

INDIAN INSTITUTE OF TECHNOLOGY DELHI
HAUZ KHAS, NEW DELHI-110016 (INDIA)

NIQ No. IITD/LCL/ALS/2014/01

DATE: 07-02-2014
DUE DATE: 21-02-2014

NOTICE INVITING QUOTATION

Quotations are invited for the purchase of **Programmable Precision Temperature Controller with accessories** as per specification given below. Quotations should reach latest by 21 Feb 2014, 17:00 HRS. Quotations are solicited from only authorized dealers with proven past record of sales, supply and after sales service.

Item	Quantity	Description
Programmable Precision Temperature Controller with accessories	1	<p><u>Programmable Precision Temperature Controller from -190°C to 400°C</u></p> <ul style="list-style-type: none">• Temperature Resolution and Precision (0.001°C),• Dual PID Outputs for Both Heating and Cooling, USB2.0 Communication Port with software for computer control,• Fully Programmable without Host Computer, 230 V input voltage <p><u>CONSISTING OF;</u></p> <p>1. <u>Hot and Cold Stages</u></p> <ul style="list-style-type: none">• Compatible with temperature controller for optical thermal microscopy measurements in liquid crystals with temperature stability of $\leq 0.01^\circ\text{C}$,• Maximum Heating Rate $\geq 100^\circ\text{C}$ per minute,• Minimum Heating Rate $\leq 0.1^\circ\text{C}$ per hour,• Inner Lid for Improved Sample Temperature Uniformity,• Gas Purge Sample Chamber, Variable Sample Chamber Height (up to 12mm),• Large Viewing Aperture (up to 10mm),• Sample viewing aperture for transmitted light = 2mm diameter,• Side loading for faster sample exchange,• Precision X-Y Micro-positioner with adaptors 10 μm resolution for XY sample manipulation compatible with hot/cold stage,

		<ul style="list-style-type: none"> • Mounting adaptor to mount hot stage on Olympus upright microscope (BX51), • Include extra cover slips. <p>2. <u>Liquid nitrogen cooling system</u></p> <ul style="list-style-type: none"> • Capable of cooling Hot and Cold Stages, • Down to -140° with suitable pump (230V) and Dewar, • Pump should be compatible with the temperature controller, <p>3. <u>Water circulation pump</u></p> <ul style="list-style-type: none"> • Water circulation pump (230V AC) PID controlled by temperature controller for frame cooling with suitable inlet and outlet pipes for the heating/cooling stage. <p>4. <u>Liquid crystal sample cell holder</u></p> <ul style="list-style-type: none"> • Liquid crystal sample cell holder for electrical field application for nonstandard cells compatible with the above hot/cold stage with dual BNC connector, • Liquid crystal homogenous cell, anti-parallel alignment layer with Cell gap =4.8 microns and 7.7 microns.
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Quotations may please be sent to the address mentioned below in a sealed cover with our NIQ reference marked on the top. The sealed cover should contain separate quotations for the ‘technical bid’ and the ‘commercial bid’ in two separate and clearly marked envelopes. Please include a certificate of compliance of the quoted items, with reference to the NIQ.

[Dr. Alok Sinha; Department of Physics; IIT Delhi, Hauz Khas; New Delhi - 110016 India; E-mail: aloka@physics.iitd.ac.in]

TERMS & CONDITIONS COVERING SUBMISSION OF QUOTATIONS

The quotation must contain the following details, otherwise quotation cannot be considered.

- I. The quote must contain all the items, and individually priced.
- II. The technical bid must contain all the required specifications, drawings, graph (transmission/reflection/response spectra of components if any) etc.

- III. Along with the technical bid, please enclose support documents related to previous sale of the above items(s) within India, proprietary certificate (if necessary) from the manufacturer.
- IV. Please quote the F.O.B. price, and indicate separately the C.I.F. charges (Air Freight), Delhi Airports.
- V. No correspondence regarding acceptance/rejection of a quotation will be entertained.
- VI. Special discount/rebate wherever admissible, keeping in view that the supplies are being made for Educational purpose in respect of a public institution, may please be indicated in the offer.
- VII. The institute reserves the right of acceptance or rejection of any or all quotations.
- VIII. Necessary information in respect of the Comprehensive Warranty, Delivery Period, and Installation & Demonstration at our premises are to be included.

LAST DATE: Feb 21, 2014 by 5.00 PM.