

DEPARTMENT OF BIOTECHNOLOGY INDIAN INSTITUTE OF TECHNOLOGY – MADRAS, CHENNAI – 600 036

Telephone: 044-2257-4107, 4101: Fax No: 2257-4102

D.KARUNAGARAN

Professor and Head Date: 25rd Jan 2016

Ref: BT/GUHA/2015/031/SPL Date: 25rd Jan 2016 Due date: 01th Feb 2016

1. Quotations are invited in duplicate for the various items shown below/overleaf/ enclosed list.

- 2. The quotations duly sealed and super scribed on the envelope with the reference No. and due date, should be addressed to the undersigned so as to reach him on or before the due date stipulated above
- 3. The quotations should be valid for sixty days from the due date and the period of delivery required should also be clearly indicated.
- 4. If the item is under DGS & D Rate Contract, Rate Contract Number and the price must be mentioned. It may also please be indicated whether the supply can be made direct to us at the rate contract price. If so, please send copy of the R.C. (Please note that we are not Direct Demanding Officers).
- 5. Relevant literature pertaining to the items quoted with full specifications (and drawing, if any) should be sent along with the Quotations, wherever applicable. Samples if called for should be submitted free of charges and collected back at the supplier's expenses.
- 6. **Local Firms**: Quotations should be for free delivery to this Institute. If quotations are for Ex-Go down, delivery charges should be indicated separately.
- 7. **Firms outside Chennai**: Quotations should be for F.O.R Chennai. If F.O.R. Consigner stationer freight charges by passenger train/lorry transport must be indicated. If Ex-Go down, Packing, forwarding and freight charges must be indicated.

- 8. The rates of Sales/General Taxes and the percentage of such other taxes legally livable and intended to be claimed should be distinctly shown along with the price quoted. Where this is not done, no claim for Sales/General Taxes will be admitted at any stage and on any ground whatsoever. The taxes livable should take into consideration that we are entitled to have concessional sales tax applicable to non government educational institutions run with no profit motive for which a Concession. Sales tax certificates will be issued at the time of final settlement of the bill.
- 9. Goods should be supplied carriage paid and insured.
- 10. Goods shall not be supplied without an official supply order.
- 11. **Payment**: Every attempt will be made to make payment within 30 days from the date of receipt of bill/acceptance of goods, whichever is later.

DESIGN AND SUPERVISION FOR PROPOSED INTERIORS OF BIO-INCUBATOR AT IITM RESEARCH PARK PHASE 2, TARAMANI, CHENNAI

Broad Scope of work

IITM Bio Incubator intends to establish an Incubation Laboratory at the 5th floor of the IITM Research Park Phase 2 with a total area of 5989 sq. ft. (floor plan attached). The lab constitutes Incubations spaces, Lab spaces, Wet labs, Clean rooms, cold rooms and office space. The broad scope of work is

- a) Preparation of Layout plans, Detailed Drawings, Working drawings, Estimates, Bill of Quantities, Tender documents for all the items of the works
- b) Services planning including Electrical, Networking, HVAC, Clean rooms, Cold rooms, Plumbing and Fire fighting. These shall include designs, drawings, calculations, BOQ and tender documents etc.
- c) Supervision of the project on a regular basis to ensure coordination between the various agencies and clarifying their doubts if any.
- d) Check and certify bill submitted by contractors.

Special Design requirements

- 1. The interior has a mix of following facilities.
 - a. Incubation spaces
 - i. Separate cabins for 10 incubatees of about 150 sq. ft. each. Each cabin will have a lab bench to work on and one sink.
 - ii. Hot- desking area
 - b. Laboratory spaces
 - i. Labs with equipment of about 1200 sq. ft. in total with spaces for the following:
 - a. Synthetic Biology lab ~ 500 sq. ft. With fume hood and sink
 - c. Analytics and Imaging lab ~ 300 sq. ft.
 - d. Cell culture lab ~ 150 sq. ft. this needs to be a Class 10,000 Clean Room
 - f. Media Preparation and washing room should have a sink, exhaust, fume hood ~ 250 sq. ft.
 - c. Office area
 - d. Innovation lounge
 - e. Meeting room
 - f. Reception
- 2. A good exhaust system to take out the air/fumes from the entire facility.

