

PONDICHERY UNIVERSITY
(A Central University)
PUDUCHERRY – 605014.

CENTRE FOR GREEN ENERGY TECHNOLOGY

Sealed quotations are invited for the following items under a DST (I-PHEE) project. The quotation should be sent by post (normal/speed/registered/courier) only. The price quoted should include all the costs such as delivery, installation, testing etc and also inclusive of all taxes. Warranty terms should be explicitly specified in your quotation. The technical specifications are given below. Last date for receiving quotation is 24.10.2017.

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Names of required items for DST (I-PHEE) project

1. Data Acquisition System
2. Temperature Sensors with datalogger
3. Weighing balance
4. Lab scale PCM test setup

Technical specification

S.No.	Item	Specifications	Quantity
1	Data Acquisition System	<u>Desktop computer</u> <ul style="list-style-type: none">• Brand: HP/DELL• Processor: i7 (7th generation)• RAM: 16GB• HDD: 1TB + 500GB SSD• Graphics card: 2GB (NVidia)• OS: Windows 10 (64 bit)• Monitor: 21 inch (Minimum resolution: 1366 X 768)• DVD drive (both read & write)• USB 3.0 ports• LAN port with Ethernet card• 5.1 Multimedia speaker system (Brand: Creative)• UPS (minimum 30 min power backup)	1

2	Temperature Sensors with datalogger	<u>Datalogger</u> <ul style="list-style-type: none"> No of channels: 16 Output: RS232Printer interface needed/direct Excel sheet PT 100 RTD sensor suitable LED Display with Touch screen Pen drive data copy facility needed 	1
		<u>Temperature sensors</u> <ul style="list-style-type: none"> Type: PT100 Temperature range: 0 °C – 300 °C Accuracy: 0.01 °C Measuring medium: Air and liquid Cable length: 10 m each 	16
3	Weighing balance	<ul style="list-style-type: none"> Capacity: 320g (maximum) Accuracy: 0.1mg Pan size: 90mm Calibration type: Internal 	1
4	Lab scale PCM test setup	<u>Sample test box</u> <ul style="list-style-type: none"> Dimension: 19.5 cm X 10 cm X 10 cm Material: Stainless steel Thickness: 2.5 mm Outer insulation with ceramic blanket Top side to be fabricated out of 2.5 mm thick Sheath to hold Various Test Tubes with leak proof washers <u>Hot bath</u> <ul style="list-style-type: none"> Capacity: 5 litres Temperature range: 30 °C to 100 °C PLC based temperature control facility Internal stirrer with speed regulator for maintaining uniform temperature Chrome plated heating element Insulated tank <u>Cold bath</u> <ul style="list-style-type: none"> Capacity: 5 litre Temperature range: 0 °C to 25 °C PLC based temperature control facility Internal stirrer with speed regulator for maintaining uniform temperature Integrated mains switch Water drain provision Insulated tank Auto restart and auto cut off should be 	1

		<p>provided</p> <ul style="list-style-type: none"> • Filling level indicator and lid for easy filling • Temperature high range with visual and audible alarm signal. • Chiller external body is Fabricated out of Steel • Chiller should be supplied with base Stand • Warranty should be for minimum 2 years from date of supply with on-site service. <p><u>Pump</u></p> <ul style="list-style-type: none"> • Flowrate: 10 litre/min • Type: recirculating • Operating temperature: 0 °C to 100 °C <p><u>Piping & Valves</u></p> <ul style="list-style-type: none"> • Pipe material: Stainless steel 304 • Completely insulated • Diameter: 1cm • PLC controlled solenoid valves (Make & model should be clearly mentioned in quotation) <p><u>Control system with LED display</u></p> <ul style="list-style-type: none"> • PLC based control system • Touch screen display with RS485 output • Switch mode power supply • Timer control for Hot fluid flow, Cold fluid flow and no flow using solenoid valves (1 cycle = 4 steps: Hot flow, No flow, Cold flow, No flow) • Data logging for all the inputs and number of cycles • Data copy using USB output • Password protected system • PLC programs should be provided • Necessary training to be provided by the supplier including programming. <p><u>Specific terms and conditions for Lab scale PCM test setup</u></p> <ul style="list-style-type: none"> • Minimum 2 years warranty and onsite 	
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		service is mandatory <ul style="list-style-type: none">• Previous experience in supply of similar setup in last 2 years – Attach user details with contact information	
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TERMS AND CONDITIONS

I. General Information:

- a) Last date and time of receipt of the Tender: 24.10.2017 at 2.30 PM and they will be opened on 24.10.2017 at 3.00 PM
- b) Quotation/ Tender document Fee: Rs. 500/-
- c) EMD rates: 2.5% of the Quoted price (for Equipment above Rs. 50,000/-) through Demand Draft, drawn in favour of The Finance Officer, Pondicherry University, payable at Puducherry.
- d) Quoting merely the lowest price does not confer any right to any bidder for award of supply order. The University's Purchase Committee, reserves the right to select the equipment any bid under the grounds of specification compliance, technologically advanced quality, proven performance track record, brand reputation, service backup support & training, offer of additional/special features, compatibility with the existing system, etc.
- e) The Quotation/Tender Document Fee and EMD should be submitted along with your quotations.
- f) The Tender must be submitted along with the stipulated EMD fee in the sealed cover, super scribing "Tender for DST (I-PHEE) Project Equipment – Centre for Green Energy Technology". The name and address of the bidder should also be mentioned at the "From address" space.
- g) The Tender should be addressed and posted to the following address by speed, registered post or by courier.

