



COLLEGE OF ENGINEERING AND TECHNOLOGY
(A constituent college of Biju Patnaik University of Technology, Odisha)
KALINGA NAGER, BHUBANESWAR – 751003

No. 3558 /CET

Date- 20.11.2015

Tender Call Notice

Sealed Tenders are invited from reputed **Original Manufacturers (OEM)/ Authorized Dealers/Suppliers**, for supply, installation and commissioning of equipments to **Department of Chemistry** of the college, details of which are available in the tender papers. The tenderers must possess valid up-to-date VAT /income tax clearance etc. and service facilities at Bhubaneswar. The last date of submission of tender is **December 20, 2015** (up to 1PM) and will be opened on the same date at 3.0 PM. The sealed tender will be received by Speed Post/Registered Post only. Tender received after the scheduled date and time will not be considered. More details are available at our college website www.cet.edu.in.

Sd/-
PRINCIPAL

**DETAILED PARTICULARS AND INSTRUCTIONS ON TENDER
FOR**

1. Tender Opening **20.12.2015 at 3.00 PM**

Purchase of Equipments
FOR
Department of Chemistry
College of Engineering and Technology
Bhubaneswar – 751003, Orissa

Sealed Tenders are invited from reputed Original Equipment Manufacturers (OEM)/Authorised Dealers/Suppliers, for supply, installation and commissioning of equipments for the Department of Chemistry, College of Engineering and Technology (CET), Techno Campus, Kalinga Nagar, Bhubaneswar – 751003, Orissa.

1. Scheduled Tender Activity:

Sl. No.	Activity	Date
1	Due date for tender	20.11.2015
2	Last Date of Tender Document Submission	20.12.2015 up to 1.00PM
3.	Tender Opening	20.12.2015 at 3.00 PM

Items	EMD (in Rupees)	Cost of Tender Document (in Rupees)	Period of complete Delivery, Installation and Commissioning
Equipments for Department of Chemistry	See under clause no. 5.1 of this tender	Rs.1000/ VAT@13.5%	6 weeks/120 days

Commercial bid & Technical bid must be enclosed separately.

The Tender documents can also be downloaded from our website cet.edu.in and the tenderer has to submit a separate draft of Rs.1000.00 + VAT @ 13.5% (in favour of Principal, College of Engineering and Technology payable at Bhubaneswar in any Nationalised Bank towards tender paper cost)along with submitted tender, otherwise the offer submitted by the tenderer will be cancelled.

2. Eligibility of Tenderer and General Instructions:

2.1 Eligibility:

Those who fulfill the following criteria are eligible to participate in the tender.

1. The tenderer must be a reputed **OEM** and/or the Authorised Dealer/Supplier of a reputed manufacturer. Manufacturers should provide all documents relating to their **Manufacturing Capabilities**.
2. If the tenderer is an Authorised Dealer/Suppliers of a reputed manufacturer, necessary certificate to this effect from the manufacturer must be enclosed.
3. The tenderer must have both sales and service center with qualified Service Engineers. All after sales support should be provided directly by the manufacturer only.
4. The tenderer must have the willingness for providing comprehensive maintenance support of the Equipment supplied by him.
5. The tenderer must provide evidence of successful execution of supply orders with installation and successful after sales support in reputed organizations.
6. The tenderer must have cleared Sales Tax and Income Tax payment up- to-date. Attested copies of Sales Tax Clearance Certificate or non-assessment certificate from the concerned Sales Tax Authority valid up- to-date and attested copy of Income Tax Clearance Certificate or non-assessment certificate, as the case may be, from the competent authority, up-to-date. and/or PAN Number must be enclosed along with the Tender documents.

2.2 General Instructions:

The tenderers who are **the Original Equipment Manufacturers (OEM)/ Authorised Dealers/Suppliers** of the product must be manufacturing the complete product, selling under the specified brand name and model are the eligible participants.

The tenders will be opened on **20.12.2015 at 3.00 PM** in presence of the tenderers or their authorized representatives. Authorized representatives will be required to produce their authorization before opening of the bid, failing which they will not be allowed to be present.