Details to be furnished by the Architect along with the application

Architects should submit the application in the prescribed form and enclose the following

- 1. A photo copy of the certificated issued by Council of Architecture of the Proprietor or Authorised signatory duly self attested.
- 2. Organisational structure of the Architect in Form A
- 3. A list of projects whose completed cost is more than Rs 100 lakhs, completed in the last three years in Form B
- 4. A list of projects in the last 5 years, where Clean rooms and Cold rooms were designed and installed. Form C
- 5. A list of projects in the last 3 years where incubations facilities were designed and created. Form D
- 6. Annual turnover in terms of consultancy fees in the last three years in Form E
- 7. List down projects in the last 5 years with design and installation of DC powered AHU's or electrical installations. Form F

If the Architect does not have in-house facility for any of the disciplines of consultancy like Electrical, HVAC (including Clean and Cold rooms), Fire Fighting,

Plumbing, IBMS etc, names and details of at least 2 consultants should be submitted in the prescribed application along with the above forms (Forms - A to Form - E).

A brief scope of work of the Architect is given below

- 1. Prepare preliminary concept drawings comments and approval.
- 2. On approval, prepare final working drawings for execution at the site. These shall include.
 - a. Final layout plan.
 - b. Details of partitions, storages and other fixed furniture including Cold rooms and Clean rooms.
 - c. Details of loose furniture.
 - d. Coordinated false ceiling plan, if any, showing related fixtures and fittings.
 - e. Flooring patterns and layouts if any.
 - f. Electrical layouts showing locations of switches for power, ups and lighting.
 - g. Miscellaneous details for all related carpentry items.
 - h. Civil details for pantry etc. if required.
- 3. Prepare electrical designs and details which shall include
 - a. Schematic distribution diagrams for the entire electrical system based on base building specs.
 - b. Layout and details for the UPS distribution system and purchase of UPS.
 - c. Layout and details of lighting distribution system including emergency lighting and purchase of light fittings.
 - d. Layout and details of raw power distribution system.
 - e. Layout and details for conduits for Data and voice cabling in consultation with IT team and the network vendor.
 - f. Layout and details for Access control system.
 - g. Layout and details for Fire alarm systems.
 - h. Layout and details for IBMS, if any.
- 4. Prepare design and details for the Air-conditioning system based on AHU capacity being provided by IITMRP.
- 5. Prepare design and details for the HVAC systems for the Clean rooms and Cold room based on our requirements.
- 6. Prepare plumbing details and drawings for water supply, drainage as required for kitchen, Clean rooms, wet lab and cold room.
- 7. Prepare estimates and bill of quantities for inviting quotations for various items of works from agencies /contractors as required.
- 8. Analyse the quotations, assist and advise on appointment of the contractors & agencies.
- 9. Undertake periodic site supervision to ensure quality of works both in terms of materials used and workmanship, smooth progress of works and for site coordination between various agencies.
- 10. Undertake bill checking and certification of the works carried out.

Other criteria for technical evaluation:

- 1. Valid registration with the Council of Architecture for the Proprietor/ Principal Architect/ Authorised Signatory.
- 2. Experience of having done projects in the IITM Research Park Ecosystem.
- 3. Experience in having done Lab projects especially wet labs relating to biotechnology

- 4. Experience in having designed and executed Clean rooms and Cold rooms.
- 5. Experience in having done incubation projects as the emphasis is to create a dynamic and vibrant research environment.
- 6. Experience in having worked with DC powered electrical systems and installed DC powered AHU's/ HVAC systems.

Please submit preliminary drawings following two-bid system (technical and commercial) to the following latest by February 1st, 2015 by 3 pm.

