NOTICE INVITING e-TENDER

NIT No. : WBSU/24PNR/ETEN/Physics/Lab_Equip./2017-18/03 Dated: 10/01/2018

The REGISTRAR (Officiating), West Bengal State University, Berunapukuria, Malikapur, Barasat, 24 Parganas (N), invites “Open E-tender for procurement of Lab Equipment(2) for the Department of Physics, WBSU”, Interested bidders may obtain bidding documents by registering themselves to the e-tendering portal (https://wbtenders.gov.in).

(Submission of Bid through online only: http://www.wbtenders.gov.in)

<table>
<thead>
<tr>
<th>Sl. No.</th>
<th>Description of Equipment / Materials</th>
<th>Earnest Money (Note: Through Online)</th>
<th>Period of Completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Model SR830 DSP Dual Phase Lock-In Amplifiers (with rack mount)</td>
<td>Rs. 10,000/-</td>
<td>30 Days</td>
</tr>
</tbody>
</table>

Opening and Evaluation of Tender

The REGISTRAR (Officiating)
West Bengal State University
Berunapukuria, Malikapur, Barasat
24 North Parganas, Kolkata-700126

Note:-

1) Only registered distributors in India of M/s. Stanford Research Systems, 1290-D, Reamwood Avenue, Sunnyvale, CA 94089, USA needs to apply. Authorization certificate must be enclosed.

2) The Lock-in-Amplifier will be used in University for purely academic and research purpose. So maximum educational discount must be given in the quoted price in USD.

3) Quotation must be provided on Direct Shipment Basis.
2) **Instruction to Bidder:**

In the event of e-filling, intending bidder may download the tender documents from the website [http://wbtenders.gov.in](http://wbtenders.gov.in) directly with the help of Digital Signature Certificate. Necessary Earnest Money deposit may be remitted through Online in favor of the “**West Bengal State University**” **payable at ‘Barasat’**. The Copy of Earnest Money Deposit (EMD) against the tender should be submitted to the Office of the West Bengal State University, Berunanpukuria, Malikapur, Barasat, North 24 Parganas, Kolkata-700126. The original part of online submission of Copy of EMD Payment(Hard Copy), Technical Specification(Hard Copy) and other submitted documents(Hard Copy) should be submitted, at least before the date of opening of the bid, falling which, the submission will treated as cancelled. The EMD will be refunded only after the issue of the final supply order.

Both Technical bid and Financial bid are to be submitted concurrently duly digitally signed in the website [http://wbtenders.gov.in](http://wbtenders.gov.in).

Tender documents may be downloaded from the website and submission of Technical Bid and Financial Bid will be done as per Date & Time Schedule stated below.

The **FINANCIAL OFFER** of the prospective tenderer will be considered only for those tenderer who have successfully qualified technically i.e., Technical Bid is found suitable in all respect. The decision of the ‘University’ will be final and absolute in this respect. The list of Qualified Bidders will be displayed in the website.

**A) Eligibility criteria for participation in the tender.**

i) Bonafide, experienced & resourceful contractors of Govt., Semi Govt., Govt. Undertaking Organizations, Govt. Enterprises etc. who have successfully completed the work of similar nature having value not less than 40% of the Estimated Cost of work, put to tender in a single contract during last 3(three) financial years are only eligible to participate in the tender. Must produce the credential & accordingly submit through online only.

ii) Contractors having valid PAN, GST registration Certificate & Professional Tax challan, Service Tax Registration Certificate if available, EPF registration Certificate and up-to-date challan are to be accompanied with the Technical Bid Documents.


iv) Registered Partnership Deed for Partnership Firm only along with Power of Attorney is to be submitted. The company shall furnish the Article of Association and Memorandum.
v) Registered Labour Co-operative Societies are required to furnish valid Bye Law, Current Audit Report, Minutes of last A.G.M., valid certificate from A.R.C.S. along with other relevant supporting papers.

vi) Running payment for work may be made to the executing agency as per availability of fund. The executing agency may not get a running payment unless the gross amount of running bill is 50 (fifty) lakh or 30% of the tendered amount whichever is less.

vii) No mobilisation advance and secured advance will be allowed.

viii) Joint Ventures will not be allowed.

ix) Average annual turnover during last three years shall not be less than 30% of the estimated cost. Working capital in the year, proceeding the year of bid submission shall not be less than 30% of the estimated cost.

