

	<b>INDIAN INSTITUTE OF TECHNOLOGY MADRAS</b> <b>Chennai 600 036</b>  Telephone: [044] 2257 9798/9723 E-mail: tender@imail.iitm.ac.in	
---	--	---

The Senior Manager (Project Purchase)

**Ref:CIE/INDU/041/2019**  
Date: 30.09.2019

**Open Tender No:CIE/INDU/041/2019**

**Due Date:21<sup>st</sup>October 2019, 3 PM**

**Pre-Bid Meeting: - 9<sup>th</sup> October 2019, 4.00 PM, at Department of Civil Engineering, IIT Madras.**

**Technical Bid opening meeting on21<sup>st</sup> October2019, 4:00 PM at Department ofCivil Engineering, IIT-Madras.**

Dear Sir/Madam,

On behalf of the Indian Institute of Technology Madras, offers are invited for the supply of“**Inductively Coupled Plasma-Optical Emission Spectrometer (ICP-OES)**”conforming to the specifications given in Annexure I.

**Instructions to the Bidder**

- I. **Preparation of Bids:** - The tenders should be submitted under the two-bid system (i.e.) Technicalbid and Financial bid.
- II. **Submission of the tender:** - The tender shall be sent to the addresses mentioned below, either by post or by courier so as to reach our office before the due date and time specified in our schedule. The offer/bid can also be dropped in the tender box on or before the due date andtime specified in the schedule.

The tender box is kept in the office of the:

**The Senior Manager,  
Project Purchase,  
IC & SR Building 2<sup>nd</sup> floor,  
I.I.T. Madras,  
Chennai – 600 036.**

- III. **Opening of the tender:** - The offer/bids will be opened by a committee duly constituted forthis purpose. The technical bids will be opened first and will be examined by a technicalcommittee which will decide the suitability of the bids as per our specifications andrequirements. All bidders will be invited for opening of the technical bids. Withrespect toopeningthe financial bid, only technically qualified bidders will be called.

- IV. Prices:** - The price should be quoted in net per unit (after the breakup) and must include all packing and delivery charges to the **Department of Civil Engineering**. The offer/bid should be exclusive of taxes and duties. The percentage of tax & duties should be clearly indicated separately. Kindly note that IIT Madras is eligible for concessional GST and relevant certificate will be issued.

In the case of import supply, the price should be quoted without custom duty. IIT Madras is exempted from levy of IGST on Imports and eligible for concessional custom duty (not exceeding 5%) and the price should be quoted on EX-WORKS and CIP basis indicating the mode of shipment.

- V. Agency Commission:** - Agency commission, if any, will be paid to the Indian agents in rupees after receipt of the equipment and its satisfactory installation. Agency Commission will not be paid in foreign currency under any circumstances. The details should be explicitly shown in the tender document even in the case of 'Nil' commission. The tenderer should indicate the percentage of agency commission to be paid to the Indian agent. The foreign Principal should indicate the percentage of the payment and it should be included in the basic price quoted originally (if any)..
- VI. Terms of Delivery:** - The item should be supplied to the **Department of Civil Engineering, IIT Madras** per the Purchase Order. In the case of import supply, the item should be delivered at the cost of the supplier to our Institution. The Installation/Commissioning should be completed as specified in our important conditions.
- VII. Technical Bid Opening:** The technical bid will be on 21<sup>st</sup> October 2019, 4:00 PM at the **Department of Civil Engineering, IIT-Madras**. The financial bids of those tenders who are technically qualified will be opened at a later date under intimation to them.
- VIII. IIT Madras** reserves the full right to accept/reject any tender at any stage without assigning any reason.

