

**INDIAN INSTITUTE OF TECHNOLOGY DELHI  
HAUZ KHAS NEW DELHI**

Date: 1/12/11

**Notice Inviting Quotation**

Quotations are invited for the purchase of Fully Automated **Electrophoresis System** for quantitative and qualitative analysis of DNA, RNA and protein, for the Department of Textile Technology. Interested suppliers are required to submit their quotations as per the specifications given below. The sealed Quotations are to be submitted in two Separate envelopes;

**A - for Technical Quote (Specifications) &  
B - for Financial Quote  
(For details, see Annexure I)**

Both these envelopes should be further enclosed in an outer envelope, which should also be sealed and addressed to, clearly mentioning on top right corner of the envelope “**Fully Automated Electrophoresis System for quantitative and qualitative analysis of DNA, RNA and protein.**”

**Dr. Sourabh Ghosh  
Assistant Professor  
Department of Textile Technology  
IIT, Hauz Khas, New Delhi 110016**

The quotations should reach the above office of **by 11.00 AM on 12/12/2011**. If needed, the suppliers may be asked to make a technical presentation before the committee.

Institute reserves the right to accept or reject any of the offers without assigning any reasons.

**Specifications of Fully Automated On chip Electrophoresis System for quantitative and qualitative analysis of DNA, RNA and protein**

S. No.	Specification	Essential requirement
1.	<b>System for DNA/RNA/Protein analysis</b>	The system should be an automated analyzer based on microfluidics, capable to run on chip electrophoresis as a part of concentration measurement and quality control for Proteins, DNA, and RNA. System shall have RNA quality check with RNA Integrity Number (RIN), offering total RNA, mRNA and Small RNA's data including RIN algorithm
2.	<b>Vortexer</b>	Should ensure homogenous mixing of sample and buffer on chip
3.	<b>Dynamic Range</b>	Protein- Dynamic range of 2.5-2000 µg/ml with protein sizing upto 260 kD RNA- 100- 5000 pg/µl.
4.	<b>Resolution and sensitivity</b>	Should be comparable to mini-gels for Proteins. Protein sensitivity should be up to 1 pg/ µl level of labeled protein on chip and Comparable to Coomassie staining Or Silver stain sensitivity of labeled protein RNA- 1 pg/ µl level
5.	<b>Run time</b>	Less than 30 min for 10-12 samples

6.	<b>Qualitative analysis and quantitation of total RNA and m RNA &amp; DNA</b>	Separate and detect total DNA, RNA or m RNA at nanogram and picogram levels. The data of biochemical analysis should be in digital form for convenient analysis, archiving and storage.
7.	<b>Monitor and softwares for data analysis</b>	System should offer various data-display options as gel view, electropherograms and tables The system software must have flexibility to compare samples across multiple chips. Should be able to provide automatic calculation to give information such as size, yield, concentration, % of total sample etc. Should be able to analyze the data for single peak as well as multiple peaks Real time display of data acquisition Multiple chip comparison function should also be present to identify the differences & similarities between multiple run Color coded result flagging tool in the software shall be available
8.	<b>Warranty</b>	Minimum 2 years
	<b>Consumables</b>	All consumables, started kits for analyzing at least 100 RNA samples should be provided free of cost
	<b>User list</b>	The system must have more than 50 installations in India. User List may kindly be enclosed.
		The system must have capability to be upgraded, if required, validation services (IQ and OQ) and 21 CFR Part 11 compliance.

*Sourabh Ghosh*

Dr Sourabh Ghosh,  
Department of Textile Technology

On behalf of Prof PK Roychoudhury, DBEB

**Annexure I**

**Envelope A: Technical Quote: The following details are to be enclosed** (*Mention clearly on this envelope – Technical Quote*)

1. Technical brochures mentioning all details with complete address of the principals.
2. A compliance chart based on the specifications as per the NIQ.
3. Any optional equipment / accessory / spares / consumables advised to be included separately.
4. Installation requirements should be provided.
5. List and addresses of organizations where the equipment has been supplied in last 3 years in India.

6. Details of other equipment supplied to IIT Delhi specifying the Department/ centre / lab to which the equipment was supplied. Also mention if the equipment is being maintained by your organization.
7. Address of the technical office, in Delhi (India), with telephone and FAX numbers. Kindly clarify the type of support available in India.
8. If quote is for imported equipment supplied through Indian Agent, Sole Agency-ship certificate on the letterhead of the principal company, if quotation is from an Indian Agent.
9. Proprietary Item Certificate from the principals, if applicable.

**Envelope B: Financial Quote: The following details are to be enclosed/ ensured.**  
*(Mention clearly on this envelope – Financial Quote)*

1. The quotations for the equipment in foreign exchange, if it is to be imported. The cost of spares and optional equipment/accessories/ consumables to be quoted separately. **The cost should be based on F.O.B., New Delhi.** If equipment is indigenous, the quote should be in INR and all taxes applicable should be mentioned clearly.
2. Institute makes payment after delivery and successful installation. In case the payment terms are different, it should be mentioned clearly. If equipment is to be imported, the address of the company in whose name the LC is to be opened should be stated.
3. The comprehensive Warranty period.
4. The details of the AMC after the warranty period.
5. Cost for Installation and training at site, if applicable.
6. Validity of the quote should be minimum 30 days.
7. The delivery period to be clearly specified.