

**E-Tender Document**

**UNIVERSITY OF DELHI**

**Department of Zoology**



**Water Quality Analyzer**

**E-TENDER DOCUMENT**

**Ref. No. - DU/ZOOL/RC/WTQ3/2021**

**Prof. Rina Chakrabarti**

University of Delhi, Delhi-110007

Delhi-110007

Phone: 011-27666496

Email: [aquaresearchlab@yahoo.co.in](mailto:aquaresearchlab@yahoo.co.in)

## **E-PROCUREMENT TENDER NOTICE**

Prof. Rina Chakrabarti, Department of Zoology, University of Delhi invites tenders under Two Bids System (Technical and Financial) from reputed & eligible agencies through e-procurement of **Water Quality Analyzer** from **DST project** in the Aqua Research Lab, Department of Zoology, University of Delhi, North Campus, Delhi-110 007.

<b>S. No.</b>	<b>Item Details</b>	<b>Date</b>
<b>1.</b>	Bid Document Download Start Date	<b>15/11/2021</b>
<b>2.</b>	Bid Submission Start Date	<b>15/11/2021</b>
<b>3.</b>	Bid Submission End Date	<b>06/12/2021</b>
<b>4.</b>	Technical Bid Opening Date	<b>07/12/2021</b>

**Notes:**

- (i) All details regarding the subject tender are available on our websites [www.du.ac.in](http://www.du.ac.in) and <https://eprocure.gov.in/eprocure/app>. Bidders are therefore, requested to visit our websites regularly to keep themselves updated.
- (ii) Manual bids shall not be accepted.
- (iii) For submission of E-Bids, bidders are required to get themselves registered with <http://eprocure.gov.in/eprocure/app>.
- (iv) Tender document's cost nil, before the end date and time of bid submission. Failing which offer will be liable for rejection. Bidder, however have to attach scanned copies of tender cost along with their e-tender.
- (v) Clarifications/ queries, if any, can be addressed to Prof. Rina Chakrabarti, Department of Zoology, University of Delhi, Delhi-110 007. Contact no. 011-27666496 and email: [aquaresearchlab@yahoo.co.in](mailto:aquaresearchlab@yahoo.co.in)
- (vi) **Prof. Rina Chakrabarti reserves the right to accept or reject or cancel any tender or relax any part of the tender offer, without assigning any reason.**
- (vii) A supplier has to demonstrate the Equipment in running condition.

**Prof. Rina Chakrabarti**

Notice inviting online tender for **Water Quality Analyzer** are invited under two bid system (technical & Financial) from manufacturers and suppliers for supply and installation of **Water Quality Analyzer** as per enclosed specification, layout design, term and condition by the office of the Registrar, University of Delhi, Delhi -110 007.

### List of Item and Technical Specifications

S.No.	Specification
1	<p><b><u>Multiparameter Water Quality Analyzer (for aqueous solutions)</u></b></p> <p><b><u>Technical Features</u></b></p> <ul style="list-style-type: none"> <li>• Large colour graphic LCD display which can show at least four parameters together or each parameter individually.</li> <li>• Display should provide additional information of showing readings with connections, time, Date, sample ID, User ID, Calibration information, temperature, etc.</li> <li>• Up to 6 point calibration for pH, Conductivity and Ions.</li> <li>• Meter should have user id and password protection feature.</li> <li>• Calibration Edit facility for fixing calibration errors for pH and ISE avoiding full recalibration.</li> <li>• Meter should have Auto Read &amp; Continuous display facility.</li> <li>• Meter should have Auto Blank read facility, Linear Point to Point &amp; Non-linear point to point selectable auto blank &amp; Low Concentration Range Stability for ISE Measurements</li> <li>• Upto 2000 point Data logging with time and date.</li> <li>• USB and RS232 for transfer of data to PC</li> <li>• Software upgrade facility of instrument through internet</li> </ul> <p><b>Input</b> : 9-pin mini-DIN  Maximum number of modules : 4  Methods : Up to 10</p> <p><b>Data logging</b>  Number of points : 2000 with time and date stamp  Log Function : Manual, AUTO-READ™, timed interval, one timed Reading</p> <p>Log Edit : Delete individual points, group of pts or all  Communication Ports : One RS232, Two USB Ports (One Client, One Host)  Power : Universal, AC power adapter, 90-260VAC,</p> <p><b>Instrument should be supplied with:</b></p> <ol style="list-style-type: none"> <li>1. pH electrode, Conductivity Probe, Optical Dissolved Oxygen electrode with their calibration standards and buffers, storage solutions, electrode stand etc.</li> <li>2. Following Ion selective electrodes: Ammonia, Chloride, Carbon Dioxide, Fluoride, Lead, Nitrate, &amp; Residual Chlorine.</li> </ol> <p><b>ISE</b>  Range : 0 to 19999  Resolution : Up to 4 significant digits  Relative Accuracy : 0.2 mV or 0.05% of reading whichever is greater  Units : ppm, M, mg/L, %, ppb. None  Calibration Points : Up to 6  Calibration Editing : Yes  Calibration Features : Timed end point, linear point to point, non- linear</p>