Yours sincerely,

**The Senior Manager (Project Purchase)**  
**IC&SR Building, I.I.T. Madras,**  
**Chennai – 600 036.**

## SCHEDULE

### Important Conditions of the tender

1. The due date for the submission of the tender is **21.10.2019, 3 PM.**

The offers/bids should be submitted in two bids systems (i.e.) Technical bid and financial bid. The Technical bid should consist of all technical details/specifications only. The Financial bid should indicate item-wise price for each item and it should contain all Commercial Terms and Conditions including Taxes, transportation, packing & forwarding, installation, guarantee, payment terms, pricing terms, etc. The Technical bid and financial bid should be put in separate covers and sealed. Both the sealed covers should be put in a bigger cover. The Open Tender for supply of **“Inductively Coupled Plasma-Optical Emission Spectrometer (ICP-OES)”** should be written on the left side of the Outer bigger cover and sealed.

2. **EMD: - The EMD (Should be in INR) in the form of Account Payee Demand Draft/Fixed Deposit Receipt/ Banker’s Cheque or Bank Guarantee for 2% of the quoted value of the item; drawn in favor of The Registrar-IIT Madras, payable at Chennai should be enclosed in the cover containing financial bid.** Any offer not accompanied with the EMD shall be rejected summarily as non-responsive.

The EMD of the unsuccessful bidders shall be returned within 30 days of the end of the bid validity period. The same shall be forfeited if the tenderers withdraw their offer after the opening during the bid validity period. The Institute shall not be liable for payment of any interest on EMD. EMD is exempted for Micro and Small Enterprises (MSE) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME).

***When a foreign vendor does not have a local agent in India, he can submit demand draft equal to 2% or wire transfer the amount to our account as detailed in the attachment (Annexure-II) and enclose the proof with the financial bid.***

3. **Performance Security:-** The successful bidder should submit Performance Security for an amount of 5% of the value of the contract/supply. The Performance Security may be furnished in the form of an Account Payee DD, FD Receipt from the commercial bank, Bank Guarantee from any nationalized bank in India. **The performance security should be furnished within 21 days from the delivery of the purchase order.**

**Performance Security in the form of Bank Guarantee:-** In case the successful bidder wishes to submit Performance Security in the form of Bank Guarantee, the Bank Guarantee should be routed through the Beneficiary Bank to the end-user bank. Otherwise, the Indian Agent of the foreign vendor has to submit a Bank Guarantee from a Nationalized Bank of India.

The Bank Guarantee should remain valid for a period of sixty days beyond the date of completion of all contractual obligations of the supplier including the warranty obligations.

4. **Indian agent:** If an Indian agent is involved, the following documents must be enclosed:  
Foreign principal’s proforma invoice indicating the commission payable to the Indian Agent and nature of after-sales service to be rendered by the Indian Agent.
  - ✓ Copy of the agency agreement with the foreign principal and the precise relationship between them and their mutual interest in the business.

5. The offer/bids should be sent only for a machine that is available in the market and supplied to a number of customers. A list of customers in India and abroad with details must accompany the quotations. Quotations for a prototype machine will not be accepted.
6. Original catalog (not any photocopy) of the quoted model duly signed by the principals must accompany the quotation in the Technical bid.
7. Compliance or Confirmation report with reference to the specifications and other terms & conditions should also be obtained from the principal.
8. **Validity:** Validity of Quotation not less than 90 days from the due date of tender.
9. **Delivery Schedule:** - The tenderer should indicate clearly the time required for delivery of the item(subjected to the executive committee-IITMadras approval). In case there is any deviation in the delivery schedule, the liquidated damages clause will be enforced or penalty for the delayed supply period will be levied.  
If there is a delay, the penalty will be @1% per week of delay subject to a max of 10% of the value of purchase order and if the delay is more than accepted time frame by IITM, the PO would be canceled and liquidated damages will be enforced.
10. **Risk Purchase Clause:-** In the event of failure of supply of the item/equipment within the stipulated delivery schedule, the purchaser has all the right to purchase the item/equipment from other sources on the total risk of the supplier under risk purchase clause.
11. **Payment:-**
  - (i) No Advance payment will be made for Indigenous purchase. However, 90% Payment against Delivery and 10% after installation are agreed to wherever the installation is involved. In case of import supplies the payment will be made only through 100% Letter of Credit i.e. (90% payment will be released against shipping documents and 10% after successful installation wherever the installation is being done).
  - (ii) **Advance Payment:**No advance payment is generally admissible. In case of a specific percentage of advance payment is required, the Foreign Vendor has to submit a Bank Guarantee equal to the amount of advance payment and it should be routed through the Beneficiary Bank to the end-user Bank. Otherwise, the Indian Agent of the foreign vendor has to submit a Bank Guarantee through a Nationalized Bank of India.
12. **On-site Installation:** - The equipment or machinery has to be installed or commissioned by the successful bidder within number of days (as prescribed by PI) from the date of receipt of the item at the site of IIT Madras
13. **Warranty/Guarantee:** - The offer should clearly specify the warranty or guarantee period for the machinery/equipment. Any extended warranty offered for the same has to be mentioned separately (For more details please refer our Technical Specifications).
14. **Late offer:** - The offers received after the due date and time will not be considered. The Institute shall not be responsible for the late receipt of Tender on account of Postal, Courier or any other delay.
15. **Acceptance and Rejection:** - I.I.T. Madras has the right to accept the whole or any part of the Tender or portion of the quantity offered or reject it in full without assigning any reason.
16. **Do not quote the optional items or additional items unless otherwise mentioned in the Tender documents / Specifications.**

