

**Indian Institute of Technology, Kanpur  
Department of Aerospace Engineering**

Inquiry no: AE/KP/2013/07

October 14, 2013

**Date of Closing: October 21, 2013**

**Subject:** Purchase of Dual Pulsed 200 mJ Nd-YAG laser system along with articulated light arm and light sheet optics for PIV application

Quotation for **the above items** are requested in a sealed envelope. The quotation should reach **on or before October 21, 2013** to the address given below.

**Technical specification for the laser system:**

Dual pulsed Nd-YAG laser with mounts and base, 532nm, 200 mJ/Pulse, 0-15 Hz, water cooled along with continuous adjustable light sheet optics with focal length between 0.3 to 3.5m, plus cylindrical lenses of -25mm & -15mm (equivalent divergence angle 14 & 25 degrees respectively), plus an 1.8m articulated arm along with optical bed and alignment accessories, capable to produce and transmit thin light sheet within the wind tunnel test sections. The laser system should be compatible and integrated with our existing stereo-PIV system supplied by TSI. The following are the additional specification of the laser source.

1. Pulse to pulse energy stability < 2% RMS
2. Energy drift over 8 hrs  $\leq$  10%
3. Pulse width  $\leq$  8 ns
4. Near field beam diameter < 7mm
5. Beam divergence < 4 mrad
6. Flash lamps life time  $\geq$  50 million shots
7. Spectral purity > 98%
8. Weight: laser head ~ 10 kg, Power supply ~ 20 kg

**Terms and conditions:**

- Quotation should have a validity of minimum of 60 days
- The equipment should be provided with a warranty of at least two year
- The delivery time frame should be specifically indicated
- Quotation should also include CIF New Delhi

**Note:** Since the equipments are to be used for educational purpose, i.e. for teaching and research purposes, maximum educational discounts should be applied.

**Address for the quotation:**

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