	selectable  Auto- Blank, Low concentration range Stability
2	<p><b>pH Electrode (for use with Aqueous solutions)</b>  Range : -2.000 to 20.000  Resolution : 0.1, 0.01, 0.001  Relative Accuracy : ± 0.002  Calibration Points : Up to 6  Calibration : Yes</p> <p><b>mV/RmV</b>  Range : ±2000.00 mV  Resolution : 0.1  Relative Accuracy : ± 0.2 mV or 0.05% of reading whichever is greater</p> <p><b>Temperature</b>  Range : – 5 to 105.0°C, 23 to 221 °F  Resolution : 0.1  Relative Accuracy : ±0.1  calibration standards and buffers, storage solutions, electrode stand etc</p>
3	<p><b>Conductivity (for use with Aqueous solutions)</b>  Ranges, : 0.001µS to 3000 mS  Resolution, : 0.001µS minimum ; 4 significant figures minimum  Relative Accuracy : 0.5 % reading ± 1 digit  Reference Temperature : 5,10,15, 20,25°C (default)  Temperature Compensation : Linear (0 to 10.0 %/°C), nLn, nLFu, EP  Calibration Points : Up to 6  Calibration Editing : Yes</p> <p><b>Resistivity</b>  Range : 2 ohm to 100 meg-ohm  Resolution : 2 ohms-cm  Relative Accuracy : 0.5% ± 1 digit</p> <p><b>Salinity</b>  Type : Practical salinity or natural sea water  Range : 0.01 to 80.0 ppt NaCl equivalent; 0.01 to 42 ppt practical salinity  Resolution : 0.01  Relative Accuracy : ±0.1</p> <p><b>TDS</b>  Ranges : 0 to 200 ppt  Resolution : 4 significant digits  Relative Accuracy : ±0.5% ± 1 digit  calibration standards and buffers, storage solutions, electrode stand etc</p>
4	<p><b>DO Electrode (for use with Aqueous solutions)</b>  <b>Concentration- Optical DO</b>  Range : 0 to 50 mg/L  Resolution : 0.01, 0.1  Relative Accuracy : ±0.1 mg/L up to 8 mg/L;  ± 0.2 mg/L from 8 to 20 mg/L;  10% of reading from 20 to 50 mg/L  Automatic Barometric Pressure Correction: 450.0 to 850.0 mm Hg  Salinity Factor Correction : Automatic with separate conductivity probe or manual; 0 to 45 ppt  Calibration Features : Water saturated air, air saturated water, manual (Winkler) and zero point  Probe Type : Optical DO  calibration standards and buffers, storage solutions, electrode stand etc</p>

