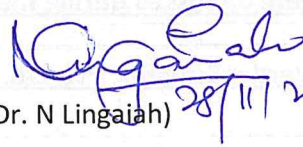
Minutes of the PBC with changes agreed (if any) will be uploaded in due course at **CPPP** for information and reference of prospective bidders on or before **28.11.2023**. All bidders are requested kindly to take a note of changes in tendered specifications subsequent to PBC held today, i.e. 05-12-2023 before they start submitting their online bids through CPPP.


(Dr. Pratyay Basak)
Member


(Dr Sreepriya Vedantam)
Member


(D Venkateshwar Rao)
Member


(Dr. Rohit Kumar Rana)
IO/PL


(Dr. N Lingiah)
Chairperson

Revised Specifications/Corrigendum

File Ref. No. PUR/IICT/DMS/325/RE/23-24

Dt 28.11.2023


Dynamic adsorption analyzer with QMS detector


Dynamic adsorption analyzer for adsorption breakthrough measurement under flow conditions with suitable furnace capable of heating up to 1000°C or better, in-built TCD detector, external QMS integrated with the unit, sample column / port, multiple inlet gas / gas mixture ports, mass flow controllers, on line gas mixing facility and suitable software for measurements and data analysis.

1. Sample column / port : one or more
2. Built in detector: TCD
3. Sample loading capacity: 200 mg to 1 gm or better
4. Gases to be used: N₂, O₂, H₂, CO, CO₂, NH₃, CH₄, C₂H₄, C₂H₂, C₂H₆, C₃H₆, C₃H₈, etc.
5. Gas ports: Minimum 6 ports
6. Mass flow controllers: Minimum 3 numbers – two for pure gases and one for mixture.
7. Gas mixing facility: Inline gas mixing facility.
8. Furnace range: up to 1000°C or better with programmable heating rate / ramping.
9. Facility for forced cooling for faster cooling.
10. Provision for cold-trap for condensable or equivalent technology.
11. Should have replaceable dust filters to prevent entry of dust and other particulate matter into analysis ports / internal tubes etc., along with 12 or more number of filter elements.
12. Software capability for selecting gas for analysis, temperature programming, and to analyze data such as area calculation, base line correction, peak deconvolution, etc.
13. Spares / accessories / consumables for trouble free operation of the unit for 2 years: 12 sets consisting of sample tubes, 'o' rings / seals, etc.
14. Quadrupole mass spectrometer (QMS)
 - Mass Range: 1- 200 amu or better with 16 or more channels
 - Detector: Faraday cup /Electron Multiplier or any other suitable detector
 - Minimum detection limit < 1ppm or better
 - Resolution: $M/\Delta M \geq 2M$ or better
 - Heated hose for sample transfer from Dynamic adsorption analyzer.
 - Scan speed: 100 amu/sec or better
 - Suitable software for QMS measurement and analysis interfaced with the dynamic sorption analyzer
 - Should be capable of taking care of interference from moisture
 - Spares / consumables for trouble free operation for 2 years.
 - Unit should be able to take input from other flow systems for sample analysis. Provision should be given for connecting any other reactor to QMS for analysis.

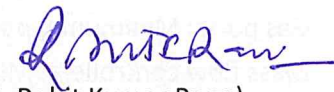
15. Branded PC for data acquisition and analysis – latest mother board, 1 TB HDD, 16 GB or higher RAM, 21" or 24" LED screen, keyboard, mouse, licensed MS windows.
16. Suitable UPS with one hour power backup for both power and control circuit.
17. The equipment should be delivered within 3-4 months from purchase order issued. The supply should include installation, commissioning and training of IICT personnel.
18. Three year warranty on the complete system


All the other tender terms remains unchanged. Bidders may please submit their bids accordingly.


(Dr. Pratyay Basak)
Member


(Dr Sreepriya Vedantam)
Member


(D Venkateshwar Rao)
Member


(Dr. Rohit Kumar Rana)
IO/PL


(Dr. N Lingaiah)
Chairperson