

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

TENDER NOTICE NO.SERIIUS/PC/13/15 dated 25.03.2013

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.	SERIIUS/PC/13/15 dated 25.03.2013
Last date and time of submitting tender	16 <sup>th</sup> April, 2013 at 11.00 AM
Pre-bid meeting	To discuss Technical specifications on 3 <sup>rd</sup> April, 2013 at 3.00 PM
Date and time for opening tender	16 <sup>th</sup> April, 2013 at 12.00 Noon
Place of opening tender	S. N. Bose Hall, IACS, Kolkata
Contact	Email: <a href="mailto:erpc@iacs.res.in">erpc@iacs.res.in</a> Ph. : +91-33-2473-4971 (ext. 1602)

## Technical Specifications:

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.

The system must be capable to perform full area Thermal imprinting. As options the system must also have the capability to conduct UV imprint methods as well as the simultaneous combination of thermal and UV.

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.

The system shall have computerized control and graphical user interface 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 (3 inch Ø)
Substrate size	From 10 mm x 10 mm up to 3 inch in diameter (~77 mm)
Stamper size	From 10 mm x 10 mm up to 3 inch in diameter (~77 mm)
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
Maximum Residual Layer Thickness	< 15 nm ( <i>recipe for Complete removal of residual layer should be given</i> )
Imprint pressure	10 - 70 bar ( <i>with Low Pressure Module minimum pressure is 1 bar</i> )
Temperature (min)	Ambient temperature
Temperature (max)	250°C ( <i>200°C with optional UV Module installed</i> )
Cooling method	Air cooling ( <i>water cooling available as option</i> )
Product safety	The system should bear certification from proper safety standard agency

*Option (available as add-on options)*

To allow for extended usability and increased system flexibility, the supplier must be able to provide the following add-on options as on-site upgrades for the system in the future:

- UV module to allow UV curable imprint processes
- The supplier must also offer options that make it possible to simultaneously apply both thermal and UV imprint processes, as well as imprint with intermediate polymer stamps.
- 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 or Bank guarantee from any Nationalised bank in India of an amount of 5% 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. For payment option as in the clause **3(a)** in **General Instructions** below, no Performance Security money will be required to be deposited.

***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, 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 visit the website ([www.iacs.res.in/tender](http://www.iacs.res.in/tender)) for any amendment.

**3. Payment options:**

**(a) payment of 95% of order value will be released on shipment and remaining 5% after installation and commissioning and completion of all contractual obligations of the supplier including warranty obligations**  
**OR**

**(b) 100% payment will be released on shipment subject to submission of 5% of the order value as "Performance Security" which will be released after installation and commissioning and completion of all contractual obligations of the supplier including warranty obligations.**

4. Warranty: Minimum 1 year.

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 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](mailto: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**