**17. Disputes and Jurisdiction:**

**Settlement of Disputes:** Any dispute, controversy or claim arising out of or in connection with this PO including any question regarding its existence, validity, breach or termination, shall in the first instance be attempted to be resolved amicably by both the Parties. If attempts for such amicable resolution fails or no decision is reached within 30 days whichever is earlier, then such disputes shall be settled by arbitration in accordance with the Arbitration and Conciliation Act, 1996. Unless the Parties agree on a sole arbitrator, within 30 days from the receipt of a written request by one Party from the other Party to so agree, the arbitral panel shall comprise of three arbitrators. In that event, the supplier will nominate one arbitrator and the Project Coordinator of IITM shall nominate on the arbitrator. The Dean IC&SR will nominate the Presiding Arbitrator of the arbitral tribunal. The arbitration proceeding shall be carried out in English language. The cost of arbitration and fees of the arbitrator(s) shall be shared equally by the Parties. The seat of arbitration shall be at IC&SR IIT Madras, Chennai.

- a. **The Applicable Law:** This Purchase Order shall be construed, interpreted and governed by the Laws of India, Court at Chennai shall have exclusive jurisdiction subject to the arbitration clause.
- b. Any legal disputes arising out of any breach of a contract pertaining to this tender shall be settled in the court of competent jurisdiction located within the city of Chennai in Tamil Nadu.

18. All Amendments, time extension, clarifications, etc., will be uploaded on the website only and will not be published in newspapers. Bidders should regularly visit the above website to keep themselves updated. No extension in the bid due date/ time shall be considered on account of delay in receipt of any document by mail.

**Acknowledgment:** - It is hereby acknowledged that the tenderer has gone through all the conditions mentioned above and agrees to abide by them.

