

August 3rd, 2022

Expression of Interest (EOI)

Modification/Upgrade of Existing Utility systems for the cleanroom at CCT building, IISc (Last date:26th Aug 2022)

This is an **Expression of Interest (EOI)** towards “**Modification/Upgrade of Existing Utility system for Cleanroom facility**”, at the CCT building, Indian Institute of Science (IISc) Bengaluru. The cleanroom is approximately 4500 mm (W) x 9800 mm (L) structure.

The cleanroom at the CCT facility is a part of the National Nanofabrication Centre, CeNSE. CeNSE already has a 14,000 sq. ft. cleanroom and characterization facility used by 200 faculty members from various disciplines at IISc. CeNSE also runs a nationwide program which has allowed 4200 participants from more than 700 universities and institutes all over India to use the facilities at CeNSE. Consequently, any utility/facility at CeNSE receives significant exposure to the scientific community at IISc and beyond. The vendors are kindly requested to factor in the value of this exposure in their quotes.

Procedure: -

1. CeNSE intends to invite Expression of Interest from vendors for the selection of the design, build and validation for “**Modification/Upgrade of Existing Utility systems for the cleanroom facility at CCT, IISc. This cleanroom is a part of CeNSE, IISc.**”
2. CeNSE Intend to float an RFP (Request for Proposal) to meet the modification and upgrade of the existing facility. The EOI is to identify competent vendors and deliberate requirements for the implementation.
3. Vendors will be required to visit our office, discuss the plan and conduct the site survey. Please contact the NNFC office, GF-20, CeNSE, IISc, Bengaluru for a site visit and verification. Bids without site survey vendors will not be considered for inviting tenders.
4. Please find the list of items needed as a part of Utilities:
 1. HVAC system (Class 10000) including AHU, Chillers, Ducting, Piping and Insulation
 2. Electrical panel and cabling: Cleanroom and HVAC
 3. Exhaust system
 4. Gas and CDA distribution system
 5. Cleanroom doors and flooring, as needed
 6. Process cooling water and DI Water distribution.
 7. BMS Automation as required.
5. The number of tools expected to be installed in this cleanroom is provided in Annexure 1
6. Vendors are encouraged to highlight the advantages of their design.
7. The proposals must include references of 3 previous designs & installations (in India) of similar scope which are of 3 years or older. The proposals should also include completion certificates from relevant authorities indicating satisfactory functioning of the cleanroom facility. The referees must belong to cleanroom facilities. Please provide the names and

contact addresses of the referees so that the CeNSE committee can contact them independently.

8. The vendor referees must be able to provide the following information:
 - a. The capacity of the exhaust system designed & implemented by the vendor.
 - b. The application for which their system was designed.
 - c. Certify that the vendor has the capability to design and implement HVAC system.
 - d. Certify that the design implemented by the vendor has stood the test of time. The performance matches the design specifications. The system is functional.
 - e. Certify that the vendor provides high-quality service and support since installation.

For site visit and any questions, please contact Dr. Savitha P, GF-20, Centre for Nano Science and Engineering, Indian Institute of Science, Bangalore 560012, India. (savithap@iisc.ac.in)

Annexure 1

Tool	Facility requirement	Exhaust requirements (CFM)
Furnace (4 stacks)	Power, O2, N2, CDA, PCW, FG	500
ICPRIE	Power, O2, N2, Ar, C4F8, CHF3, SF6, He, CDA, PCW	20
Wet bench x 3	Power, N2	600 x 3
Sputter tool	Power, N2, O2, PCW	50
Ebeam evaporator	Power, N2, O2, PCW	50
Mask Aligner	Power, N2	50

Thanks,
Savitha P,
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