Submission of more than one bid by a particular tenderer under different names is strictly prohibited. In case it is discovered later on that, this condition is violated, all the tenders submitted by such tenderer/s would be rejected or contract cancelled and earnest money deposited will be forfeited.

All offers should be typed or printed clearly in English and the price quoted for each item should be firm.

Warranty period, Delivery period and After-Sale-Service conditions, etc. are also to be clearly indicated.

The rates and the conditions of the offer will remain valid for three months from the date of opening of the tender and no change or alteration of the rate will be acceptable on any account.

Submitted tender forms with overwriting or erased or illegible specifications and rates will be rejected.

Request from tenderer in respect of additions, alterations, modifications, corrections, etc. of either terms & conditions or rate after opening of the bid may not be considered. However, negotiation may be made before finalization.

Tenderers shall carefully examine the bid documents and fully inform themselves of all the conditions, which may in any way affect the work of the cost thereof.

Should a tenderer find discrepancies or omissions from the specification or other documents and any doubt as to their meaning, he should at once notify the purchaser and obtain clarification in writing.

This, however, does not entitle the tenderer to ask for time beyond the due date fixed for receipt of tenders.

The tenderer must also specify minimum uptime and maximum time to repair/replace in the event of a failure and penalty there of.

Verbal clarification and/or information given by the purchaser or its employees or representatives shall not be binding on the purchaser.

Submission of sealed bid will carry with the implication that the tenderer agrees to abide by the conditions laid down in the detailed particulars of the bid notice.

Conditional offers and offers qualified by vague and indefinite expression, as 'subject to immediate acceptance', 'subject to prior sale', etc. will not be considered.

While tenders are under consideration, tenderers and their representatives or other interested parties are advised to refrain from contacting by any means, to the purchaser's personnel or representatives on matter relating to the tenders under study.

The purchaser, if necessary, will obtain clarification on tenders by requesting such information from any or all the tenderers either in writing or through personal contact as may be necessary.

The tenderer will not be permitted to change the substance of his offer after the tenders have been opened.

In the event of non-compliance with this provision, the tenderer is liable to be disqualified.

2.3 Submission of Tenders:

The sealed envelope must show the name of the tenderer and his address and should be superscribed as “*Tender for Equipments for Department of Chemistry*” on the top of the envelope.

All the documents submitted must be in the papers showing signature of the tenderer and printed office name of the tenderer on official seal.

All the documents must be submitted in a sequential manner with separator/flags to help in quick scanning of the topics.

Wherever possible, data in tabular form should be given.

Cost-benefit/break-even analysis should be supported in graphical and tabular form to give quick view and supported with description or details.

The tenders should be submitted at the office of the **Principal, College of Engineering & Technology, Bhubaneswar – 751003, Orissa.**

Outstation offices may sent the tender forms by Registered Post/Speed Post and addressed to the **Principal, College of Engineering & Technology** superscribed as “*Tender for Equipments for Department of Chemistry*”.

3. Requirements by Tenderer before Supply:

3.1 Rating Plate, Name Plate and Labels:

Each of the equipment is to have permanently attached to it, a rating plate of non-corrosive material in a conspicuous position, upon which the total specifications along with the manufacturer's name, address, etc. are to be engraved.

3.2 Packaging:

All the equipment are to be suitably protected, covered in water-proof packing and crated to prevent damage or deterioration during transit and storage till the time of installation. The supplier shall be responsible for any loss or damage caused during transportation, handling or storage till their successful installation.

3.3 Inspection:

All materials/equipment shall be inspected and tested for completeness, proper assembly, operation, cleanliness and state of physical condition and performance as per quoted specification.

The test shall be conducted, reported and certifications to provided by the tenderer.

The tenderer shall provide all test and measuring equipment/tools required for inspection/testing.

The cost of all such tests shall be borne by the Tenderer.

CET reserves the right to reject any equipment if it does not comply with the specifications during site testing, installation and commissioning stage.

Inspection & testing would be conducted, jointly, at various stages as applicable during unpacking, installation and commissioning of respective equipment/components at the manufacturing site.