5	<p><b>Ammonia Ion Selective Electrode (for use with Aqueous solutions)</b>  Ammonia gas-sensing electrode.  Obtain a more linear response at lower levels  Membranes, filling solution, and accessories  Measurement Range - 0.01 to 17,000 ppm  Optimum Temperature Range - 0 to 50°C  calibration standards and buffers, storage solutions, electrode stand etc</p>
6	<p><b>Carbon Dioxide Electrode (for use with Aqueous solutions)</b>  Measure carbon dioxide, carbonate and bicarbonate in aqueous solutions quickly and accurately  Gas sensing electrode  Measurement range - 4.4 to 440 ppm  Optimum Temperature Range - 0 to 50°C  Membranes Filling Solutions and accessories  calibration standards and buffers, storage solutions, electrode stand etc</p>
7	<p><b>Nitrate Ion Selective Electrode (for use with Aqueous solutions)</b>  Measure nitrate in aqueous solutions accurately  convenient to use with small sample volumes.  Measurement range – 0.1 to 14000 ppm as N  Membranes Filling Solutions and accessories  Optimum Temp Range 0 to 40 °C  Membranes Filling Solutions and accessories  calibration standards and buffers, storage solutions, electrode stand etc</p>
8	<p><b>Chlorine Electrode (for use with Aqueous solutions)</b>  Measure total residual chlorine quickly and accurately in aqueous solutions  Measurement range – 0.01 to 20 ppm  Optimum Temp Range 0 to 50 °C  Membranes, Filling Solutions and accessories  calibration standards and buffers, storage solutions, electrode stand etc</p>
9	<p><b>Chloride Electrode (for use with Aqueous solutions)</b>  Measure free chloride in aqueous solutions  Measurement range 1.8 to 35,500 ppm  Optimum Temp Range 0 to 80 °C  Accessories to store the probe for long time  calibration standards and buffers, storage solutions, electrode stand etc</p>
10	<p><b>Fluoride Electrode (for use with Aqueous solutions)</b>  Measure free fluoride ions in aqueous solutions quickly, simply, accurately  Measurement range – 0.02 ppm to saturation  Optimum temperature range - 0 to 80 °C  Accessories to store the probe for long time  calibration standards and buffers, storage solutions, electrode stand etc</p>
11	<p><b>Lead Electrode (for use with Aqueous solutions)</b>  Measure lead ions in aqueous solutions quickly, simply, accurately  convenient to use with small sample volumes  Measurement range – 0.2 to 20,700 ppm  Optimum temperature range - 0 to 80 °C  calibration standards and buffers, storage solutions, electrode stand etc</p>

## INFORMATION & INSTRUCTIONS FOR BIDDERS

Earnest Money Deposit	<b>Nil</b>
Cost of Tender Form (Non-Refundable)	<b>Nil</b>
Issue of Tender Document	Tender Document may be down-loaded from the University website <a href="http://www.du.ac.in">www.du.ac.in</a> and CPP portal <a href="http://eprocure.gov.in/eprocure/app">http://eprocure.gov.in/eprocure/app</a> as per the schedule.
Bid Document Download Start Date	<b>15/11/2021</b>
Bid Submission Start Date	<b>15/11/2021</b>
Bid Submission End Date	<b>05/12/2021</b>
Technical Bid Opening Date	<b>06/12/2021</b>

## **1. Bid Submission**

“Technical Bid” shall be submitted as per Annexure I

“Financial Bid” shall be submitted as per Annexure II

Bids shall be submitted online only at CPP portal:

<https://eprocure.gov.in/eprocure/app>.

Tenderer/contractor are advised to follow the instructions provided in the ‘Instructions to the Contractor/Tenderer’ for the e-submission of the bids online through the Central Public Procurement Portal for e-procurement at <https://eprocure.gov.in/eprocure/app>.

Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.

Tenderer who has downloaded the tender from the University website [www.du.ac.in](http://www.du.ac.in) and Central Public Procurement Portal (CPPP) <https://eprocure.gov.in/eprocure/app>, shall not tamper/modify the tender form including downloaded price bid template in any manner. In case if the same is found to be tempered/modified in any manner, tender will be completely rejected and tenderer is liable to be banned from doing business with University of Delhi. Intending tenderers are advised to visit regularly University website [www.du.ac.in](http://www.du.ac.in) and CPP Portal <https://eprocure.gov.in/eprocure/app> at least 3 days prior to closing date of submission of tender for any corrigendum/addendum/amendment.