B) Submission of Bids:

Technical Bid & Financial Bids are to be submitted concurrently duly digitally signed in the website https://wbtenders.gov.in.

C) Bid Validity

Bids shall remain valid for a period not less than 30 days (Thirty) from the last date of submission of Financial Bid / Sealed Bid.

D) Detailed Specification:

1) Model SR830 DSP Dual Phase Lock-In Amplifiers (with rack mount)

Specifications

**Signal Channel**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voltage inputs</td>
<td>Single-ended or differential</td>
</tr>
<tr>
<td>Sensitivity</td>
<td>2 nV to 1 V</td>
</tr>
<tr>
<td>Current input</td>
<td>10^6 or 10^8 V/A</td>
</tr>
<tr>
<td>Input impedance</td>
<td></td>
</tr>
<tr>
<td>Voltage input</td>
<td>10 MΩ + 25 pF, AC or DC coupled</td>
</tr>
<tr>
<td>Current input</td>
<td>1 kΩ to virtual ground</td>
</tr>
<tr>
<td>Gain accuracy</td>
<td>±1 % (±0.2 % typ.)</td>
</tr>
<tr>
<td>Noise</td>
<td>6 nV/√Hz at 1 kHz</td>
</tr>
<tr>
<td>Line filters</td>
<td>50/60 Hz and 100/120 Hz (Q=4)</td>
</tr>
<tr>
<td>CMRR</td>
<td>100 dB at 10 kHz, decreasing by 6 dB/oct above 10 kHz</td>
</tr>
<tr>
<td>Dynamic reserve</td>
<td>&gt;100 dB (without prefilters)</td>
</tr>
<tr>
<td>Stability</td>
<td>&lt;5 ppm/°C</td>
</tr>
</tbody>
</table>

**Reference Channel**

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency range</td>
<td>0.001 Hz to 102.4 kHz</td>
</tr>
<tr>
<td>Reference input</td>
<td>TTL or sine (400 mVpp min.)</td>
</tr>
<tr>
<td>Input impedance</td>
<td>1 MΩ, 25 pF</td>
</tr>
<tr>
<td>Phase resolution</td>
<td>0.01° front panel, 0.008° through computer interfaces</td>
</tr>
<tr>
<td>Absolute phase error</td>
<td>&lt;1°</td>
</tr>
<tr>
<td>Relative phase error</td>
<td>&lt;0.001°</td>
</tr>
</tbody>
</table>
Orthogonality 90° ± 0.001°

Phase noise
Int. reference Synthesized, <0.0001° rms at 1 kHz
Ext. reference 0.005° rms at 1 kHz, 100 ms, 12 dB/oct

Phase drift <0.01°/°C below 10 kHz,
<0.1°/°C, 10 kHz to 100 kHz

Harmonic detection
Acquisition time (2 cycles + 5 ms) or 40 ms, whichever is greater

Demodulator
Stability Digital outputs and display: no drift. Analog outputs: <5 ppm/°C for all dynamic reserve settings.
Harmonic rejection -90 dB
Time constants 10 µs to 30 ks (6, 12, 18, 24 dB/oct rolloff). Synchronous filters available below 200 Hz.

Internal Oscillator
Range 1 mHz to 102 kHz
Accuracy 25 ppm + 30 µHz
Frequency resolution 4½ digits or 0.1 mHz, whichever is greater
Distortion -80 dBC (f <10 kHz), -70 dBC (f >10 kHz) @ 1 Vrms amplitude
Amplitude 0.004 to 5 Vrms into 10 kΩ (2 mV resolution), 50 Ω output impedance, 50 mA maximum current into 50 Ω
Amplitude accuracy 1 %
Amplitude stability 50 ppm/°C
Outputs Sine, TTL (When using an external reference, both outputs are phase locked to the external reference.)

