### **DEPARTMENT OF APPLIED MECHANICS**

#### **INDIAN INSTITUTE OF TECHNOLOGY, DELHI**

25<sup>th</sup> Oct. 2012

#### **NOTICE INVITING QUOTATIONS**

## Subject: <u>Purchase of "Digital Frame Grabber and Synchronization Board for</u> <u>LaVision PIV system</u>"

Sealed quotations in two-bid (Technical and Commercial in separate sealed *envelopes*) are invited for the purchase of a <u>"Digital Frame Grabber and</u> <u>Synchronization Board for LaVision PIV system</u>" as per the details given below, by <u>9<sup>th</sup> Nov. 2012</u>. Your quotation should be superscribed "Technical/Commercial Quotation for Digital Frame Grabber and Synchronization Board for LaVision PIV system".

### **SPECIFICATIONS:**

#### A] Synchronization Board: (Qty.: 01)

Programmable Timing Unit (PTU) for synchronization of LaVision's Imaging System with following specifications:

Time resolution	:	10ns	
Frequency generator range	:	0.01Hz to 1.0MHz	
Sequencer line	:	16	
Minimum number of cameras	:	04	
to control			
Reference times	:	1,4,8	
Software support	:	DaVis software v7.2	
Output	:	TTL compatible	
Computer Interfacing	:	PCI or USB (Quote separately)	
Application	:	2D/3D FlowMaster systems with DP Laser,	
		PIV, LIF.	
Preferable make	:	LaVision GmbH	

**B] Digital frame grabber**, camera link for Imager pro X 4M CCD cameras (Qty.: 02)

Preferable make	:	LaVision GmbH
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# Note : Above items should 100% compatible with existing PIV system supplied by M/s LaVision GmbH in our laboratory.

(Existing 3–D FlowMaster stereoscopic PIV System consisting of: SPZ TRL 400 Nd:YAG double-cavity laser (pulse energy: 400mJ at wavelength 532 nm repetition rate up to 15 Hz.), Make : Litron.) with Imager pro X 4M CCD cameras.)

## Other Terms & Conditions:

- Validity of the quotation required : 90 days
- Warranty : 01 year (also quote separately for extended warranty for 2 years)
- **Payment** : 100% on commissioning (preferred)
- On-site installation, commissioning and staff training expenses are to be borne by the supplier.
- Please quote the price of the above item on Ex-works / FOB (*Freight on Board*) basis either in USD, EURO or GBP currency. IIT Delhi will bear the actual Freight charges as per IATA (International Air Transport Association) rate and additional insurance charges.
- If the above item is a proprietary item then a "<u>**Proprietary Certificate**</u>" should be enclosed with technical bid.
- The bidder must be a reputed OEM or an authorized local agent.
- If there is any Indian agent associated with the foreign supplier, then an appropriate "<u>Letter of Authorization</u>" certificate has to be provided with the technical bid of the quotation.
- Further, if the Indian agent quotes for the above mentioned item on behalf of the foreign supplier, then the Indian agent should be enlisted with the Department of Expenditure, Ministry of Finance (Government of India). Copy of the supporting documents has to be enclosed with the technical bid of the quotation. Further, in the letter it must be clearly stated from the principles that the bidder is an authorized agent.
- Quotation for the above items in a sealed cover should be submitted to *"Prof. Murali R. Cholemari, Applied Mechanics Department, Indian Institute of Technology Delhi, Hauz Khas, New Delhi – 110 016*" by 9<sup>th</sup> Nov. 2012.
- IIT reserves the right to reject any or all the quotations without assigning any reason.

S. V. Veraralt

(Srinivas V. Veeravalli)