**Dr. A. Sreekumar,
PI – DST (I-PHEE) Project,
Assistant Professor,
Centre for Green Energy Technology,
Pondicherry University (A Central University),
R.V. Nagar, Kalapet,
Puducherry – 605 014.**

- h) Tenders will not be accepted through fax / e-mail.

II. Common Conditions (Import or Indigenous)

1. Price Schedule:

The rates should be quoted for a single unit and also for the total quantity required by the University. The price should include the delivery, installation, training charges, etc. at the respective Department, Pondicherry University. The prices quoted shall remain firm until the equipment is supplied to the respective Department, Pondicherry University.

2. Quoting the Core price & Tax, Duties, Discount etc:

The taxes / duties / discounts, if applicable, are to be explicitly and separately shown in the bid.

3. Eligibility:

The firm must have the requisite domain expertise with regard to supply, installation and post-sale & service of the items they are quoting. The firm should have sufficient number of

installations of the similar Equipment in the premier Research Institutes in India. Any other techno commercial information, pertaining to this particular Equipment, principal suppliers, technical background and capability, local agents' background on Scientific Equipment Business, etc. may also be appended along with testimonials and documentary proof.

4. Duty Exemption:

The University has been granted the benefit of exemption from the payment of the Central Excise Duty and Customs Duty by the Department of Scientific and Industrial Research (DSIR), India, vide their Notification No.10/97, dated 01-03-1997 and No.51/96 dated 23.07.96 respectively, in respect of

- a) Scientific and technical instruments, apparatus, equipment, software including computers.
- b) Accessories and spare parts of goods specified in (a) above and consumables.
- c) Computer software, compact disks, CD ROM, recording magnetic tapes, microfilms, micro-chips etc.
- d) Prototypes.

Customs duties at Indian port, if any, will be to the account of the University.

5. Technical Specifications:

- i. **WARRANTY:** The Equipment covered under the purchase order, when installed, shall be warranted for the quality, workmanship, trouble free operation and performance for a period of at least 13 months from the date of putting the system into operation at the Centre for Green Energy Technology, Pondicherry University, or at least 12 months from the date of receipt of the last lot of the consignment in India.
- ii. If any item covered under warranty fails, the same shall be replaced free of cost including all the applicable charges including shipping cost both ways.
- iii. Complete technical specifications of the Equipment including the operating system to be included in the bid.
- iv. The necessary service support should be provided by Bidder during the agreement period. v. The training should be provided by the supplying companies.
- v. The training should be provided by the supplying companies.
- vi. Operating Manual should be provided in English.
- vii. A recent customer list (within last five years) with contact details including email address is to be submitted with technical bids / bids as the case may be.
- viii. If the Equipment is proprietary a product, a proprietary product certificate should be enclosed.
- ix. The Equipment must operate at 230V / 50 Hz single phase and / or equivalent three phase electrical power.
- x. The validity of each quotation should be at last for **THREE MONTHS** from closing date.
- xi. The offers will not be considered if received after the bid closing date and time.
- xii. The offers received through telex / telefax / e-mail will not be accepted by the University under any circumstances.
- xiii. The University shall not be responsible for any delay / loss or non-receipt of the tender by post courier service.
- xiv. No unsolicited correspondence shall be entertained after the submission of the offer.
- xv. If an order is placed with the firm, the purchase shall be governed by an agreement as per the University rules in force at the time.
- xvi. Additional terms and conditions will be incorporated in the purchase order, if needed, to

- safeguard the interests of the University.
- xvii. The tender is not transferable.
 - xviii. In case of any dispute in respect of the Tender, all legal matters shall be instituted within the jurisdiction of the place where the purchaser ordinarily resides.

6. Power to reject the offer:

- i. Pondicherry University reserves the right to accept / reject any offer in full or in part or accept any offer other than the lowest offer without assigning any reason thereof. Any offer containing incorrect and incomplete information shall be liable for rejection.
- ii. No Agency commission will be paid to any authorized agent in India.
- iii. Liquidated damages: Timely supply of the ordered items, installation, commissioning (wherever is applicable) and training etc. is the essence of the contract. In case of failure to supply within the time specified in the Purchase order, a penalty / LD of 0.5% of the total value per week or a part thereof shall be levied subject to a maximum of 7.5% in respect of items which are not supplied. The decision of Pondicherry University shall be final in this regard.
- iv. Bidder(s) must be authorized business partners of Global / National service providers of the respective Equipment.
- v. The Bidders must enclose authorization letter from the respective global / national service providers of the above said Equipment particularly mentioning an undertaking that in case of default by the Bidder, they (Global Service Provider) shall take over all the responsibilities of the Bidder.
- vi. The Bidder should not be involved in any Bankruptcy filing for protection from it.