3.4 Environmental Condition:

All the equipment supplied shall be rugged and should operate without any deviation in quality, or degradation of equipment performance. All the specification/parameters shall be guaranteed over the following environmental conditions:

- * Storage Temperature 0 to 70 degree Celsius
- * Operating Temperature 0 to 50 degree Celsius
- * Humidity 95% RH (non-condensing)

All the equipment are intended to operate under 220 V, 50 Hz power supply.

4. Requirements by Tenderer after Supply:

4.1 Supply:

The material would be delivered by the supplier at **College of Engineering & Technology, Techno Campus, Kalinga Nagar, Near Khandagiri, Bhubaneswar – 751003, Orissa.**

The items should be supplied directly from the manufacturing terminal having passed all tests successfully with Certifications as required.

The equipment should conform to the latest relevant National/International standards and shall be completed in all respect.

Any component, fitting etc. which may not have been specifically mentioned in the specifications but which are usual and necessary for the equipment, shall be supplied by the tenderer at no extra cost.

In case, articles are found damaged in transit or found short at the time of delivery the full cost of the same will be deducted from the bill of the supplier in case the supplier does not replace the stock within a week from the date of lodging the complain.

The articles ordered must be supplied in one lot within 6 (SIX) weeks (for Indian equipments or 120 days for foreign manufacturers) of placing of the purchase order.

In case of delay in delivery or successful installation, a penalty of 1% (one per cent) per week shall be levied.

CET reserves the right to procure the materials from alternative sources at the risk and cost of the successful tenderer giving 15 days notice.

Any increase in tax and duties after expiry of delivery period will be to the seller's account.

In case the items supplied by the supplier are found not up to the specification shall be rejected. The supplier will be intimated to take back the stocks at his own cost within three days from the date of rejection and to replace the same within 7 days, failing which the EMD will be invoked in addition to taking legal actions.

The suppliers shall be responsible for releasing the consignments from the carriers/transporters.

The equipment shall be delivered and installed at site at the cost of the tenderer.

All taxes, levies, surcharges including the customs clearance and handling freight and insurance should be paid and handled by the tenderer.

4.2 Installation and Commissioning:

Installation and Commissioning shall include the following:

- a) Installation and Testing of the Equipment, Machineries etc. supplied by the tenderer.
- b) It will be the responsibility of the tenderer to provide all necessary spares and consumables, which may be required during installation and commissioning, at no extra cost to CET.
- c) The tenderer is to bring their own testing and measuring instruments required for installation, testing, commissioning, which can be taken back after completion.
- d) Installation must complete within a week after delivery on site.

4.3 Documentation:

Detailed technical manuals, handbooks, drawings, Warranty card and Factory Quality Assurance checklist, test results and any other certifications mentioned in the Technical specifications shall be supplied along with the consignment.

Supplied manuals/handbooks must cover detailed technical specifications and installation, operation, maintenance and System Safety procedures.

For Experimental setups details of theory, procedure and methods of taking measurements etc. should be provided in the form of hand books for each experiment in duplicate.

The receipts for taxes paid, if any, for the supplied materials should also be submitted

4.4 Trial Operation and Performance Guarantee Test:

After successful completion of Installation and Commissioning of the equipment, a 7-day continuous trial operation putting those on optimum use shall be conducted by the tenderer at site, during which the performance of the equipment shall be demonstrated for trouble-free continuous operation, meeting the specified standards.

During trial operation, tenderer shall do all necessary adjustments required to ensure the performance as per the acceptable level.

In case, guaranteed performance is not established, the tenderer shall be given opportunity to rectify/replace the equipment/components, and restart the 7 days continuous trial operation, at the risk and cost of the tenderer.

4.5 On-Site Warranty:

- a) The entire materials may be used continuously. The reliability and safety of the total installed system and trouble-free operation are, therefore, of prime importance. The supplied devices/equipment and components shall be covered under **two-years or more** comprehensive on-site warranty from the date of issue of successful completion of Performance Guarantee Report.
- b) During the period of warranty, it shall be the responsibility of the tenderer to provide all essential spares and consumables, which may be required for maintenance and trouble-free operation of the devices / components at the tenderer's cost.
- c) Software, if any, has to be tested with at least one-year warranty for trouble free operation.

