

INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE

2A & 2B , Raja S.C. Mullick Road, Jadavpur, Kolkata-700032

NIT No. : IACS/OC/JG/2017-18/89

Date: 19/01/2018

Sealed tender in two bids system (technical bid and price bid) is invited from bonafide, resourceful and eligible manufacturer/exclusive distributor/vendors for **PHOTOREACTOR**

Part-I (Technical Bid) of the tender should contain technical specifications in detail as well as commercial terms and conditions. **Part-II (Price Bid)** should clearly indicate item-wise price, if needed, as mentioned in the technical bid. The Technical Bid and Price Bid are to be submitted in separately sealed envelopes, distinctly marked accordingly and both to be put inside another envelop, that should be sealed and superscribed with tender notice no. and due date. The bidders may submit bids in their own letterheads with signature on each and every page.

Completed tender bids should reach the office of the **Registrar, Indian Association for the Cultivation of Science (IACS), 2A & 2B Raja S. C. Mullick Road, Jadavpur, Kolkata-700032** on or before the scheduled date and time specified below:

Tender Notice No.	NIT No. IACS/OC/JG/ 2017-18/89 Date: 19-01-18
Last date and time of submitting tender	February 12, 2018, upto 3.00 PM
Pre-bid meeting(date, time & place) to discuss technical specification	February 2, 2018, 3:00 pm, Department of Organic Chemistry
Date and time of opening tender (Technical Bids)	February 12, 2018 at 4.00 PM
Place of opening tender	Organic Chemistry Department
Date and time of opening of Price Bid	The Price Bids of the bidders qualifying the technical bid will only be opened, the date of which will be intimated to the short-listed bidders at their email addresses. The rest of the bids will be rejected.
Contact	Email: ocjg@iacs.res.in, Tel.+91 33 2473 4971 [Ext 1426]

The technical bids will be opened first to judge/evaluate the technical specifications of the said instrument and thereafter the price bids of only technically qualified bidders will be opened.

Technical Bid Evaluation: The Technical Bids will be evaluated in the presence of the representatives of intending bidders who will be able to clarify technical aspects of their bids, if any, required by the Technical Evaluation Team.

Opening of price-bid: The Price Bids of the bidders qualifying the technical bid will only be opened, the date of which will be intimated to the short-listed bidders at their email addresses. The rest of the bids will be rejected.

Please note that IACS will not provide any accommodation or reimburse any expenses to any of the bidders for attending opening of technical bid.

Quotations received incomplete or beyond the stipulated time will be summarily rejected.

Bidders should submit their past experience for supplying and successful installation of similar units to other research Institutes/Universities/other organizations in India and abroad. Please provide documentary proofs of such successful installation and supportive documents that the instruments are running successfully.

1. TECHNICAL BID

The technical bid should contain technical specifications and should be kept in a separate sealed envelope duly superscribed as 'TECHNICAL BID' on the outer cover of the envelope as already detailed above. **It should be clearly mentioned on the envelope as "Technical Specification for PHOTOREACTOR".**

Technical Specification for PHOTOREACTOR:

1. Main instrument: Should having below specifications

- Chamber material should be made of stainless steel
- Humidity should be between 0% to 95% (non-condensing)
- Internal Dimension should be between 280mm to 320mm wide x 280mm to 320mm deep x 200mm to 250mm high
- External Dimension should be between 450mm to 480mm wide x 500mm to 550mm deep x 400mm to 450mm high
- The main system should be with complete set of UV & visible lamps (minimum 16 nos. of each) where 8 top lamps & 8 sided lamps equipped in the chamber

2. Accessories should be included :

- **Digital countdown meter:** Exposure time from 1 min to 99 hrs, 99 min (leaving the photoreactor near the exhaust fan)
- **Carousel:** Should hold minimum 15 nos. 15mm test tubes with 1" bottom height from chamber floor for liquid sample.
- **Turntable:** minimum 1" bottom height from chamber floor for solid sample
- **Magnetic Stirrer:** with a max speed of 9500-1000RPM can be stirring a up to volume of 1L
- **Hour meter:** Should be a built-in-drive that can be track the numbers of hours for operation time of the unit
- **Safe Exhaust:** Should be made of galvanized aluminum with an exhaust fan speed of 3000RPM
- **Safety Interlock:** Turns off lamps during door open also should have LED signal if door open and if power is running to the lamps.
- **UV protecting goggles:** Safety goggles

OPTIONAL:

Optionally to be quoted each of 16 Lamps:

- 1.a) LAMP, centered at ~300nm, with a peak of 313nm.
- b) LAMP, germicidal lamps, with a strong line at ~ 254nm,
- c) LAMP , Lab centered at 420um
- d) LAMP, LZC-540 Amber filter for VIS bulbs ,cuts out light below 540 nm
- e) LAMP, Red filter for VIS bulbs ,cuts out all light below 600nm.

2. a. Digital Temperature, Monitor. Monitors the air temperature of flow exiting the chamber. Standard: °C. Can be factory pre-set to °F.