Head of Department, Department of Biotechnology, IIT Madras, Chennai 600036

ORGANISATIONAL STRUCTURE OF THE APPLICANT

- 1) Name of the applicant
- 2) Address of the applicant
- 3) Telephone no / Fax no / e-mail id
- 4) Legal status of the applicant -

Individual / Propriety firm / A firm in partnership

5) Total number of employees in the organization

SI No	Detail of Planning work	Total Number of persons in the	Total proposed to be deployed for	
		organization	this work	
1	Architectural			
2	Electrical works planning and design			
3	HVAC planning and design including Clean and cold			
	rooms			
4	Plumbing planning and design			
5	Fire fighting planning and design			
6	Fire detection and IBMS planning and design			

In cases where the planning works are proposed to be outsourced, the details pertaining to those consultants may be indicated.

Signature of the Applicant.

FORM - B

WORKS COSTING MORE THAT Rs 100 LAKHS COMPLETED IN THE LAST THREE YEARS ENDING MARCH 2015

SI	Name of the	Owner or	Completed cost	Date of	Date of	Name, address and contact details
No	Project	Authority in	of the work	Commencement	Completion of	(Telephone, email) of the person to
		charge	Rs - LAKHS	of planning work	planning works	whom reference can be made

Dated Signature of the Applicant

LIST OF PROJECT IN LAST 5 YEARS ENDING MARCH 2015 WHERE CLEAN ROOMS AND COLD ROOMS HAVE BEEN DESIGNED AND EXECUTED

(Please specify clean or cold room clearly)

- 1. Name of the Project(s) and its location
- 2. Details of Clean room: (Class, brief specs vendors involved)
- 3. Details of Cold Room: (Size, Volume, Temp, Brief specs, Supplier, vendors involved)

Date & Signature of the Applicant

LIST OF WORKS IN WHICH INCUBATION FACILITIES WERE DESIGNED AND CREATED

SI	Name of the	Owner or	Estimated cost	Date of	Stipulated Date	Name, address and contact details
no	Project	Authority in	of the work	Commencement	of Completion of	(Telephone, email) of the person to
		charge	Rs - Lakhs	of planning work	planning work	whom reference can be made

Dated Signature of the Applicant

FINANCIAL INFORMATION

Gross Annual Business Turnover (in terms of Consultancy fees received only) for the past 3 years ending March 2015

Year	Consultancy Fees (Rs – Lakhs)
2014-2015	
2013-2014	
2012-2013	

- 1. Permanent Account No (PAN):-
- 2. Copies of Income tax returns for the above Years

Signature of the Chartered Account with seal

Signature of the Applicant with seal

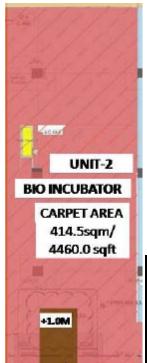
FORM - F

LIST OF WORKS IN WHICH DC ELECTRICAL SYSTEMS OF HVAC SYSTEMS HAVE BEEN USED

SI	Name of the	Owner or	Estimated cost	Date of	Stipulated Date	Name, address and contact details
no	Project	Authority in	of the work	Commencement	of Completion of	(Telephone, email) of the person to
		charge	Rs - Lakhs	of planning work	planning work	whom reference can be made

Dated Signature of the Applicant

BI Phase 2 Architect Tender



2	UNIT 2 - BIO INCUBATOR		SQM		SGRI LIFTS TERMINATED IN
					4TH FLR. HOWEVER FOR
	OFFICE AREA 1 (LESS SHAFTS)		397.20		TECH. REASONS, SPACE
	ADD ELEVATED SPACE (@ +1.0M) ABOVE SGRI PASS ELE		17.30		ABOVE ELEV IN 5TH FLR IS
	GRAND TOTAL OF CARPET AREA		414.50		RAISED BY 1.0M. HENCE
	LOADING FOR BCA+ PCA AS PER AHC CALCULATIONS	32.25%	133.68	1438.36	CLEAR HT. AND HENCE
	TOTAL LEASABLE AREA FOR BIO INCUBATOR		548.18	5898.38	USABILITY IS REDUCED

Ref: BT/GUHA/2015/031/SPL

Dt. 025.01.16 Due Dt.01.02.16

HEAD OF THE DEPARTMENT