4.6 Comprehensive Maintenance Contract:

The tenderer shall be under the obligation of entering into a Comprehensive Maintenance Contract (CMC) with CET for a minimum period of two years, renewable if felt necessary, on mutually acceptable rates, terms and conditions. CMC shall start after the completion of Warranty.

The scope of CMC shall cover maintenance and supply/replacement of materials and components, for smooth and reliable operation of the systems without trouble.

Accordingly, the tenderer has to offer rates for the CMC structure per equipment along with the price for the Systems and other associated Equipment supplied.

4.7 After Sales Service:

During the warranty period and subsequently, after signing of Agreement for CMC the tenderer shall attend to the problems reported by the users of CET on a priority basis.

For any problem reported, the tenderer shall attend and rectify the problem within 3 (three) days or provide a stand by system of the similar configuration.

The report on any problem will be informed through phone or fax number of which shall be given by the tenderer.

The branch office of the concerned manufacturing firm will be fully responsible to provide maintenance service, in case of any negligence, in providing the service by the tenderer.

5. Financial Terms:

5.1 EMD

The tenderer has to submit a Demand Draft/Banker's Cheque/Pay Order/bank Quarantee item-wise as detailed below in favour of **Principal, College of Engineering and Technology** payable at Bhubaneswar in any Nationalised Bank towards EMD. **Without EMD for an item, the tender will be not be considered for the same item.**

	Items	EMD (in Rupees)
(i)	Rotary Vap	5,000/-
(ii)	Density and sound velocity meter	18,000/-
(iii)	Probe sonicator	2000/-
(iv)	Simultaneous Thermal Analyzer	21,000/-

There will be no interest paid to the tenderer towards EMD money opening of the bid.

No request for adjustment of claims, if any, will be accepted.

The EMD of unsuccessful tenderers will be refunded as soon as possible after the tenders are finalized.

No one should submit a tender who is unable to furnish the EMD as indicated above and supply the equipment within the specified period as indicated in the indent/order issued for the quantities decided in his favour.

5.2 PRICES:

Price quoted should be **FOR Bhubaneswar only.**

Price should be quoted for unit item; however, the actual requirements may be much more. (A tenderer may propose to give discounts if any for purchase of more than one unit of a particular item.)

Purchase order will be placed as a single lot for each type of item or for all the items together, as the case may be.

In case of items of import, the tenderer should take full responsibility for customs clearance, handling, tax payment, etc. and specify the charge for the same in the price bid. Custom duty and other government duties/taxes will be paid extra and as per actual.

5.3 Sales Tax Concession:

Central Sales Tax Concession is to be availed on production of the required certificates applicable to Educational Institution.

5.4 Discount:

Our Institute is a pioneer Institution in the field of Teaching and Research in Engineering and allied disciplines and do not run with profit motive.

As such we are availing price discount for purchase of equipment/instruments.

The rate of discount or any other Institutional benefit arising out of Govt. Policy etc., on each item may also be indicated in the bid specifically.

5.5 Payments:

- a) In case of imported items, (i) payment will be made by wire transfer or (ii) payment will be made through opening LC.
- b) In case of purchase in Indian Rupees, payment of 100 percent of the ordered value will be made after successful installation and commissioning of the equipment subject to submission of satisfactory performance report by our Professor-in-Charge.

5.6 Penalty:

If the delivery, installation and commissioning is not carried out in time as specified in other part of the tender document, the tenderer/manufacturer will be charged @ 1% (one per cent) per week of the total value of the concerned system/equipment.

5.7 Rate Contract with DGS&D or any other Government Organisation:

In case the tenderer has entered into a Rate Contract with DGS & D or any other Government Organisation such as EPM, rate contract preference, number & copy of rate contract have to be submitted along with tender.

6. Technical Specifications:

The technical specifications are enclosed in Annexure-I.

7. Instruction to the Tenderer:

7.1 Instructions to Offer Technical and Price Bids Separately:

Technical Offer and Price Bids should be separately given in two different covers. Each cover should be earmarked as to know the contents within as either *“Technical Offer”* or *“Price Offer”*.

