भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान मोहाली
(शिक्षा मंत्रालय का एक स्वायत संस्थान, भारत सरकार के अधीन)
सैक्टर–81, नॉलेजसिटी, पो. ओ. मनौली, एस. ए. एस. नगर, मोहाली, पंजाब-140306

INDIAN INSTITUTE OF SCIENCE EDUCATION AND RESEARCH MOHALI
(Established By Ministry of Education, Govt. of India)
Sector-81,Knowledge city, PO-Manauli, SAS Nagar Mohali-140306, Punjab

Notice Inviting Bid for GeM

NAME OF WORK: S/I/T/C OF 150 KLD MODULAR STP AT IISER MOHALI.

भारतीय विज्ञान शिक्षा एवं अनुसंधान संस्थान मोहाली
(शिक्षा मंत्रालय का एक स्वायत संस्थान, भारत सरकार के अधीन)
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GeM Ref. No.: IISER/EE-EO/23-24/GeM/16 **Date:** 14.10.2023

Notice Inviting Bid for GeM

The Executive Engineer on behalf of the Director, IISER Mohali, invites online bids under two bid system i.e. technical bid and financial bid through GeM portal from eligible contractor / agency for the work mentioned below:

Name of work:-		S/I/T/C of 150 KLD Modular STP at IISER Mohali.
GeM Ref. No	:	IISER/EE-EO/23-24/GeM/16
Estimated cost	:	INR 54,98,800/- (Inclusive GST)
Stipulated period of work	:	Ten (10) weeks i.e. 70 days

Online tenders are invited on behalf of the Director, IISER Mohali in **TWO BID SYSTEM** for above cited subject in IISER Mohali at GeM portal. Tender documents may please be downloaded from the GeM Portal**.** Tender fee in shape of DD/Banker Cheque of Rs 590/- (Non-refundable) and EMD of Rs.1,10,000/- should be submitted by DD /Banker Cheque/FDR/ Bank Guarantee in favour of the Registrar, IISER Mohali payable at Mohali or through Online mode in Institute Account (Canara Bank Saving Account Number: 4790101001912 and IFSC Code: CNRB0004790). However, scanned copy of the both tender fee and EMD should be upload on website along with technical bid part. The hard copy of the same in originalto be send to the address mentioned below duly superscribing the supply/work name and reference/ GeM Bid ID on the envelope and same must reach before opening the bid and if not received within due date the bid will be rejected summarily. **Micro & MSME/NSIC and Firms registered and the firms registered with concerned Ministries/ Departments, the bidders are exempted from payment of Tender Fee/EMD as per GOI notifications/GFR (2017) and Ministry of Finance OM No. F.9/4/2020-PPD dated 12 November 2020.**

The Original EMD and Tender Fee should be sent to:

Executive Engineer, IISER Mohall,

Sector-81, knowledge City, PO- Manauli,

SAS Nagar Mohali-140306, Punjab

In case of online payment of Tender Fee/EMD, transaction details needs to be uploaded. Non-receipt of original EMD and tender fee will lead to rejection of tender.

SUBMISSION OF TENDER:

Tender shall be submitted by the Bidders in two parts:

(i) Technical Bid. – Cover I (ii) Financial Bid. - Cover II

The two bid system will be followed for this tender. In this system the bidder must submit bid on line at **GeM Portal** his offer in two covers. "**Cover No. l- Technical Bid along with requisite fee details and all forms under seal and signature of Bidder" mentioned below and "Cover No.II - Financial Bid"** respectively.

Cover –II, i.e. Price Bid:

The **Cove I** (Technical Bid) shall consist of following:

i) **Earnest Money** -The bidder shall furnish as part of its bid, an EMD of Rs. 1,10,000/- (Rupees one lakh and ten thousand only). The EMD is to be submitted through Demand Draft of any Scheduled / Nationalized Bank (drawn in favour of "Registrar, IISER, Mohali")

ii) **Cost of Tender Form** - The Cost of Tender Form Rs.590/- (non refundable) is to be submitted through Demand Draft of any Scheduled *1* Nationalized Bank (drawn in favour of "Registrar, IISER, Mohali") payable at Mohali.

Note - The original payment instrument like Demand Draft of any Nationalized Bank against Earnest Money and Cost of Tender Form sent to the address- **Executive Engineer, IISER Mohall, Sector-81, knowledge City, PO- Manauli, SAS Nagar Mohali-140306, Punjab** by post/speed post/courier/by hand before bid opening date & time.

PACKAGED TYPE SEWAGE TREATMENT PLANT OF CAPACITY 150 KLD AT IISER MOHALI, SECTOR 81-SAS NAGAR, PUNJAB.

1.1 The Plants are for above ground installation having specifications and quantity as per the Annexure-A attached.

1.2 The Plants should be of Mild steel Construction of adequate strength, with FRP lining inside and Epoxy paint to approved colour outside.