## **2. OPENING OF FINANCIAL BID AND EVALUATION**

Financial bids of eligible and technically qualified bidder will be opened. The lowest financial bid in respect of **Water Quality Analyzer** will be considered for the award of work.

## **3. FINAL DECISION MAKING AUTHORITY**

The University reserves the right to accept or reject any bid and to annul the process and reject all bids at any time, without assigning any reason or incurring any liability to the bidders. No claim whatsoever will be entertained/paid by the university to the bidder(s).

#### **4. AMENDMENT OF TENDER DOCUMENT:**

Before the deadline for submission of tender, the University may modify the tender document by issuing addendum/corrigendum.

5. Any addendum/corrigendum thus issued shall be a part of the tender document and shall be uploaded on the University website ([www.du.ac.in](http://www.du.ac.in)) and CPP portal <https://eprocure.gov.in/eprocure/app>.

#### **6. ARBITRATION AND SETTLEMENT OF DISPUTES:**

In the event of any question, dispute or difference arising under this agreement or in connection there with (except as to matter the decision of which is specifically provided under this agreement), the same shall be referred to sole arbitration of the Registrar or any other person as approved by the Vice-Chancellor, University of Delhi. There will be no objection for any such appointment on the found that the arbitrator is an Employee of University of Delhi or that he/she has to deal with the matter to which the agreement relates or that in course of his/her duties as University of Delhi Employee he/she has express views on all or any of the matter under dispute. The award of the arbitrator shall be final and binding on the parties.

The arbitrator may from time to time with the consent of parties change the time for making and publishing the award. Subject to India Arbitration and Conciliation Act 1996 and the Rules made there under, any modification thereof for the time being in force shall be deemed to apply to the arbitration proceeding under this clause.

#### **7. TERMS OF PAYMENT**

**PAYMENT MODE:** After, the award of the contract and receipt of instrument in running condition the vendor has to submit the bill. The Payment will be released though RTGS after providing of job performance certificate from concerned departments/branches/offices.

The break down maintenance call shall have to be attended within one week.

#### **INSTRUCTIONS FOR ONLINE BID SUBMISSION:**



The bidders are required to submit soft copies of their bids electronically on the CPP Portal, using valid Digital Signature Certificates. The instructions given below are meant to assist the bidders in registering on the CPP Portal, prepare their bids in accordance with the requirements and submit their bids online on the CPP Portal.

More information useful for submitting online bids on the CPP Portal may be obtained at: <https://eprocure.gov.in/eprocure/app> .

## **REGISTRATION**

1) Bidders are required to enroll on the e-Procurement module of the Central Public Procurement Portal (URL: <https://eprocure.gov.in/eprocure/app>) by clicking on the link.

“Online bidder Enrolment” on the CPP Portal which is free of charge.

2) As part of the enrolment process, the bidders will be required to choose a unique username and assign a password for their accounts.

3) Bidders are advised to register their valid e-mail address and mobile numbers as part of the registration process. These would be used for any communication from the CPP Portal.

4) Upon enrolment, the bidders will be required to register their valid Digital Signature Certificate (Class II or Class III Certificates with signing key usage) issued by any Certifying Authority recognized by CCA India (e.g. Sify / nCode / eMudhra etc.), with their profile.

5) Only one valid DSC should be registered by a bidder. Please note that the bidders are responsible to ensure that they do not lend their DSC's to others which may lead to misuse.

6) Bidder then logs in to the site through the secured log-in by entering their user ID / password and the password of the DSC / e-Token.