Both these covers should be placed in a third cover super scribed as *“Tender for Equipments for Department of Chemistry”*.

Some of the minimum specifications specified may be redundant, obsolete or incompatible and in these cases, quote the particulars of correct specification of latest trend and technology. Higher specifications instead of minimum specifications are allowed if a minimum specification is not available, obsolete or incompatible. Otherwise, model with higher specification should be in addition to the model with minimum specifications.

Specify brand name and full model name and number for each offer. Include the printed catalogue and price list if any for each of the equipment quoted.

Specify the list of Accessories required along with each of the equipment.

Quote the additional price of the accessories; only those, which are fully compatible with the quoted model, should be furnished.

Specify the list of Accessories to be given free of cost, along with the equipment as **“Free Accessories”**; these should be fully compatible with the quoted models.

7.2 Solving Disputes:

CET, the tenderer and the manufacturer shall make all efforts to resolve amicably by direct informal negotiation on any disagreement or dispute arising between them under or in connection with this contract.

All disputes arising out of the contract shall be referred to courts under the jurisdiction of the Bhubaneswar court only.

The CET authority has all rights to accept/reject any tender without assigning any reasons there of.

NB: (i)The above terms and conditions except those otherwise agreed upon, shall form a part of the Purchase Order.

(ii) Sign on each page of this tender document and return it along with the offer enclosing this part together with the technical offer.

1. Rotary Evaporator

Technical Specifications: Rotary evaporator with stand, receiving and evaporating flasks and water bath along with necessary accessories and complete set up for installation, commissioning and testing (without chiller). All kind of necessary spares and cables/cords with tool kits should be supplied with the equipment. The power system is compatible with the Indian standard system.

Sl. No.	FEATURES	DESCRIPTION	Qty	Rate		
a	Temperature	Ambient to 180 ° C	one			
b	Rotation Speed	20- 250 RPM or more				
c	Heating Bath Type	Electrically Heated Digital Water Bath with Accuracy ± 1.5 °C or better Temp Control with Microprocessor Based PID control along with safety features such as over heating protector, bath cover				
d	Evaporating Flask Capacity	1 L				
e	Receiving flask	1L				
f	condenser	Vertical double spiral cooling				
g	Up Down	Automatic Motorized. Height Elevation 100 mm				
h	Sealing	PTFE/ Viton /Teflon Seals				
i	Liquid contact	Glass& PTFE				
j	Flask Holder	Holding Clip B24				
k	Rotary joint	B24				
l	Vapour Tube	Glass Tube of B24 Size				
m	Main Body	MS Epoxy Powder Coated Shell White				
n	Driving unit	Induction motor with electronic speed control				
o	Optional	(A)				
		(i) Glass flasks – 2 nos. (ii) Condenser – 1no. (iii) Glass feed Valve with PTFE tube – 1 no. (iv) Vacuum seal main – 1no. (v) Rotary joint B24 or as suitable -1 no. (vi) Joint clip B24 or as suitable – 2no.				

p	<p>(B) VACUUM PUMP : Chemical resistant, diaphragm vacuum pumps which can be widely used to hard acidic, basic and solvent vapors by utilizing corrosion proof PTFE on all the wetted surfaces.</p> <p>Specification:- Displacement: > 12 L / min at 0mm Hg Max. Vacuum : -750mmHg=98.68kPa=10Torr 500mmHg Vacuum : 3 L/min Motor Rotation : 1400RPM or more Water bath capacity: 10L or more Horse Power : 1/6HP or more Aspirator element: metal aspirator x2 Safety function: check valve, thermal protection Bath material: Polypropylene or similar type</p>	one
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2. Density and Sound velocity meter: automatic detection of filling error and bubbles in the measuring tube, a real time checking of the filling process with permanent on-screen display with a fixed camera and automatic storage of images, automatic full-range viscosity correction for accurate and precise true density results, automatic determination of ambient air pressure for exact air density adjustments along with necessary accessories and softwares and complete set up for installation, commissioning and testing (without computer). All kind of necessary spares and cables/cords with tool kits should be supplied with the equipment. The power system is compatible with the Indian standard system.

