Expression of Interest (EOI) for Validating of C4DFED, Clean Labs at Indian Institute of Technology (IIT) Mandi, (H.P), India

1. **IIT Mandi invites Expression of Interest (EOI) for validating of C4DFED, Clean Labs at Indian Institute of Technology (IIT) Mandi.**

2. **Third-party vendors will submit the technical & financial quotes in the two different envelopes to the bidding of EOI, subject to vendors having prior experience in validating Clean Labs and equipped with the required tools are only permissible to participate in the expression of interest (EOI).**

3. **Duly constituted committee will hire the services of technically qualified third party vendor and will ask to initiate the C4DFED validation process immediately.**

Schedule:

Last date and time of submission of quotes:	10th March, 2021 till 3:00 P.M
Opening Date & Time of quotes	10th March, 2021, 2021 at 3:30 P.M
Place of Opening	C4DFED LAB. A4 Building, South Campus Indian Institute of Technology Mandi (IIT Mandi), Kamand – 175 005, District - Mandi (H.P), India
Email for further communication:	c4dfed@iitmandi.ac.in

Both (Technical & Financial quotes) envelops should be placed in separate sealed envelope and address to:

C4DFED LAB.
A4 Building, South Campus
Indian Institute of Technology Mandi (IIT Mandi),
Kamand – 175 075, District - Mandi (H.P), India"

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Expressions are invited from interested vendors for validating recently developed Clean Laboratories for device fabrication at C*4*DFED, Indian Institute of Technology (IIT)-Mandi, (Himachal Pradesh).

The center has five labs of following specifications.

SN	Lab	Class	Process	Area (SqFt)
1	**Clean Room- 1**	**ISO Class 5 (Class100)**	Device Characterization	**434**
2	**Clean Room- 2**	**ISO Class 5 (Class100)**	Lithography Process Area	**358**
3	**Gowning Room-1**	**ISO Class 5 (Class100)**	Gowning	**113**
4	**Clean Room -3**	**ISO Class 5 (Class100)**	Sample Preparation Process Area	**360**
5	**Clean Room -4**	**ISO Class 6 (Class1000)**	Material Science Process Area	**308**
6	**Clean Room- 5**	**ISO Class 7 (Class10000)**	Furnace Process Area	**246**
7	**Gowning Room-2**	**ISO Class 6 (Class1000)**	Gowning	**78**
8	**Lobby & Corridor**	**ISO Class 8 (Class 100000)**	Surrounding Clean Area	**563**

The validation should ensure the facility's performance fit for its intended purpose, the facility, equipment, and environment meet User Requirement Specifications (URS), meet defined regulatory requirements and to ensure the facility, equipment, and environment function together as a system to meet standards.

Validation should confirm if the cleanroom operates in conformance with both design and user-defined requirements. Cleanroom consistently operates within a defined range of conditions.

Protocol to be addressed-

(i) Testing the HVAC
(ii) Critical alarms
(iii) Interlock alarms
(iv) Critical operating parameters
(v) Filter integrity tests
(vi) Standard operation
(vii) Air speed/flow
(viii) Air flow patterns
(ix) Pressure differential

Performance Qualification.

Report should demonstrate that cleanroom consistently operates within defined parameters to produce the defined/desired environmental outcome. Testing and monitoring includes:

(i) Air Velocity Test
(ii) PAO Test For Hepa Filters
(iii) Particle Count Test
(iv) Pressure Differential Test
(v) Air Flow Pattern
(vi) dB Level
(vii) Lux Level
(viii) Room Recovery Test
(ix) Room Temperature
(x) Air Velocity Test

a) The output report should analyze the performance of the cleanroom against specified equipment parameters. This is a pre-requisite for certification.

b) Vendors having prior experience in validating Clean Labs and are equipped with required tools needed for such validation can send their expression of interest (EOI).

c) The identified vendor will be asked to initiate the validation process immediately to complete the process within one week.

d) All details should be submitted with the best price and other terms & conditions.