

**INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE
2A & B, RAJA S.C.MULLICK ROAD
JADAVPUR, KOLKATA -700032**

TENDER NOTICE NO. IACS/SERIIUS/PC/ERU/13/A-09 dated 11.02.2013

Sealed tenders in two bids system (Technical Bid & Financial Bid) is invited from bonafide, resourceful and eligible manufacturers/exclusive distributors for **"Nano Imprint Lithography System"** .

Part - I (Technical Bid) of the tender should contain technical details and commercial terms and conditions and **Part-II** (Price Bid) should indicate group-wise price as mentioned in the Technical Bid where applicable. The Technical Bid and Price bid are to be submitted in two separately sealed envelopes distinctly marked accordingly and both to be put inside another envelope, which should be sealed and superscribed with tender notice no. and due date. The bidders may submit bids duly signed in their own letterheads.

Complete tenders bids should reach the office of the ERU, Indian Association for the Cultivation of Science, 2A & B Raja S. C. Mullick Road, Jadavpur, Kolkata-700032 on or before scheduled date & time specified below.

Tender Notice No.	IACS/SERIIUS/PC/ERU/13/A-09 dated 11.02.2013
Last date and time of submitting tender	4th March, 2013 at 1.00 P.M.
Pre-bid meeting	To discuss technical specification on 28th February, 2013 at 3.00 P.M.
Date and time of opening tender	8 th March, 2013 at 12 P.M.
Place of opening tender	S.N.Bose Hall, IACS, Kolkata
Contact	e-mail:erpc@iacs.res.in Tel. +01-33-2473 4971 (ext. 1602)

The technical bids will be opened first to evaluate the technical specifications of the equipment 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 on the same day as the Technical Bid. The rest of the bids will be rejected.

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

1. TECHNICAL BID:

The Technical Bid should contain technical specifications and kept in a separate envelope duly super scribed as "**Technical Bid**" on the outer side of the envelope as detailed above.

The Technical Specifications acceptable for the "Nano Imprint Lithography System" are as follows:

Nano Imprint Lithography System

The Nano Imprint Lithography System should fulfill the following requirements.

General capabilities

The system must be able to conduct full area imprint with pattern features in dimensions from the micrometer range down to the 20 nm ranges on a wide range of substrates, and in various resist materials.

Type of imprint methods

The system must be capable to perform full area Thermal imprinting, using solid state heating.

As options the system must also have the capability to conduct UV imprint methods as well as the simultaneous combination of thermal and UV.

Method of pressure application

To make it possible for stamp and substrate to conform to each other and allow imprint of nm range features on thin resists, the system must be able to apply a

uniform pressure over the entire imprint area. To accomplish this, the imprint sandwich, (the stamp / substrate stack), must have a rigid reference plane on one side while the imprint pressure is achieved by applying a uniform field of compressed air/gas pressure on the other side of the imprinting sandwich.

To have the pressure generated by two solid plates pressing against each other is not acceptable.

System Control

The system shall have computerized control and graphical user interphase with capability to operate all the above features. The software must be able to handle multiple pressure, temperature and time settings and store imprint recipes.

System Technical Specification

Imprint Area (Maximum)	77 mm Ø
Substrate size	From 10 mm by 10 mm up to 77 mm in diameter
Stamper size	From 10 mm by 10 mm up to 77 mm in diameter
Thickness of imprint sandwich	Standard: up to 1 mm, <i>(with optional spacers: up to 5 mm)</i>
Imprint chuck	The system should be set up so that the same chuck can be used to print on stamps and substrates of any size and shape as long as the larger one is in the bottom and does not exceed 77 mm diagonally
Minimum Feature Size	< 20 nm
Minimum Residual Layer Thickness	< 15 nm (Complete removal recipe should be given)
Imprint pressure	10 - 70 bar <i>(with Low Pressure Module minimum pressure is 1 bar)</i>
Temperature (min)	Ambient temperature
Temperature (max)	250°C or 200°C <i>with optional UV Module installed</i>
Cooling method	Air cooling <i>(water cooling should be available as option)</i>
Product safety	<ul style="list-style-type: none"> ○ CE marked ○ The system should have an interlocking safety cover

