



NAVSARI AGRICULTURAL UNIVERSITY  
ERU CHAR RASTA, NAVSARI, GUJARAT-396 450

NAVSARI AGRICULTURAL UNIVERSITY  
**Dr. T. R. Ahlawat**  
PI & NODAL OFFICER  
NAU-CAAST, NAHEP

Contact: 02637- 283452  
Email: caastnau@gmail.com

No. NAU/DR/NAHEP-CAAST/ 1073 /2019

Date: 31 /07/2019

To,

.....  
.....  
.....

Dear Sir/Madam,

**Subject: Invitation of Quotations for supply of Bomb Calorimeter**

The Principal Investigator and Nodal Officer, NAHEP-CAAST Sub-Project, Navsari Agricultural University, Navsari invites most competitive quotations in sealed envelope under National Agricultural Higher Education Project (NAHEP) CAAST sub-project entitled “Establishment of Secondary Agriculture Unit for Skill Development in Students and Farmers at NAU, Navsari” for below given from reputed sellers.

1. You are invited to submit your most competitive sealed quotation for supply of **Bomb Calorimeter**

Particular	Specifications
Measuring Range	500-10000 K.cal/Kg
Repeatability of tests	±1 cal/gm
Temperature Resolution	0.001 °C
Temperature Indicator	Microprocessor based Digital Temperature Indicator with Built-in Timer with Computer Interface & Software
Test per hour	3-6 tests/hour
Calorimeter vessel	The vessel is made up of copper and is chromium plated.
Bomb firing	Automatic (mostly Preferred) or Button Press
Water jacket	The outer container of Jacket is made up of copper and is chromium plated both inside and outside or S.S. The top is closed by a Bakelite cover. A terminal block is fitted on the top of the container so that connections can be made from the firing control.
Offset stirrer	The stirring mechanism supplied gives sufficient turbulence for effective stirring. While no heat is imparted to the calorimeter water. It consists of an impeller driven by a stirrer at a constant speed. The offset arrangement whereby the motor drives the impeller via belt precludes any possibility of heat transfer between motor and calorimeter Vessel contents.
Outer jacket	Outer jacket will be provided with insulation.
Electronic firing	The unit must be incorporated with Digital Beckmann



Particular	Specifications
unit with digital thermometer printer	Thermometer for the precise measurement of the Rise in temperature and an electronic circuit that provides an electrical means for firing the samples. This unit must also have a printer that prints the temp. readings are being recorded by the printer continuously so the operator is totally free do any other job thus saving operators time and the human errors involved with recording the readings are also eliminated. Socket for stirrer terminals for fuse wire must also be provided at the back side of the unit.
Pressure resistance	Must with stand pressure of 300 atmospheres (4400psi) for a period of ten minutes without any sign of leakage.
Oxygen filling	Automatic
Crucible	Various types of crucible are available but the standard supplied with the outfit beings a stainless steel crucible of 8 ml capacity which fits in the standard support ring provided with the outfit
Calculations	Automatic with report and graphs. There is built in thermal printer for direct report print out. Internal Data Logger with computer interface, PC Software for Data records
Data storage	With facility to store the recorded data.
Power supply	220 V AC
Accessories	Must be supplied with all accessories required for running the Bomb calorimeter like gas cylinder etc
Other	Must have performance certificates from the reputed government institutes Bidder should supply spare parts or AMC for minimum of 10 years if needed. AMC should be after warranty period. Demonstration of the bomb calorimeter shall be on bidder part
Warranty	1 year compulsory
<b>Note: Additional warranty may be quoted with extra amount</b>	

- The quotation should be as per enclosed terms and conditions forwarded by hand/post/courier on/or before the closing date in the name of Principal Investigator and Nodal Officer, NAHEP-CAAST Sub-Project, O/o Directorate of Research, Navsari Agricultural University, Navsari – 396 450, Gujarat. **Please mention “Quotation for supply of Bomb Calorimeter (NAU-CAAST)” on the top of the envelope.**
- Government of India has received a financing from the International Bank for Reconstruction and Development (IBRD) in various currencies towards the cost of the National Agricultural Higher Education Project (NAHEP) and intends to apply part of the proceeds of this Loan to eligible payments under the contract for which this invitation for quotations is issued.
- Payments will be done through Cheque/PFMS after receiving **Bomb Calorimeter** and bill in favour of the billing firm.



**Principal Investigator & Nodal Officer  
NAHEP-CAAST Sub-Project**



## Terms and Conditions

1. **Bid Price**
  - a) The contract shall be for the full quantity as described above. Corrections, if any, shall be made by crossing out, initialing, dating and re writing.
  - b) All duties, taxes and other levies payable on the Equipment and components shall be included in the total price.
  - c) Taxes in connection with the sale shall be shown separately.
  - d) The rates quoted by the bidder shall be fixed for the duration of the contract and shall not be subject to adjustment on any account.
  - e) The prices shall be quoted in Indian Rupees only.
2. Each bidder shall submit only one quotation.
3. **Validity of Quotation**

Quotation shall remain valid for a period not less than 30 days after deadline date specified for submission.
4. **Evaluation of Quotations**

The Purchaser will evaluate and compare the quotations determined to be substantially responsive i.e. which

  - a) are properly signed; and
  - b) Conform to the terms and conditions and specifications.