1.3 The Plants should be capable of continuous operation or batch processing type operation and also suitable for operating on smaller loads and for shutting down and resuming operation after some time, if required.

2.1 The process should preferably be bacteria (or other organism) based for minimizing sludge production. The process should have the approval of Central Pollution Control Authorities.

2.2 The treated effluent should be suitable for re-cycling for use in flush Tanks and also for landscaping.

2.3 The Treated effluent should be free of colour and odour and should conform to the parameters laid down by the Central Pollution Control Authorities for re-cycling for the above uses.

2.4 The intending supplier should have similar type of plants installed and commissioned such type of plants of approximately capacity as 6.2 below or more and successfully operated the same (certificate of completion should be attached).

3.0 The Institute will provide the following:

3.1 Equalization Tank of recommended capacity.

3.2 Treated effluent storage tank.

3.3 Foundation platform for placing the plant, to suit the loading required.

3.4 Power supply as per requirement at a pillar box near the plant.

4.0 Other than the above all equipment electrical, mechanical, screens, filters and ladders and anything else required to make the plant complete and workable should all be part of the supply in the scope of the supplier.

5.0 Notwithstanding, the approvals of the Institute, the safety and serviceability of the plant is the sole responsibility of the suppliers.

6.0 The supplier should unconditionally indemnify the Institute from any legal proceeding by any persons or Body, National or International arising out of any patented process that may be employed in manufacture/supply by this equipment.

6.1 The supplier will get the test report with regard to the characteristics of the treated water approved/passed from the State Pollution Control Board Laboraty and have to comply with other statutory norms, if required or deemed necessary for the smooth installation/operation of thePlant.

6.2 The supplier should have supplied and installed at least one package type sewage treatment plant of capacity 120 KLD in Central or State Govt/Central or State PSU/Autonomous body.

7.0 After installation and commissioning the supplier should undertake to maintain (including spares and consumables, if any) the plant for a period of 1 year, under warranty. During this one-year Institute personnel should be trained by the supplier.

Eligibility Criteria:

1. Should contain the technical particulars of the plant like process, flow diagram physical sizes and weight of the plant, list of electrical and mechanical components, and any other details the supplier would like to include, like time required for installationand commissioning detail of similar plants installed by the supplier should be given along with the proof of having "Supply and installed one packaged/modular type of plant (Order with Completion Certificate) of minimum capacity of 120 KLD" as explained in para 6.2

2. Average annual gross financial turnover during last three Financial Years duly certified by Charted Accountant should be 50% of the estimated cost.

3. Should contain the details of the financial offer (including all applicable taxes and levies). Supply and Erection commissioning to be quoted separately.

4. Price quoted should include Transport up to the erection site in the Institute campus including unloading, and also transit insurance along with the cost of the material as indicated in Annexure-A.

5. The bidder shall furnish as part of its bid, an EMD of Rs.1,10,000/-(Rupees One Lakh Ten Thousand only). The EMD is to be submitted through Demand Draft of any Scheduled / Nationalized Bank (drawn in favour of "Registrar, IISER, Mohali") payable at Mohali.

6. To comply with the provision 6.1 (Indicate in written submission).

7. To provide undertaking that disinfection shall be carried out by UV only. (Chlorination is not permitted to be used in IISER).

8. To provide undertaking that the treated water shall comply with NGT norms and BOD at outlet should be less than 10 ppm.

9 Bidder should upload the copy of scanned copy of valid GST and PAN number.

10 Bidder should upload the scanned copy of one year warranty on bidder letter head.

11 Bidder should upload the copy of DNIT (with signature & stamp on every pages).

Method of selection :

1. The technical bids would be scrutinized and evaluated by a committee constituted by Director.
2. Based on the above the vendors will be finally selected for the purpose of opening of financial bids.
3. The Agency/contractor who is L-1 would be awarded the said work who should sign an agreement with the Institute and undertake the assignment immediately.
4. The Director IISER Mohali reserves the right to reject any or all the offers based on Technical Evaluation Report.
5. If the Financial offers of the successful applicant are considered by the Institute committee to be unreasonably high the Institute reserves the right to negotiate for the price to be reduced. If there is no agreement reached, the Institute reserves the right to cancel this

invitation and decide further course of action by a fresh invitation or otherwise.

General Conditions:

1. Time for supply at the Institute's campus:10 weeks from the date of order.
2. Performance guarantee: 5% of the quoted price to be furnished within 10 days of the placing of the order and must be valid for the time required for completing the work plus 60 days.
3. Security @ 5% will be deducted and will be released after completion of the defect liability period of one year from the date of handing over of the plant. Other taxes as applicable will be deducted.

