

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

**Notice Inviting Quotation**

Quotations are invited for the purchase of Differential Scanning Calorimeter (DSC) (one in number) at the Department of Textile Technology. Interested manufacturers / 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 of the envelope "Quotations for DSC"

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

The quotations should reach the above office **by 5.00PM on 27/12/2013**. 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 DSC (One in number)

S. No.	Specification	Essential requirement
1.	DSC Type	<ul style="list-style-type: none"> <li>• Modulated Differential Scanning Calorimeter</li> </ul>
2.	Measurement Technology	<ul style="list-style-type: none"> <li>• Heat flux measurement</li> </ul>
3.	Software	<ul style="list-style-type: none"> <li>• Suitable for MDSC and evaluation of possible thermal transitions</li> <li>• Online data acquisition</li> <li>• Temperature modulated software for effective separation of thermodynamic and kinetic processes including analysis of overlapping peaks</li> </ul>
4.	DSC Cell	<ul style="list-style-type: none"> <li>• Fixed position</li> </ul>
5.	Temperature range	<ul style="list-style-type: none"> <li>• -85°C to 500°C or broader</li> </ul>
6.	Cooling system	<ul style="list-style-type: none"> <li>• Compatible cooling system with attachment to DSC unit</li> </ul>
7.	Gas Flow	<ul style="list-style-type: none"> <li>• Mass flow controller (range 5 ml/min to 200 ml/min) for gas switching</li> </ul>
8.	Temperature accuracy	<ul style="list-style-type: none"> <li>• <math>\pm 0.2^{\circ}\text{C}</math></li> </ul>
9.	Temperature precision	<ul style="list-style-type: none"> <li>• <math>\pm 0.02^{\circ}\text{C}</math></li> </ul>
10.	Controlled heating and cooling rates	<ul style="list-style-type: none"> <li>• 0.1 to 200°C/min</li> </ul>
11.	Calorimetric sensitivity	<ul style="list-style-type: none"> <li>• 0.2<math>\mu\text{W}</math></li> </ul>
12.	Calorimetric reproducibility	<ul style="list-style-type: none"> <li>• <math>\pm 1\%</math></li> </ul>
13.	Calorimetric precision	<ul style="list-style-type: none"> <li>• <math>\pm 0.1\%</math></li> </ul>
14.	Baseline curvature	<ul style="list-style-type: none"> <li>• <math>&lt; 0.15 \mu\text{W}</math></li> </ul>
15.	Baseline reproducibility	<ul style="list-style-type: none"> <li>• <math>&lt; 0.04 \mu\text{W}</math></li> </ul>
16.	Dynamic range	<ul style="list-style-type: none"> <li>• <math>\pm 350 \text{ mW}</math></li> </ul>
17.	Power requirement	<ul style="list-style-type: none"> <li>• 100-240 V 50/60 Hz</li> </ul>
18.	Autosampler	<ul style="list-style-type: none"> <li>• 32 position or higher (maximum 100)</li> </ul>

**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 advised to be included separately.
4. Installation requirements including water supply, UPS, etc.
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 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.
10. Copy of the certificate of a registered importer from Ministry of Commerce or Finance if the quotation is being submitted by an Indian agent.

**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 to be quoted separately. The cost should be quoted based on **FOB and CIF, Textile Department, IIT Delhi, 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 90 days.
7. The delivery period to be clearly specified.