**SIGNATURE OF TENDERER  
ALONG WITH SEAL OF THE  
COMPANY WITH DATE**

## Technical Specification for Inductively Coupled Plasma-Optical Emission Spectrometer (ICP-OES)

### Technical specifications:

S.No	Specifications	Descriptions
1	ICP-OES system	Simultaneous and background correction reading ICP-OES system using solid-state detector technology. A system with bench-top design.
2	Optical & detection	<ul style="list-style-type: none"> <li>• The instrument must be simultaneous dual-view ICP-OES Spectrometer for multi-element analysis using solid-state detector technology.</li> <li>• The Instrument must have an Echelle-based polychromator that utilizes a single charge-coupled device (CCD) /charge induced detector (CID) or better</li> <li>• The optical resolution of the system should be better than 0.007 nm at 200 nm</li> <li>• The entire optical system must be enclosed in a purged and thermostated optical enclosure.</li> </ul>
3	Torch and plasma view	The ICP torch must be vertically/horizontally aligned, easily mountable by the user as well preferably a system with computer-controlled axial and radial viewing.
4	Wavelength range	The spectrophotometer must cover the spectral range from 170-780 nm or better
5	Sensitivity	Capable of multi-element analysis with preferably at least with 10 ppb sensitivity for each element.
6	Gas flow control	The instrument must be provided with three independent mass flow controllers for plasma, auxiliary and nebulizer gases. The interlock must be continuously monitored and plasma should shutdown automatically if any interruption during the analysis occur.
7	RF generator	The solid-state RF Generator must run at a frequency of 40/27 MHz or better. The RF Power should be variable and a maximum of 1500 W or better to handle complex matrix samples.
8	Plasma	The instrument must include a mechanism to eliminate the end of the plasma for minimizing self-absorption and physical interference.
9	Peristaltic pump	Minimum 4 channels peristaltic pumps with variable speed. The flow rate should be between 0.5 - 5.0 mL/min or better and will have the flexibility to add internal standard online.
10	Accessories	<ul style="list-style-type: none"> <li>• The instrument must include accessories for low detection limits (&lt; 10 ppb) of Mercury, Arsenic, and other hydride forming elements.</li> <li>• Air compressor and purification panels for Argon should be included.</li> </ul>

		<ul style="list-style-type: none"> <li>• The vendor should take care of the installation of ducting from the gas cylinders to the instrument.</li> <li>• The suitable fume exhaust system should be quoted.</li> <li>• Suitable chiller re-circulator with appropriate capacity should be provided along with the system.</li> </ul>
11	System software	Software-based on the windows operating system should be provided for full control of all instrument functions including plasma ignition, gas flows, viewing position, and monitoring of safety interlocks.
12	Performance	Analytical linearity over 5 orders of magnitude with the ability to use alternate wavelengths that are measured simultaneously.
13	Training	Training should be imparted to 3 persons for 2-3 working days on the operation and maintenance at IIT Madras.
14	Warranty	The warranty of the equipment should be at least 36 months from the date of installation along with all accessories and equipment. During the warranty period free upgrades of the soft wares, if any, should be provided.
15	Other accessories (Should be quoted separately)	<ul style="list-style-type: none"> <li>• Auto-sampler capable of handling up to 50 or more samples must be included.</li> <li>• Air compressor or equivalent is needed for the unit.</li> <li>• All required pumps.</li> <li>• Gas filters.</li> <li>• Gas cylinders and appropriate gas lines, connectors, valves and control systems for these.</li> <li>• Required exhaust system.</li> <li>• Single element standards for at least 20 elements must be provided.</li> <li>• Gas cylinders (4 Argon, 1 Nitrogen) with regulator and gas panels.</li> </ul>
16	Spare parts	2 additional torch kits; 1 additional nebulizer/spray chamber; 1 additional sample introduction kit for HF., extra tubing, consumables for generator and filter should be quoted separately.

## **General terms and conditions**

1. The supplier/vendor must be an original equipment manufacturer or the sole authorized agent/dealer/seller of the proprietary item.
2. The system should be delivered within 8 - 10 weeks from the opening of the letter of credit or issue of the purchase order, whichever is later.
3. Costs and related information should be given only in the financial bid.
4. The cost should include 36 months warranty of the overall system and CIP up to Chennai.
5. Prices quoted should be valid for at least 90 days.
6. Item-wise break up of cost should be provided for the different items (parts).
7. IIT Madras reserves the right to exclude some items from the purchase.
8. The payment conditions consist of 90% LC at the site and 10% after installation and satisfactory training.
9. The system should be installed and commissioned with no additional cost.
10. Training at IIT Madras should be provided with no additional cost.
11. Two copies of the system manual should be provided in CD form.
12. There must be a local service agent in India.

### **Technical Bid should comprise of the following:**

1. Detailed Technical brochure
2. Detailed technical write up explaining how each of the Technical Specification is complied with.
3. The list of at least three Institutions/R&D units/Industry where similar installations have been supplied in India/abroad including contact details (name of the person-in-charge, designation, email and landline/mobile number) is to be provided. Post-sales service feedback will be considered for technical evaluation.

### **After Sales, Service & Application Support:**

The vendor should have after-sales service support centre and application support centre for the offered System at India to provide prompt services, application support for various applications of our interest.