Dispute:

1. Any dispute arising out of this work would be referred to the sole Arbitrator to be appointed by the Director of the Institute.
2. If the dispute remains unresolved even after that, legal remedy may be sought, subject to the jurisdiction of the Local court Mohali

Annexure-A

LIST OF MACHANICAL & ELECTRICAL WORKS FOR 150 KLD PACKAGED STP

1.	**BAR SCREEN** Application – Screening of Floating matter Size of spacing – 10-20 mm, MOC- SS-304	1 No
2.	**SEWAGE TRANSFER PUMP** Capacity- 7.5 m^3/hr, MOC – SS, Make –Kirloskar/Grundfus/ KSB.	2 Nos. (1W+1S)
Secondary Treatment		
3.	**MBBR REACTOR I & II** Capacity- 7.5 m^3/hr MS Thickness – 6 mm FRP: 3 mm MOC – MSFRP, Make: OEM	2 No.
4.	**MBBR MEDIA FOR MBBR REACTOR I & II** Sp Surface Area-500 $m_2/m3$, MOC- PVC UV Stabilized, Make: Small Box/Cooldeck/MM Aqua	1 Lot
5.	**SECONDARY TUBE SETTLER TANK** Capacity- 7.5 m^3/hr Thickness – 6 mm FRP: 3 mm MOC – MSFRP, Make: OEM	1 No
6.	**SECONDARY TUBE SETTLER MEDIA** MOC- PVC UV Stabilized, Make: Cooldeck/MM Aqua	1 Lot
7.	**FINE MEMBRANE AIR DIFFUSERS FOR MBBR REACTOR** MOC –Silicon, Make: PP Aqautech/Rehaeu	1 Lot
8.	**AIR PURGING GRID FOR MBBR REACTOR** Accessories- Complete with piping & valves MOC –MSEP/UPVC, Make-OEM	1 Lot
9.	**AIR BLOWER WITH ACCESSORIES** Capacity- As per design, MOC – CI, Pressure - 0.45 kg/cm2, Blower Make- Everest/ Angersol Motor Make- Siemens/Crompton& Greaves/ABB Accessories- MS base plate, safety valves, suction filter, silencer, NRV, PRV, anti vibration pad, V belt, Belt guard, Drive and driven pulleys	2 nos (1W+ 1S)
10	**SLUDGE RECIRCULATION PUMP** Application: - To recirculation of sludge Type- Centrifugal, horizontal, Self-priming, Capacity- 5 m3/hr, MOC – CI, Make – Kirloskar/Wilo/Lubi	1 No
TERTIARY TREATMENT		
11.	**FILTER FEED TANK** Capacity- 5000 L MOC – HDPE, Make: Sintex/Diplast.	1 No
12.	**FILTER FEED PUMP** Type- Centrifugal, Monobloc, horizontal Capacity- 7.5 m^3/hr, Head- 25 m, MOC – CI, Make – Kirloskar/Wilo/Lubi.	2 Nos (1W+1S)

13.	**PRESSURE SAND FILTER** Application: - To remove suspended impurities from Water Capacity- 7.5 m^3/hr, Media- under bed with graded silica sand MOC – MSEP/FRP, Make – Pentair	1 no.
14.	**ACTIVATED CARBON FILTER** Application: - To remove suspended impurities and color from Water Capacity- 7.5 m^3/hr, Media- under bed with graded silica sand and activated carbon, MOC – MSEP/FRP, Make Pentair	1 No
15.	**UV SYSTEM** No Of Bulb: 5, Flow Rate: 8 M3/hr MOC: SS-304, Make-Philips/Alfa/Inflow/Ozone air	1 Lot
16.	**INTERCONNECTING PIPING, FITTING & VALVES** MOC: MS / GI / UPVC, Make: Tata / Zenith/ Jindal	1 Lot
17.	**INSTRUMENTATION** Pressure Gauge- at air blower and pump Level Switch- inside tanks Electromagnetic Flow meter: Forbes/Marshall/ABB	1 Lot
18.	**ELECTRICAL CONTROL PANEL** Control panel will be fabricated in 14 SWG/ 16 SWG CRCA sheet with non-compartment, dust & vermin proof, machine mounted Make of Switchgears - Siemens / L & T/ABB	1 Lot
	CABLING Electrical cabling shall be provided from control panel to various units of sewage treatment plant Size of cable- As per the capacity of the motors / drives MOC: Copper / Al unarmoured, Make: Polycab / Havells	
19	**ULTRA FILTRATION SYSTEM** Capacity: 7.5 m^3/hr, Supply, Installing, testing and commissioning of approved make ultra filtration membranes with 2 nos (1W+1S) UF feed pumps, 2 No back wash/Flat Pump, required CIP dosing's, pipes fittings, air compressors, and valves with PLC based control panel with Skid	1 Lot
20	**SLUDGE BAG FILTER** MOC; SS 304, Make: Techno Fungi	1 Lot

Annexure-B

BOQ

Sr. No.	ITEM	Description of Item	Qty	Unit
1	ITEM1	SITC of 150KLD modular/package type STP **(AS per Annexure-A)**	1	Nos