Displays
Channel 4½-digit LED display with 40-segment LED bar graph. X, R, X-noise, Aux 1 or Aux 2. The display can also be any of these quantities divided by Aux 1 or Aux 2.
Channel 2 (SR830) 4½-digit LED display with 40-segment LED bar graph. Y, Θ, Y-noise, Aux 3 or Aux 4. The display can also be any of these quantities divided by Aux 3 or Aux 4.
Offset X, Y, R can be offset up to ±105 % of full scale.
Expand X, Y, R can be expanded by 10× or 100×.
Reference 4½-digit LED display

Inputs and Outputs
CH1 output ±10 V output of X, R, X-noise, Aux 1 or Aux 2. Updated at 512 Hz.
CH2 output ±10 V output of Y, Θ, Y-noise, Aux 3 or Aux 4. Updated at 512 Hz.
(SR830) X, Y outputs In-phase and quadrature components (±10 V), updated at 256 kHz
Aux. A/D inputs 4 BNC inputs, ±10 V, 1 mV resolution, sampled at 512 Hz
Aux. D/A outputs 4 BNC outputs, ±10 V, 1 mV resolution
Sine Out Internal oscillator analog output
TTL Out Internal oscillator TTL output
Data buffer Two 16k point buffers. Data is recorded at rates to 512 Hz and read through the computer interfaces.
Trigger In (TTL) Trigger synchronizes data recording
Remote pre-amp Provides power to the optional SR550, SR552 and SR554 preamplifiers

General
Interfaces IEEE-488.2 and RS-232 interfaces standard. All instrument functions can be controlled and read through IEEE-488.2 or RS-232 interfaces.
Power 40 W, 100/120/220/240 VAC, 50/60 Hz
Dimensions 17” x 5.25” x 19.5” (WHL)
Weight 23 lbs.
Warranty One year parts and labor on defects in materials and workmanship
**Terms and Conditions:**

1) The Lock-in-Amplifier will be used in University for purely academic and research purpose. So maximum educational discount must be given.
2) Quotation must be provided on Direct Shipment Basis.
3) Payment- By Wire Transfer in USD in advance.
4) Quotation must include Air Freight Charges, Insurance and Packaging charges in USD up to CIP Kolkata Airport.
5) Custom clearance will be undertaken by the University.
6) Unpacking and successful Installation with demonstrations onsite at free of cost must be done by the Bidder.
7) Standard Company Warranty must be provided.

**E) Qualification Criteria:**

The Tender Inviting & Accepting Authority will determine the eligibility of each bidder; the bidders shall have to meet all the minimum Criteria regarding:-

a) Financial Capacity  
b) Technical Capability comprising of personnel & equipment capability  
c) Experience

The eligibility of a bidder will be ascertained on the basis of the attested documents in support of the minimum criteria as mentioned in a), b) and c) as above and the declaration executed through prescribed affidavit in non-judicial stamp paper of appropriate value notarized duly. If any document submitted by a bidder is either concocted or false, in such cases the eligibility of the bidder/ tenderer will be out rightly rejected at any stage without any prejudice with forfeiture of earnest money forthwith.

**3) Date & Time schedule:**

<table>
<thead>
<tr>
<th>Particulars</th>
<th>Date</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.Date of uploading of N.I.T. &amp; other Documents(online) (Publishing Date)</td>
<td>10.01.2018</td>
<td>01:30 PM</td>
</tr>
<tr>
<td>2. Documents download/sale start date (Online)</td>
<td>10.01.2018</td>
<td>02:30 PM</td>
</tr>
<tr>
<td>3. Documents download/sale end date (Online)</td>
<td>27.01.2018</td>
<td>06:00 PM</td>
</tr>
<tr>
<td>4. Bid submission start date (Online)</td>
<td><strong>10.01.2018</strong></td>
<td>03:30 PM</td>
</tr>
<tr>
<td>5. Last Date of submission of original copies for the Copy of Earnest money deposit Payment(Hardcopy) &amp; Technical Detailed Specifications (Hardcopy) &amp; necessary sufficient documents as per Online Submission (Hardcopy)</td>
<td>29.01.2018</td>
<td>Upto 03:30 PM</td>
</tr>
<tr>
<td>6. Bid Submission closing (Online)</td>
<td>27.01.2018</td>
<td>06:00 PM</td>
</tr>
<tr>
<td>7. Bid opening date for Technical Proposals (Online)</td>
<td>30.01.2018</td>
<td>02:00 PM</td>
</tr>
<tr>
<td>8. Date of uploading list for Technically Qualified Bidder(online)</td>
<td>To be Notified after evaluation of Technical Proposal</td>
<td></td>
</tr>
<tr>
<td>9. Date for opening of Financial Proposal (Online)</td>
<td>To be Notified after evaluation of Technical Proposal</td>
<td></td>
</tr>
</tbody>
</table>
4) **General Terms and Condition:**

**INSTRUCTION TO BIDDER**

A. **General guidance for e-Tendering**
   Instructions/ Guidelines for tenders for electronic submission of the tenders have been annexed for assisting the contractors to participate in E-Tendering.

