

Indian Institute of Technology Kanpur Department of Mechanical Engineering

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Enquiry No.: IITKME/BB/2018/Modal Opening Date: 01/03/2018 Closing Date: 28/03/2018

NOTICE INVITING QUOTATION

Sealed Quotations are invited for Modal Analysis software with option for extracting modal parameters from experimental vibration measurements (FRFs) to identify the frequency, damping & mode shape of a structure from experimental data.

The features of the required software are:

- Option to obtain Modal parameters imported & exported using the Universal File Format (UFF), UNV.
- Software must be compatible with our pre-existing 3D Laser Doppler Vibrometer (Polytec) System.
- Normal Mode Indicator Function (NMIF), Power Mode Indicator Function (PMIF)
- Frequency & damping curve fitting, Residue curve fitting
- Frequency & damping estimates on the Mode Indicator graph
- Curve Fit function-SDOF, MDOF
- FRFs synthesis using the parameters of selected modes
- Modal Assurance Criterion (MAC)
- Shape Difference Indicator
- Shape Difference Indicator (SDI)
- Extracting mass, stiffness, damping matrix
- Multi-Reference Modal Analysis
- Geometry Creation, Import and export
- Mode shapes can be imported from many third party disk files.
- Multi-Reference Complex Mode Indicator Function and or a Multi-Reference Multivariate Mode Indicator Function
- Multi-Reference modal analysis
- Stability diagram, Cluster Diagram, Pole Density Diagram
- Stable Poles diagram
- Shape Complexity Plot
- Complexity plot and CoMAC geometry plot
- Operational Modal Analysis
- CrossMAC with animation of selected mode pairs
- Measurement Validation task is to check the quality of the measurement data prior to performing the modal parameter extraction

General terms and conditions of purchase:

1. All quotation must reach undersigned before or on 28/03/2018 at 15:00 Hrs.

2. Quotation must be valid for 60 days.

3. Delivery period should not be more than 75 days.

4. The supplier must have supplied similar product to any of the IITs or IISc. (details must be submitted for reference).

5. Minimum Warranty of 1 year at least. Longer warranty period preferred.

6. Quotation should carry proper certifications like proprietary certificate, authorization certificate from manufacturer, etc.

7. Maximum educational discount should be offered wherever applicable.

8. Testing and training of the product onsite is mandatory.

9. Mention F.O.R. destination or C.I.F. (New Delhi) prices separately if requires import.

10. The Quote should cover insurance and transport up to Kanpur.

11. Concessional rate of GST (@ 5%) will be applicable with reference to Notification No. 45/2017 Central Tax (Rate) dated 14/11/2017. We will provide relevant certificate for this purpose. On import items for research purpose presently the GST applicable is 0% (Zero). DSIR certificate along with CDEC has to be submitted for availing concession. Vendor should use these GST rates in their quotation.

12. Payment term,

a) For foreign currency through LC.

b) For Rupees payment 90% on delivery & 10% after satisfactory using /working.

c) Advance payment up to 100% against bank guarantee.

13. Please do mention tender number clearly on the envelope.

14. The institute is exempted for payment of Excise duty under notification No. 10/97 & partially custom duty (@5.15%), under notification 51/96 and a road permit will be provided, if applicable. The Concessional Form 'C/D' have been abolished w. e. f. Apr 01, 2007.

15. The indenter reserves the right to withhold placement of final order. The right to reject all or any of the quotations and to split up the requirements or relax any or all of the above conditions without assigning any reason is reserved.

Your early response in this matter would be highly appreciated.

Sincerely,

Dr. Bishakh Bhattacharya Professor Department of Mechanical Engineering Indian Institute of Technology Kanpur, Kanpur- 208016