



Date:	20/09/2022
Quotation due date:	03/10/2022

To Whom It May Concern

Limited Tender for a RF Ion Source (Max 4 cm dia.) complete package

This is an RFQ (Request for Quote) for procurement of a RF **Ion source (Max 4 cm dia.)** to fix with existing dual ion beam sputtering system at Functional Thin Films Laboratory, CeNSE, IISc Bangalore. This comes under semiconducting equipment.

CeNSE is a multidisciplinary research department at IISc that houses a 14,000 sq. ft. cleanroom and characterization facility used by 50 faculty members from various disciplines at IISc. Consequently, any tool in CeNSE receives significant exposure to scientific community at IISc and beyond. The vendors are requested to factor in the value of this exposure in to their quotes.

<http://nnfc.cense.iisc.ac.in/>

<http://www.mncf.cense.iisc.ac.in/>

<https://www.inup.cense.iisc.ac.in/>

Procedure

1. Vendors will be required to submit a technical proposal and a commercial proposal in **two separate sealed envelopes**. Only vendors who meet the technical requirement will be considered for the commercial negotiation.
2. **The deadline for submission of proposals is the Date and Time Indian Standard Time.** Proposals should arrive at the Centre for Nano Science and Engineering (CeNSE), Indian Institute of Science, Bangalore 560012, India, by the above deadline.
3. The decision of purchase committee will be final.
4. The technical proposal should contain a compliance table with 5 columns. The first column must list the technical requirements, in the order that they are given in the technical configuration below. The second column should describe your compliance in a “Yes” or “No” response. If “No” the third column should provide the extent of the deviation (please provide quantitative responses). The fourth column



- should state the reasons for the deviation, if any. The fourth column can be used to compare your tool with that of your competitors or provide details as requested in the technical requirements table below.
5. Any additional capabilities or technical details, that you would like to bring to the attention of the purchase committee, can be listed at the end of the technical table.
 6. Vendors are encouraged to highlight the advantages of their tools over comparable tools from the competitors.
 7. If multiple systems can fulfill the requirements, vendors can submit multiple bids.
 8. In the commercial bid, please provide itemized cost of the system and required accessories, such as software, power supply, etc.
 9. As an option, please provide itemized cost for any suggested accessories/add-ons that may enhance the usability, capability, accuracy or reliability of the tool. Vendors are encouraged to quote for as many add-ons as their tool portfolio permits.
 10. The quotes should include all charges for door delivery.
 11. Please indicate the warranty provided with the tool. **Warrant of 2 years** are preferred.
 12. Provide itemized cost for required spares for 2 years of operation. For sake of this calculation, the vendor may assume active tool usage of 20 hours/ week. This number will be used to estimate the life cycle cost of the tool.
 13. If maintenance requires, as an additional option, provide cost of an annual maintenance contract (AMC) for 3 years, post warranty. The **AMC must cover 2 scheduled and 2 emergency visits per year**. The AMC cost must also include an itemized list of spares that are essential for the scheduled visits.
 14. Also include CIP/CIF charges, customs duty (exemptions, if any) and IGST charges.
 15. The **RFQ must include references of minimum 5 previous installations, preferable in India**. Please provide the names and contact addresses of the referees, so that the committee can contact them independently.
 16. Any technical questions can be directed to Prof. Pavan Nukala, CeNSE, IISc., Bengaluru (pnukala@iisc.ac.in) and Prof. Srinivasan Raghavan, CeNSE, IISc., Bengaluru (sraghavan@iisc.ac.in).

Technical Requirement

I. RF Ion source (Max 4 cm dia.) complete package to fix with existing dual ion beam sputtering system at Functional Thin Films Laboratory, CeNSE, IISc Bangalore.		
1.	Beam current (mA)	Max. 100
2.	Beam energy (eV)	50 - 1500
3.	Beam size (cm)	4 (Dia.)
4.	Beam type	Collimated
5.	Gases	Ar, O ₂ , N ₂ , other reactive gases
6.	Typical Flow (sccm)	Max. 10
7.	Typical pressure (mbar) – Operating Range	5.5×10^{-5} to 1×10^{-3}
8.	Length (cm)	Max 15
9.	Width (cm)	Max 14
10.	Neutralizer	Filament/Hallow Cathode
11.	Mount Type	Flange – ISO CF 200 (8")
12.	Warranty	<ul style="list-style-type: none"> • 12 months from the date of commissioning and acceptance of equipment.
13.	Spares and accessories	<ul style="list-style-type: none"> • Grids, Ceramic isolators, Filaments, tool kits for servicing and, necessary cords and cables.
14.	Training and demonstration	<ul style="list-style-type: none"> • Training on usage of the machine (hardware and software) must be demonstrated by the successful bidder at bidder's cost to the end users at IISc, Bangalore.
15.	Eligibility Criteria	<ul style="list-style-type: none"> • The bidder must have supplied minimum three RF ion sources to IITs, IISERs, NITs, Government Institutes, Reputed Process



		<p>Industries/ Research Institutes preferably in India. Please provide the names and contact addresses of the referees, so that the committee can contact them independently.</p> <ul style="list-style-type: none">• Equipment offered must be a model from the current serial production range of the manufacturer. Customized or One-off Manufactured Model will not be accepted. Offer should be supported with printed catalogue & depiction on company website. System Catalogue should be produced with the Technical Bid.• PO copies to be submitted as proof.• Manufacturers are requested to provide ISO certificate and Declaration on CE Conformity with minimum 3 valid directives. (The certificates need to be uploaded/submitted in the Statutory Cover.)• CE Certification must be provided for the proposed system. The CE certificate should be provided with the Unit.• Supplier should support the user with all the spares for a minimum period of 10 years.• Details of experienced service engineer including contact detail should be provided in tender document. Supplier should mention the details of service setup and man powers who are responsible for after sales support. Response time should be within 24 hrs.• Up to date sales tax clearance certificate.
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Thanking you,

Pavan Nukala