B. **Registration of Vendor**
   Any Vendor willing to take part in the process of E-Tendering will have to be enrolled & registered with the Government e-Procurement system; through logging on to [https://wbtenders.gov.in](https://wbtenders.gov.in) the vendor is to click on the link for E-Tendering site as given on the web portal.

C. **Digital Signature certificate (DSC)**
   Each vendor is required to obtain a class-II or Class-III Digital Signature Certificate (DSC) for submission of tenders, from the approved service provider of the National Information’s Centre (NIC) on payment of requisite amount details are available at the Web Site stated in Clause 2 of Guideline to Tenderer’s DSC is given as a USB e-Token.

D. **Submission of Tenders**
   General process of submission, Tenders are to be submitted through online to the website in two folders at a time for each work, one in Technical Proposal & the other is Financial Proposal before the prescribed date &time using the Digital Signature Certificate (DSC) the documents are to be uploaded virus scanned copy duly Digitally Signed. The documents will get encrypted (transformed into non readable formats)

E. **Tenders Documents Details:**
   **Others important Documents or My Document**

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Category Name</th>
<th>Detail(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Certificate(s)</td>
<td>GST Registration Certificate &amp; Acknowledgement. PAN. P Tax (Challan) (current financial year). Latest IT Receipt. IT-Saral for last Assessment Year</td>
</tr>
<tr>
<td>2.</td>
<td>Company Detail</td>
<td>Proprietorship Firm (Trade License) Partnership Firm (Partnership Deed, Trade License) Ltd. Company(Incorporation Certificate, Trade License) Valid Trade License</td>
</tr>
<tr>
<td>3.</td>
<td>Credential</td>
<td>Similar nature of work completion certificate.</td>
</tr>
<tr>
<td>4.</td>
<td>Financial Info</td>
<td>Tax Audited Report last 3 (Three) years (year just preceding the current Financial Year)</td>
</tr>
</tbody>
</table>
Statutory Cover containing the following documents

E.1 Technical proposal

The Technical proposal should contain scanned copies of the following further two covers (folders).

i. Scan copy of AFFIDAVIT
ii. FORM I, II
iii. Scan copy of Technical Specifications

E.2 Financial proposal

The financial proposal should contain the following documents in one cover (folder) i.e. Bill of quantities (BOQ), the contractor is to quote the rate online through computer in the space marked for quoting rate in the BOQ.

Note- The original part of online submission of copy of EMD Payment (Hard Copy), Technical Specification (Hard Copy) and other submitted documents (Hard Copy) should be submitted, at least before the date of opening of the bid, falling which, the submission will treated as cancelled. Also submitted the Commercial Terms & Conditions for the quoted items.

F. Non-statutory Cover containing the following documents:

A) GST Registration Certificate & Acknowledgement. PAN. P Tax (Challan) (current financial year). Latest IT Receipt. IT-Saral for last Assessment year.
B) Job Credential.
C) Company Details.
D) Payment Certificate.
E) Power of Attorney (For Partnership Firm / Private Limited Company, if any)

N.B.: Failure of submission of any of the above mentioned documents as stated above will render the tenderer liable to be rejected for both statutory & non statutory cover.

G. Rejection of Bid:

The Tender Committee reserves the right to accept or reject any Bid and to cancel the Bidding processes and reject all Bids at any time prior to the award of Contract without thereby incurring any liability to the affected Bidder or Bidders or any obligation to inform the affected Bidder or Bidders of the ground for Tender Committee’s action.

H. Award of Contract

The Bidder who’s Bid has been accepted will be notified by the Tender Inviting & Accepting Authority through an Acceptance e-mail / Letter of Acceptance.

The notification of award will constitute the formation of the Contract.