Additional option (available as add-on options)

To allow for extended usability and increased system flexibility, the supplier should be able to provide the following add-on options as on-site upgrades with price quotes:

- UV module to allow UV curable imprint processes
- IPS® (Intermediate Polymer Stamp) technology
- STU® (Simultaneous Thermal and UV) technology
- Low Pressure Module
- Water Cooling option

User List: The supplier should provide a list of current users (with contact no, Email address etc) for the quoted item in India and abroad.

Service facility: Trained technicians should install the instrument and ensure it is operating correctly and within specifications. User training at site should also be provided. Supplier should mention their details of service setup that are responsible for after sales support.

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. The price bids of only technically qualified bidders will be opened and they will be intimated the date and time of opening at their email id-s. Rest of the bids will stand rejected.

PRICE: Price to be quoted both on FOB and CIF basis. Name of the particular port from where our authorized forwarder will lift the consignment must be mentioned clearly with FOB price.

BID SECURITY:

1. The financial bid should be super scribed as "**PRICE BID**" on the outer cover of the envelope
2. **Bid Security (EMD):** An Account Payee Demand Draft of Rs.3,00,000/- in the name of "**Indian Association for the Cultivation of Science**" is to be furnished by the bidders, as Bid Security money or Earnest Money Deposit (EMD).

3. The Demand Draft for the Bid-Security money should have at least 45(forty five) days validity period after the opening of the Bids.

4. In case of non-award of the work the Bid Security money would be returned to the unsuccessful Bidders.

PERFORMANCE SECURITY:

An Account Payee Demand Draft of an amount of **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 will be refunded to successful bidder on receipt of the Performance security money.

GENERAL INSTRUCTIONS:

1. Incomplete & conditional tenders and tenders received after the date will be summarily rejected without assigning any reasons thereof. "**Nano Imprint Lithography System**" should clearly be written on the envelope.

2. At any time prior to the bid due date, IACS may, for any reason, shether 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 visit the website (www.iacs.res.in/tender) for any amendment.

3. **Payment** will be released on successful installation and submission of performance guarantee.

4. **Warranty:** Minimum 3 years.

5. **Installation/Demonstration/Application Training at site:** Free of cost by the supplier.

6. **Service facility:** Supplier should mention their details of service setup and Manpower in Kolkata who are responsible for after sales support. Response time should be within 24 hours.

7. **Validity of tender:** Tender submitted shall remain valid at least for three months from the date of opening the tender. Validity beyond four months from the date of opening of the tender three months from the date of opening of the tender shall be by mutual consent.

8. The tender should accompany a compliance chart.

9. The rate should be inclusive of all taxes, transportation etc. Nothing extra will be paid in addition to the quoted rate.

10. The model number, make, and a printed literature of the product shall submit positively.

11. Proposed delivery schedule should be mentioned clearly.

12. Manufacturers/exclusive distributors/vendors should have history of supplying this type of instrument to this or other Scientific Organization.

13. Authorized Dealership Certificate is must in case of principal manufacturing company is not quoting directly.

14. Guarantee certificate, users manuals etc. are to be handed over to the user after successful commissioning of the system.

15. In the event of date being declared a closed holiday for purchaser's office, the due date for submission of bids and opening of technical bids will be the following working day at the appointed time.

16. In case of any dispute, the decision of the Institute authority shall be final and binding on the bidders.

17. For any clarification regarding technical specifications etc. please send your queries to "Prof. Partha Chaudhuri" erpc@iacs.res.in.

18. The Institute reserves the right to reject any or all of the tenders received without assigning any reason thereof.

Registrar