Sl. No.	Measuring range:	Specifications	Qty	Rate
a	Density:	0 to 2.5 g/cc or better	one	
b	Sound velocity	1000 to 2000 m/s		
c	Temperature	0 to 60 °C		
d	Pressure	0 to 3 bar		
e	Minimum Volume of Liquid	5mL or less		
f	Measuring time per sample	<5min		
g	Interface	USB port		
h	Repeatability:			
i	Density	0.000001g/cc		
j	Sound velocity	0.1 m/s		
k	Temperature	± 0.01 °C		
l	Data memory	1000 nos		
m	Optional Accessories:	pH measurement facility Extra		

3. Probe Sonicator should have auto frequency chasing, display temperature control checking and set over hot

protection of the sample and overload protection to prevent the damage of the instrument along with necessary accessories for complete set up for installation, commissioning and testing. All kind of necessary spares and cables/cords with tool kits should be supplied with the equipment. The power system is compatible with the Indian standard system.

Sl. No.	Measuring range:	Specifications	Qty	Rate
a	Samples volume	5 – 300 ml	one	
b	Output Amplitude:	0 – 100 %		
c	Max Probe dia:	3/8"		
d	Frequency range:	20KHz(auto tracking)		
e	Total working timer:	1s- 1hr with pause function		
f	Temperature control:	20-100°C		
g	Power :	500Watts		

4. Simultaneous Thermal Analyser: Fully automatic and software controlled (windows 8 based softwares for Control and data acquisition and interpretation) for real-time measurement and analysis of sample weight change and heat flow for Simultaneous Thermal Analyzer. Simultaneous analysis of TG with DTA mode (DT) and DSC (mW) mode, TGA and DTA should operate up to 1000°C, the system should have built-in DTA mode with simultaneous scanning facility in single run, provision for conversion of DTA signal to DSC mode/signal, provision of all the three curves/parameters like TGA/DTA/DSC to be displayed on single screen with suitable chiller for cooling along with necessary accessories and softwares and complete set up for installation, commissioning and testing (without computer).

All kind of necessary spares and cables/cords with tool kits should be supplied with the equipment.

The power system is compatible with the Indian standard system.

Sl. No.	Specification of instrument	Description	Qty	Rate
a	Temperature range	15 °C to 1000 °C	one	
b	Heating rate ambient to 1000 °C	0.1 to 80-100 °C /min		
c	Temperature calibration	Metal standards or better fixtures		
d	Temperature accuracy	< ±0.5 °C or better		
e	Temperature reproducibility	< ±0.5 °C or better		
f	Cooling rate	< 25 mins (maximum)		
g	Furnace type	Mostly alumina, corrosion resistant, Top loading, loading and unloading in manual and automated mode		

h	Thermocouples	PT-PT/Rh (Type R) or better		
i	Furnace cooling	Forced air and chiller		
j	Sample capacity	1500 mg or less		
k	Balance design	Single Beam vertical with sensor		
l	Balance sensitivity	0.1 micro gm or less for TGA with top load design		
m	Calorimetric accuracy/precision	+/- 2% based on metal standards or better		
n	Sample pans	Alumina or similar type		
o	Pan holder	corrosion-resistant, pure platinum pan holder		
p	Autosampler	Optional, > 30 positions		
q	Chiller for cooling	Suitable for cooling as per above cooling rate		
r	The built-in mass flow controller for 2 different gases. The gas flows to be controlled through built-in mass flow controller and software.			
s	Softwares: setting the wavelength and run time, controlling top / waste valve and syringe, wide variety of plots display (overlay mode), routine kinetic fittings (calculation of rate constants for single exponential and double exponential data fittings to the kinetic traces), simulation, 3D data set, concentration profile for all the species.			
t	Optional: The combination with an IR analyzer			

The instruments may have the facility for upgradation.

Following are the minimum specifications of the equipment.

The minimum specifications are indicative and not exhaustive.

Advanced models with better options/applications may also be quoted.

The quoted materials should be of latest trend and technology.