The Agreement as per enclosed format in G.C.C. will incorporate all agreements between the Tender Accepting Authority and the successful bidder. All the tender documents including N.I.T. & B.O.Q. will be the part of the contract documents. After receipt of Letter of Acceptance, the successful bidder shall have to submit requisite copies of contract documents stated in N.I.T. of the concerned work within time limit to be set in the letter of acceptance.

I. There shall be no provision of Arbitration.
J. Conditional / Incomplete tender submissions will be treated as non responsive.

K. In case of quoting rates, no multiple lowest rate will be entertained. Rates to be quoted both in number & words. No adjustment in price or price as collation of any kind will be allowed for the works included in this NIT.
FORM – I

PRE-QUALIFICATION APPLICATION

To
The Registrar
West Bengal State University
Berunanpukuria, Malikapur
Barasat, Kolkata-700126

Ref: Tender for ………………………………………………………………………………………………………..  
(Name of Work)……………………………………………………………………………………………………..  
…………………………………………………………………………………………………………………………...  
N.I.e.T. No. : ……………………………………………………………………………………………… ………
…………………………………………………………………………………………………………………………...

Having examined the Statutory, Non-statutory & N.I.T. documents, I /we hereby submit all the necessary
information and relevant documents for evaluation.

The application is made by me / us on behalf of ……………………………………………………… in the
capacity…………………………………………………………………………………………….. duly authorized to submit
the order.

The necessary evidence admissible by law in respect of authority assigned to us on behalf of the group of firms
for Application and for completion of the contract documents is attached herewith.

We are interested in bidding for the work(s) given in Enclosure to this letter.

We understand that:

1. Tender Inviting & Accepting Authority / Engineer-in-Charge can amend the scope & value of the contract
   bid under this project.

2. Tender Inviting & Accepting Authority / Engineer-in-Charge reserve the right to reject any application
   without assigning any reason

Enclosure(s): e-Filling:-

a) Statutory Documents.

b) Non Statutory Documents.

………………………………………………………………………………………………………..
Signature of applicant including title

Date: …………………………….
## FORM – II
### STRUCTURE AND ORGANISATION

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Name of the Applicant</td>
</tr>
<tr>
<td>2</td>
<td>Office Address</td>
</tr>
<tr>
<td></td>
<td>Telephone No.</td>
</tr>
<tr>
<td></td>
<td>Fax No</td>
</tr>
<tr>
<td>3</td>
<td>Name and Address of Bankers</td>
</tr>
</tbody>
</table>
| 4 | Attach an organization chart showing the structure of the company with names of Key personnel and technical staff with Bio-data.  
**Note:** Application covers Proprietary Firm, Partnership, Limited Company or Corporation |

Signature of applicant including title and capacity in which application is made
AFFIDAVIT – “Y”

(To be furnished in Non – Judicial Stamp paper of Rs.100.00 (One Hundred only) duly notarized)

1. I, the under-signed do certify that all the statements made in the attached documents are true and correct. In case of any information submitted proved to be false or concealed, the application may be rejected and no objection/claim will be raised by the under-signed.

2. The under-signed also hereby certifies that neither our firm M/S……………………………………………………………….…………………………………… nor any of constituent partner had been debarred to participate in any tender by any Govt. Organization / Undertaking during the last 5 (five) years prior to the date of this N.I.e.T.

3. The under-signed would authorize and request any Bank, person, Firm or Corporation to furnish pertinent information as deemed necessary and/or as requested by the Department to verify this statement.

4. The under-signed understands that further qualifying information may be requested and agrees to furnish any such information at the request of the Department.

5. Certified that I have applied in the tender in the capacity of individual/ as a partner of a firm and I have not applied severally for the same job.

..............................................................
Signed by an authorized officer of the firm.

..............................................................
Title of the officer

..............................................................
Name of the Firm with Seal

Date: .............................
Copy forwarded to the: -
i) The Sabhadhipati 24 North Parganas Zilla Parishad.
ii) D.M 24 North Parganas.
iii) District Information officer 24 North Parganas.
iv) Divisional Account Officer 24 North Parganas.

Sd/
REGISTRAR (Officiating)
West Bengal State University
Berunanpukuria, Malikapur Barasat
24 North Parganas, Kolkata-700126