Indian Institute of Technology-Delhi
Department of Chemical Engineering

Date: 06 Dec 2012 **Ref: IITD/CHE/VVB/2012-13/2**

Department of Chemical Engineering invites quotations for "LED fiber optic illuminator" with the following specifications.

LED fiber optic illuminator (Qty: 1)

- LED fiber optic illuminator that should be able to provide continuous (flicker free) "QUAD" broad spectrum white light for high speed imaging (to be performed using CCD camera) up to 3000 frames/s.
- The unit should provide cold illumination and should not produce excess heat.
- LED Fiber optic illuminator should have manual intensity controller from 0 -100%, output power of 4300 Lumens, light wavelength (in nm) of 6500K White, radiant flux of 9800 mW, LED lifetime of 60000 hours.

Required accessories for the aforementioned LED Fiber optic illuminator unit

- **Single flexible fiber optic light guide (1 Qty)**
  Single flexible fiber optic light guide with 0.5" diameter, 36"length, fiber diameter 50 µm, numerical aperture of 0.55 and minimum bend radius of 50.8 mm.
- **Adapter to connect light guide to the illuminator unit (1 Qty)**
  Suitable adapter required to connect one end of the aforementioned single flexible fiber optic light guide to the LED fiber optic illuminator unit.
- **Adapter to connect single flexible fiber optic light guide to focusing assembly (1 Qty)**
  Suitable adapter required to connect other end of the aforementioned single flexible fiber optic light guide to the focusing assembly described below.
- **Focusing assembly with C-mount (to reduce the divergence of light from fiber optic light guide) (1 Qty)**
  Focal length of 40 mm, beam divergence 10.8°, spot size at 6" working distance of 0.9", outer diameter of 30 mm, total length of 68 mm, C-mount.
- **C-mount lens mount (which will fit into focusing assembly and hold the holographic diffusers) (1 Qty)**
  Should be able to fit into the aforementioned focusing assembly, outer diameter of 30 mm, diameter of compatible optics should be 23 – 25.4 mm, thickness of compatible optics 1.0 - 3.75 mm, clear aperture (CA) should be 22 mm, extension length of 16.3 mm.
- **Circular holographic diffusers kit (to control the diffuse area of illumination and increase the transmission efficiency) (1 Qty)**
  Outer diameter of 25 mm, kit should include the diffusers with diffusing angles of 30, 40, 60 and 80 degrees. Should fit into the aforementioned C-mount thin lens mount.
- **Articulating Arm Package for C-Mount Focusing Lenses**
- **Bench plate (6" x 6") with sorbothane bumpers (package of 4)**

Warranty: 3 year comprehensive onsite warranty (inclusive of parts and labor costs)

Scope of Work:

The vendor will be responsible for installation of LED fiber optic illuminator system and their required accessories. The vendor shall also be responsible for configuring the LED fiber optic illuminator hardware and their accessories and necessary cables such that the LED fiber optic illuminator gives uniform illumination.

Terms and conditions

- **The supplier must be an authorized dealer/distributor of the principal/manufacturer and should furnish the authorization certificate from the principal/manufacturer. Quotations without authorization certificate will be rejected.**
- The technical and commercial bids must be submitted in separate sealed envelopes subscribed with "**Technical Bid"** or "**Commercial Bid"** as appropriate. Both the technical and the commercial bids should be enclosed in an envelope subscribed **"Quotation for LED Fiberoptic illuminator system"** and should be submitted to the undersigned.
- Quotations should include all the terms and conditions i.e. all applicable taxes, freight, insurance, installation and other miscellaneous chargers, terms of warranty and delivery schedule.
- In case import (foreign OEM), CIF New Delhi price should be quoted in appropriate currency with details of payment mode/bank etc.
- Quotations must be valid for at least three months from the date of NIQ.
- A special discount/rebate wherever admissible keeping in view that supplies are being made for educational purpose in respect of public institution of national importance may please be indicated.
- The institute reserves right to accept or reject any or all quotations without stating the reasons thereof.

The quotations should reach undersigned latest by **5.00 pm on 24th December 2012.**

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