The quotation would be evaluated for all the items together.  
Sales tax in connection with sale of goods shall not be taken in to account in evaluation.
5. **Award of contract**

The purchaser will award the contract to be bidder whose quotation has been determined to be substantially responsive and who has offered the evaluated quotation prices.

  - 5.1 Notwithstanding the above, the Purchaser reserves the right to reject all quotations at any time prior to the award of contract.
  - 5.2 The bidder whose bid is accepted will be notified of the award of contract by the Purchaser prior to expiration of the quotation validity period. The terms of the accepted offer shall be incorporated in the purchase order.
6. Payment shall be made immediately after delivery after goods.
7. Bank Account Details  
**The Supplier is required to provide the following mentioned information**
  - Name of the Bank and Branch:**
  - Postal Address (with PIN Code):**
  - E-mail and Phone:**
  - Bank Account No:**
  - Account Type:**
  - IFSC Code:**
8. Normal commercial warranty/ guarantee shall be applicable to the supplied goods.
9. All supply and work of above items should be consigned to **Department of Post Harvest Technology, ASPEE College of Horticulture, Navsari Agricultural University, Near Eru Char Rasta, Navsari-396450 (Gujarat)"** by Courier/in Person. However, the preferred mode of delivery is in person by hand against duly signed and stamped delivery-challan at above mentioned address only.
10. Supplier has to perform on-site live demonstration/training as per specification of item.
11. Original dispatch documents are to be forwarded by way of recorded delivery *i.e.* Registered post/Speed post/Courier in the above mentioned address only.
12. Supplier should submit the pre-receipted bill in triplicate mentioning the purchase order number, date and delivery challan number and date along with the supporting documents if any, such as photo copy and signed by the supplier concerned, as per institute book purchase rule. Each of the Invoice/Bill of the Vendor/Supplier concerned must bear the PAN number (*i.e.* Permanent Account Number) and **Xerox copy of the PAN Card duly signed with seal of the Vendor/Supplier, if not furnished earlier.**
13. The bidder is at liberty to be present or authorize a representative to be present at the time of opening of quotation at the time and date as specified in the schedule. The name and address of the representative, who would be attending the opening of the quotation on the bidder's behalf, should be indicated in his/her quotation. Please also state the name and address of the permanent representative, if any.
14. While the purchaser and the vendor shall make every effort to resolve disputes amicably by direct informal negotiation, even then in any disagreement or dispute arising between them under or in connection with the contract shall be settled under the court of law within its jurisdiction at Navsari, Gujarat. The resultant contract will be interpreted under Indian laws.
15. All rights are reserved with the University Authority to accept or reject the Item without assigning any reasons thereof.
16. **You are requested to provide your offer latest by 17:00 hours on 20/08/2019.**
17. **Supplier can visit the site and discuss the plan of meeting hall to be modernized before submitting final quotation**
18. **We look forward to receiving your quotations and thank you for your interest in this project.**
19. We accept above mentioned terms and conditions

Signature of Supplier  
Seal/Stamp



## Quotation

To,

**The Principal Investigator and Nodal Officer**  
**NAHEP-CAAST Sub-Project**  
O/o Directorate of Research, University Bhavan  
Navsari Agricultural University  
Eru Char Rasta, Navsari- 396450

**Subject: Quotation for supply of Bomb Calorimeter**

**Reference:** No. NAU/DR/NAHEP-CAAST/ 1073 /2019

Date: 31/07/2019

**Dear Sir,**

In response to above referred subject, we are submitting our offer for supply of  
**Bomb Calorimeter**

The details are as under:

1. Name of the bidder: .....
2. Complete address of the Bidder: .....
3. Bank Name:
4. A/C No:
5. Name of Branch:
6. IFSC Code:
7. PAN Number:
8. Account type:
9. GSTIN :

### FORMAT OF QUOTATION

Particular	Specifications
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	must also have a printer that prints the temp. readings are being recorded by the printer continuously so the operator is totally free do any other job thus saving operators time and the human errors involved with recording the readings are also eliminated. Socket for stirrer terminals for fuse wire must also be provided at the back side of the unit.
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	Internal Data Logger with computer interface. PC Software for Data records
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	Bidder should supply spare parts or AMC for minimum of 10 years if needed. AMC should be after warranty period.
	Demonstration of the bomb calorimeter shall be on bidder part
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**OUR BEST PRICE TO FOLLOWING EQUIPMENT/INSTRUMENT/ITEM**

Sr. No.	Name of Equipment/Instrument/Item	Qty.	Rate per Item	Total amount(Rs.)
1	Bomb Calorimeter	01		

**Above Quoted price included GST/VAT and other taxes or Transport, Installation and training if any pertaining to quoted prices**

**Gross Total Amount: Rs. ....**

We agree to supply the above goods in accordance with the technical specifications for a total contract price of Rs.....(Amount in figure) (Rs.....amount in words) within the period specified in the Invitation for Quotation.

We also confirm that the normal commercial warrantee/guarantee of ..... months shall apply to the offered goods.

We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in bribery.

We hereby accepted Terms and Conditions (Dully sign accepted)

**Signature of Supplier  
Seal/Stamp**