## **SEARCHING FOR TENDER DOCUMENTS**

- 1) There are various search options built in the CPP Portal, to facilitate bidders to search active tenders by several parameters. These parameters could include Tender ID, Organization Name, Location, Date, Value etc. There is also an option of advanced search for tenders, wherein the bidders may combine a number of search parameters such as Organization Name, Form of Contract, Location, Date, Other keywords etc. to search for a tender published on the CPP Portal.
- 2) Once the bidders have selected the tenders they are interested in, they may download the required documents/tender schedules. These tenders can be moved to the respective 'My Tenders' folder. This would enable the CPP Portal to intimate the bidders through SMS/e-mail in case there is any corrigendum issued to the tender document.
- 3) The bidder should make a note of the unique Tender ID assigned to each tender, in case they want to obtain any clarification/help from the Helpdesk.

## **PREPARATION OF BIDS**

- 1) Bidder should take into account any corrigendum published on the tender document before submitting their bids.
- 2) Please go through the tender advertisement and the tender document carefully to understand the documents required to be submitted as part of the bid. Please note the number of covers in which the bid documents have to be submitted, the number of documents - including the names and content of each of the document that need to be submitted. Any deviations from these may lead to rejection of the bid.
- 3) Bidder, in advance, should get ready the bid documents to be submitted as indicated in the tender document / schedule and generally, they can be in PDF / XLS / RAR / DWF/JPG formats. Bid documents may be scanned with 100 dpi with black and white option which helps in reducing size of the scanned document.
- 4) To avoid the time and effort required in uploading the same set of standard documents which are required to be submitted as a part of every bid, a provision of uploading such standard documents (e.g. PAN card copy, annual reports, auditor certificates etc.) has been provided to the bidders. Bidders can use "My Space" or "Other Important Documents" area available to them to upload such documents. These documents may be directly submitted from the "My Space" area while submitting a bid, and need not be uploaded again and again. This will lead to a reduction in the time required for bid submission process.

## **SUBMISSION OF BIDS**

- 1) Bidder should log into the site well in advance for bid submission so that they can upload the bid in time i.e. on or before the bid submission time. Bidder will be responsible for any delay due to other issues.

- 2) The bidder has to digitally sign and upload the required bid documents one by one as indicated in the tender document.
- 3) Bidders are requested to note that they should necessarily submit their financial bids in the format provided and no other format is acceptable.
- 4) The server time (which is displayed on the bidders' dashboard) will be considered as the standard time for referencing the deadlines for submission of the bids by the bidders, opening of bids etc. The bidders should follow this time during bid submission.
- 5) All the documents being submitted by the bidders would be encrypted using PKI encryption techniques to ensure the secrecy of the data. The data entered cannot be viewed by unauthorized persons until the time of bid opening. The confidentiality of the bids is maintained using the secured Socket Layer 125 bit encryption technology. Data storage encryption of sensitive fields is done. Any bid document that is uploaded to the server is subjected to symmetric encryption using a system generated symmetric key. Further this key is subjected to asymmetric encryption using buyers/bid openers' public keys.
- 6) The uploaded tender documents become readable only after the tender opening by the authorized bid openers.
- 7) Upon the successful and timely submission of bids (i.e. after Clicking "Freeze Bid Submission" in the portal), the portal will give a successful bid submission message & a bid summary will be displayed with the bid no. and the date & time of submission of the bid with all other relevant details.
- 8) The bid summary has to be printed and kept as an acknowledgement of the submission of the bid. This acknowledgement may be used as an entry pass for any bid opening meetings.

## **ASSISTANCE TO BIDDERS**

- 1) Any queries relating to the tender document and the terms and conditions contained therein should be addressed to the Tender Inviting Authority for a tender or the relevant contact person indicated in the tender.
- 2) Any queries relating to the process of online bid submission or queries relating to CPP Portal in general may be directed to the 24x7 CPP Portal Helpdesk.

## Annexure-I

### TECHNICAL BID

1. Name of the Company\_\_\_\_\_

2. Make and Model \_\_\_\_\_

3. Address (with Tele No. fax No. & e-mail )\_\_\_\_\_

4. Contact person Name and mobile number\_\_\_\_\_

5. (a) The number of years of experience in dealing with concerned Equipment/System.