### **Reference:**

The quoted model should have at-least 3 installation in India/Abroad. Three performance certificates of the quoted model in reputed institutions in India should be enclosed duly signed and stamped by the concerned scientist. Recent Performance should be enclosed.





CENTRE FOR INDUSTRIAL CONSULTANCY & SPONSORED RESEARCH (IC&SR)  
INDIAN INSTITUTE OF TECHNOLOGY MADRAS  
CHENNAI 600 036



**ELECTRONIC CLEARING SERVICE (Credit Clearing)/ REAL TIME GROSS SETTLEMENT (RTGS) FACILITY FOR RECEIVING PAYMENTS**

**A. Details of Account Holder**

Name of the Institution	Indian Institute of Technology - Madras
Complete Contact Address	Industrial Consultancy and Sponsored Research Indian Institute of Technology-Madras, IIT- Madras Campus Post Office, Sardar Patel Road, Guindy, CHENNAI - 600 036
Telephone No./ Fax No.	Tel - 044-22578355 / Fax - 044-22570545
E- mail ID of the FO/AO/REG/DIR	dricsr@iitm.ac.in

**B. Bank Account Details:**

Institution Account Name (As per Bank Record)	The Registrar, Indian Institute of Technology - Madras
Account No.	2722101001741
Account Print Name	IIT F A/C , The Registrar IIT Madras
IFSC CODE	CNRB0002722
Bank Name (in full)	Canara Bank
Branch Name	IIT-Madras Branch
Complete Branch Address	Canara Bank, IIT-Madras Branch, IIT- Madras Campus Post Office, Sardar Patel Road, Guindy, CHENNAI - 600 036
MICR No.	600015085
Account Type	Savings Account

Certified that the Institute's account is in an RTGS enabled branch.  
I hereby declare that the particulars given above are correct and complete.

Date: \_\_\_\_\_ Signature of the Competent Authority  
of the Institution with seal.

*K. M. Srinivasan*  
**DEPUTY REGISTRAR (IC&SR) (IC)**  
**IC & SR, I.I.T. MADRAS**  
**CHENNAI - 600 036**

Certified that the particulars furnished above are correct as per our records.

Date: \_\_\_\_\_ Signature of the Authorized  
Bank Official with Bank Seal.



For CANARA BANK  
*B. Sekar*  
SENIOR MANAGER  
I.I.T. CHENNAI 600 036.

**B. SEKAR**  
Senior Manager  
SP No 39312



CENTRE FOR INDUSTRIAL CONSULTANCY & SPONSORED RESEARCH (IC&SR)  
 INDIAN INSTITUTE OF TECHNOLOGY MADRAS  
 CHENNAI 600 036



K VIJAYALAKSHMI  
 DEPUTY REGISTRAR (IC&SR) *KL*

Project Accounts  
 July 5, 2019

TO WHOMSOEVER IT MAY CONCERN

In connection with project, US currency may be transferred to CANARA BANK, IIT – MADRAS  
 Branch In connection with the following details.

**FOR TRANSFER OF CURRENCY US DOLLAR**

**Please Credit in USD**

(THROUGH)

JP MORGAN CHASE, NEW YORK  
 SWIFT CODE: CHASUS33

**For credit to**

USD ACCOUNT No: 001 – 1395969, of CANARA BANK INTERNATIONAL DIVISION MUMBAI

**For Further Credit to**

ACCOUNT NO: 2722101001741 of IIT Chennai – Swift Code: CNRBINBBIT OF THE  
 REGISTRAR, IIT, MADRAS

*K Vijay*  
 DEPUTY REGISTRAR(IC & SR) i/c

This is to certify that particulars furnished are correct.

*for CANARA BANK*  
*[Signature]*  
 Senior Manager  
 CHENNAI-600 036.  
 Canara Bank – IIT Madras branch

B. SEKAR  
 Senior Manager  
 SP No. 39312



DEPUTY REGISTRAR (IC&SR) (i/c)  
 IC & SR, I.I.T. MADRAS  
 CHENNAI - 600 036