III. Specific Conditions for Imported Equipment's

1. Payment of EMD:

The Quotation must be accompanied by EMD as stated above, by means of a Demand Draft, drawn in favour of The Finance Officer, Pondicherry University, payable at Puducherry.

The Small-Scale units are exempted from payment of EMD provided they enclose the proof of their exemption Certificate issued by the competent authority.

2. Payments terms:

Normally a payment 90% will be released after the installation & training. However, 100% payment will be released if the supplier provides Bank Guarantee towards performance Security for the 10 % of the total cost of the equipment to cover the warranty period. Bank charges in India shall be borne by the purchaser and outside India shall be borne by the contractor / supplier. The offer must be in English. The rates should be indicated both in figures and words against item specified in the given table.

BANK GUARANTEE

Pondicherry University
Bharat Ratana Dr. B R Ambedkar Administrative Building
R Venkataraman Nagar
Puducherry 605 014

1. This guarantee made this _____ day of _____ 201_ by and one of its branches at _____ and one of its branches at _____ (hereinafter referred to as “the Guarantor” which expression shall, unless it be repugnant to the subject, meaning or context thereof, be deemed to mean and include its successors and assigns) in favour of the Pondicherry University, Puducherry 605 014 represented by its Registrar, having his office at R. Venkataraman Nagar, Kalapet hereinafter referred to as the “University” which expression shall include his successors in office for an amount not exceeding Rs. _____ (Rupees _____ only) at the request of M/s. _____ (more fully described hereunder)
2. Whereas the University has placed Work Order No: PU/ _____ dated _____ for with M/s. _____ having its office at _____ and hereinafter referred to as the “Contractor” which expression shall include their successors and assigns.
3. And whereas the Contractor has accepted and agreed to execute the work as per the work order as per undertaking / agreement dated _____ within the time stipulated and in the manner specified therein.
4. And whereas the University has called upon the Contractor to furnish Bank Guarantee for the sum of Rs. _____ (Rupees _____ only) for fulfilment of the said work as specified in the work order and as agreed to by the Contractor.
5. And whereas the Contractor has requested the Guarantor herein to furnish an irrevocable and unconditional Bank Guarantee in favour of the University for an amount of Rs. _____ as guarantee towards execution of the work as agreed to by the contractor to the University.
6. Now therefore we _____ Bank, the guarantor herein, do hereby irrevocably and unconditionally Guarantee the payment to the University the sum not exceeding Rs. _____ (Rupees _____ only) in the event of any breach, failure, neglect of inability on the part of the Contractor in the execution of the said work, on demand without reference of the matter to the Contractor and without any prior consent of the Contractor, at all times throughout the period of execution of the work, demur, cavil or argument or delay.
7. The Guarantor agrees and undertakes that the decision of the University as to whether the contractor has committed any breach of the obligation with respect to the wok to be executed, and the quantum of amount therefore payable by the Contactor to the University in that regard, shall be final, binding and conclusive as against the Guarantor and the Guarantor shall make payment accordingly, on demand by the University.
8. The Guarantor further agrees and undertakes to pay to the University the amount demanded by the University irrespective of and not withstanding any dispute raised by the Contractor in any suit or proceeding before any judicial forum relating to the Contracted work and the Guarantor’s liability under this Guarantee shall be absolute and unequivocal.
9. This Guarantee is issued subject to the condition that the liability of this Guarantor under this guarantee is limited to the maximum of Rs. _____ (Rupees _____ only) and the guarantee shall remain in full force up to _____ and invoked otherwise than by a written

demand or claim by the University for the payment of the said amount by the Guarantor on or before _____ or any extended date as decided by the University.

10. This University shall have the fullest liberty without our consent and without affecting in any manner our obligations hereunder to vary any of the terms and conditions of the contracted work or to extend time for performance of the work by the Contractor. Any change to the contracted work shall not in any way release the Bank (Guarantor) from liability under this Guarantee and we waive notice of any such change. The University shall have full liberty to forbear or enforce any of the terms and conditions of the contracted work.
11. This Guarantee shall not be affected by any legal limitation, disability or other circumstances relating to the Contractor or the Guarantor.
12. This Guarantee shall be valid for the period upto _____ and shall extend further and beyond _____ for such period as determined by the University.
13. The Guarantor undertakes not to revoke this guarantee except with the previous consent of the University in writing.
14. Notwithstanding anything contained herein: Our liability under this guarantee shall be limited to Rs. _____ (Rupees _____) upto _____ and for such further period as determined by the University for fulfilment of the contract. We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only and only if you serve upon us a written claim or demand on or before _____ or such extended period / date. In witness whereof, this Guarantee has been executed by _____ for an on behalf of the Bank (Guarantor) on the day, month and year first above written.

SIGNATURE AND
SEAL NAME OF THE BANK
(GUARANTOR) ADDRESS