\_\_\_\_\_

(b) Total value per year of Business during the last three years\_\_\_\_\_

(Attested certificate from Chartered Accountant should be attached.)

6. (a) Registration Number \_\_\_\_\_

(b) GST number\_\_\_\_\_

(c) PAN Number \_\_\_\_\_

(d) Service Tax Number \_\_\_\_\_

7. Technical details of Audio/sound as per details given below:

1. Installations charges if any should be mentioned clearly in the bid

2. One Year Warranty should be provided.

**NOTE: Place of supply – Aqua Research Lab, Department of Zoology, University of Delhi, North Campus, Delhi – 110007. Quote for the equipment with 5% GST and quoted price should include the Cost, Freight, Insurance, All Applicable taxes, Transportation and Installation charges. DSIR Certificate will be provided against 5% GST.**

**Document Confirmation**

<b>S. No.</b>	<b>Document</b>	<b>Whether attached</b>
<b>1.</b>	Whether the firm is in existence for three years or more in the trade in Central/State Govt. /Autonomous bodies. If yes necessary documents should be Attached.	
<b>2.</b>	Have you attached copies of the last three financial years	
<b>3.</b>	Have you attached a copy of authorization certificate	
<b>4.</b>	Have you attached a certificate regarding the technical assistance, repair and maintenance charges will be included in the financial bid	
<b>5.</b>	Have you attached a copy of Service Tax Registration Certificate, GST, Registration Certificate and PAN Certificate	
<b>6.</b>	Have you attached details of complete address of the company office and service centre with names of contact person (s) and their telephone/mobile/fax numbers	
<b>7.</b>	Have you attached a letter that company/vender has not been blacklisted by any state/central government/public sector undertaking/university in India in the last 3 years	
<b>8.</b>	Have you attached a copy of the tender acceptance letter	

Declaration

I hereby certify that the information furnished above are full and correct to the best of our knowledge. We understand that in case any deviation is found in the above statement at any stage, the company will be black-listed and will not have any deal with the Organization in future.

**Authorized Signature**

**With Seal of Company**

**ANNEXURE II**

**Financial Bid**

<b>S. No.</b>	<b>Description of Items</b>	<b>Quantity</b>	<b>Unit cost</b>	<b>Total cost inclusive all taxes</b>
<b>1.</b>	<b>Water Quality Analyzer</b> as per details given in Annexure I	01		
F.O.R. Aqua Research Lab, Department of Zoology, University of Delhi, North Campus, Delhi-110 007				

**Authorized Signatory**

**With seal of company**

**Annexure-II**

**TENDER ACCEPTANCE LETTER**

(To be given on Company Letter Head)

To,

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Sub: Acceptance of Terms & Condition of Tender.**

Tender Reference No: \_\_\_\_\_

Name of Tender / Work:-

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Dear Sir,

1. I/We have downloaded/obtained the tender document(s) for the above mentioned 'Tender/Work' from the web site(s) namely:

\_\_\_\_\_  
\_\_\_\_\_

As per your advertisement, given in the above mentioned website (s).

2. I/We hereby certify that I/we have read the entire terms and conditions of the tender documents from Page No. \_\_\_\_ to \_\_\_\_ (including all documents like annexure(s), schedule(s), etc.), which form part of the contract agreement and I/we shall abide hereby by the terms / conditions/ clauses contained therein.

3. The corrigendum(s) issued from time to time by your department / organization too has also been taken into consideration, while submitting this acceptance letter.

4. I/we hereby unconditionally accept the tender conditions of above mentioned tender document(s)/corrigendum(s) in its totality/entirely.

5. I/we do hereby declare that our firm has not been blacklisted/ debarred by any Govt. Department/Public Sector undertaking.

6. I/we certify that all information furnished by the our Firm is true & correct and in the event that the information is found to be incorrect/untrue or found violated, then your department/organization shall reject the bid or terminate the contract, without giving any notice or reason.

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Yours faithfully

(Signature of the Bidder, with Official Seal)