3. Quartz Labware

a) QL-BFJ100, Boiling Flask with, 24/40 joint. (flat bottom) Volume 100ml

4. Quartz Test Tubes

a) **Q-Tubes Set of 8 commercial grade** quartz test tubes, 14mm OD, 12mm ID, 130 mm long, approximate capacity 10 ml.

b) **Q-tubes_50, Set of 50 commercial grade** quartz test tubes, 14mm OD, 12mm ID, 100 mm long, approximate capacity 10 ml.

5. OTHERS :

- The system must be attended within 48 hrs of reporting.
- Training and Installation: Installation must be done at user's site with no extra costs involved. A one-week (at least) general entry-level training-cum-workshop and advanced-level training-cum-workshop must be arranged at the user's site by the vendor on experimental and data analysis part, with no extra cost involved.
- Proof of Performance documents must be provided with the Compliance sheet. The vendors must submit/upload all the Technical Data Sheets as per their claim in original & authenticated. The specification sheets should also be available in the public portal.
- Users lists of similar equipment supplied in India should be provided (Enclose full list of the users in India). Vendor should have at least five (5) users available in the eastern zone of India.

Warranty: Minimum 1 year while 3 years extendable warranty is preferred.

Servicing facility within India is a must while service engineer stationed at Kolkata will be preferred. A list of other places where the instrument has been installed should also be provided.

A compliance table (see below) must be prepared and submitted along with the technical bid.*

Sr. No	Tender specification	Your offered instrument specification	Extent of compliance

*Tender will not be accepted if the technical compliance chart is not provided following the above format.

2. PRICE BID

The financial bid indicating (item-wise) price for the item(s) mentioned in the technical bid should be kept in a separate sealed envelope duly super scribed as 'PRICE BID' on the outer cover of the envelope as already detailed above. Price bids of only technically qualified bidders will be opened and they will be intimated the date and time of the opening of price bid at their e-mail ids. Rest of the bidders will stand rejected.

PRICE: Price to be quoted on CIF Kolkata and also FOB basis.

3. BID SECURITY:

- a. An Account payee Demand Draft/Pay Order of Nationalized Bank for Rs.25,000 (Rupees twenty-five thousand only) drawn in favour of "Indian Association for the Cultivation of Science (State Bank of India, Jadavpur University Branch, A/C No. 11079699211, IFSC: SBIN000093, MICR Code: 700002048)" is to be furnished by the bidders alongwith Technical Bid except those who are registered with the Central Purchase Organizations, National Small Industries Corporation or the concerned Ministry or Department, as Bid Security money or Earnest Money Deposit (EMD). Alternatively, the Bidder shall have the option to furnish the EMD in the format of Bank Guarantee (BG).
- b. The Demand Draft for the Bid-Security should have at least about 90 (ninety) days validity period of opening of the bids.
- c. In case of non-award of the work the Bid Security money would be returned to the unsuccessful Bidders.

4. PERFORMANCE SECURITY:

Performance Bank Gurantee on any nationalized bank of India for 10% of the order value in the name of "Indian Association for the Cultivation of Science" is to be furnished by the successful bidder as Performance security. Performance security money should remain valid for a period of 60 days beyond the date of completion of all contractual obligations of the supplier including warranty obligations. Bid security money or EMD will be refunded to successful bidder on receipt of the Performance security.

5. TERMS OF PAYMENT :

Payment will be made through irrevocable Letter of Credit in two installments. 90% of the money will be released on submission of shipping of documents. Remaining 10% will be released after successful installation of the instrument.

6. GENERAL INSTRUCTIONS :

1. Validity of tender: Tender submitted should remain valid for at least six months from the date of opening the tender. Validity beyond six months from the date of opening of the tender shall be lapsed by mutual consent.
2. The tender should accompany a compliance chart.
3. Incomplete and conditional tenders as well as tenders received after the due date will be summarily rejected without assigning any reasons thereof.
4. At any time prior to the bid due date, IACS may, for any reason, whether at its own initiative or in response to a clarification requested by a prospective bidder during pre-bid meeting, modify the bidding documents. The amendment(s) will be notified on the institute website. Prospective bidders are advised to occasionally to visit the website (www.iacs.res.in/tender) for any amendment.
5. Installation/Demonstration/Application training at site: Installation & user training at IACS, free of cost by the supplier.
6. Service facility: In India, preferably Kolkata, supplier should mention their details of service setup and man powers who are responsible for after sales support. Response time should be within 24 hrs.
7. The model number, make and a printed literature of the product should be submitted positively.
8. Proposed delivery schedule should be mentioned clearly.
9. Manufacturers / exclusive distributors / vendors should have history of supplying this type of instruments to this or other scientific organizations. Availability of a list in this regard would be preferred.
10. Authorized dealership certificate should be provided in case of principal manufacturing company is not quoting directly.

11. Guarantee certificate, users manuals etc. are to be handed over to the user after successful commissioning of the system.
12. In the event of date being declared a closed holiday for purchaser's office, the due date for submission of bids and opening of the technical bids will be the following working day at the appointed time.
13. In case of any dispute, the decision of IACS authority shall be final and bidding on the bidders.
14. For any clarification regarding technical specifications, information etc., please send your queries to Joyram Guin (ocjg@iacs.res.in).
15. The authority of IACS reserves the right to reject any or all of the tenders received without assigning any reason thereof.

Acting Registrar