

## Global tender for “a compact waveguide polishing kit”

Ref: PH/SBM/532/2022-23

Date: 18/10/2022

This is a notice inviting global tenders for the procurement of an “**a compact waveguide polishing kit**” (referred to as equipment or system in this document) that will be utilized for photonic research at IISc Bangalore. The required technical details, including terms and conditions, are provided below. The last date of reaching the quotation to us is mentioned below.

### Specifications:

1. A compact tabletop polisher is required for polishing a wide variety of optical components, i.e., waveguide-based photonic devices.
2. The polisher should come with a universal mechanical holder (i.e., adjustable grippers) capable of holding a variety of component dimensions. This waveguide holder should be mounted on top of a rotating polishing base.
3. Types of components supported: Dielectric material (such as silica glass) with rectangular cross-section, such as optical waveguides, planar light-wave circuits, optical chips
4. Dimension of components:  
Width: 10 mm to 25 mm; Thickness: 0.5 mm to 4 mm; Length  $\geq$ 6 mm
5. Polishing tolerance:  $\pm 0.35$  deg along the edges of the component
6. Polishing angle range: The sample (i.e., optical component) tilt relative to the abrasive plane is required to be adjustable in the range of 0 deg (i.e., Flat). to 45 deg.
7. The polishing process should be controlled via precision linear translation and adjustable pressure application.
8. Polishing motion: Random orbital
9. Polishing time and speed should be adjustable by the user
10. Silicon carbide abrasive polishing films of approximately 4-inch diameter should be included with the system.
11. Grit sizes of the abrasive polishing films: At least 30, 9, 3, 1, 0.3 micron
12. Footprint of the system: not more than 10-inch by 6-inch.
13. Operating voltage, frequency: 220 VAC, 50 Hz
14. The system should be plug & play, maintenance-free.

15. Integration: The vendor/company should provide a complete factory set integrated system. Testing and documentation should be done using the complete system, assembled and integrated in the factory
16. All accessories such as connectors, AC adapters, cables etc. required for the independent operation of the device should be included.
- 17. Include pictures of the exact system being offered**
18. Warranty: 1 year from the date of installation. Quote for extending the warranty period for an additional one (i.e., total of two) years.

**Terms and conditions:**

1. The bid should be submitted in a two-cover system, i.e., technical bid and commercial bid separately in sealed covers. The technical bid should contain all commercial terms and conditions, **except the price**.
2. The technical bid must contain a point-by-point technical compliance document. The technical proposal should contain a compliance table that should describe your compliance in a "yes" or "no" response against each specification. If "no" the second column should mention the extent of the deviation. The third column should state the reason for the deviation, if any. The fourth column can be used to compare your tool with that of your competitors or provide details as requested in the technical requirement table below.
3. In the commercial bid, the price should be inclusive of all discounts.
4. The vendor/company should have a track record of having previously supplied similar equipment in well-known national/international institutes/universities (please furnish details).
5. The vendors quoting should ideally be registered with IISc, and the quote should ideally carry the vendor registration number in the bid.
6. Lead time should be clearly mentioned in the technical and commercial bids.
7. The offer shall be valid at least 90 Days from the date of opening of the commercial bid.
8. The vendor/company should have supplied similar *waveguide polishing kits* in well-known national/international institutes/universities (please furnish the details).

9. The vendor/company should have existence for a minimum of 3 years. (Enclose Company Registration Certificate).
10. The vendor/company must not be blacklisted/banned/suspended or have a record of any service-related dispute with any organization in India or elsewhere.
11. The quotations should be on C.I.P. Bangalore basis (by Air Freight only). Please provide Itemized cost of the system and required accessories. The quotation should mention the terms of delivery, delivery schedule, estimated delivery date, and payment terms.
12. The Institute reserves the right to accept or reject any bid, or to annul the bidding process and reject all bids, at any time prior to the award of contract without thereby incurring any liability of the affected bidder or bidders.
13. Notwithstanding anything specified in this tender document, IISc Bangalore, in its sole discretion, unconditionally and without having to assign any reason, reserves the rights:
  - a. To accept OR reject lowest tender or any other tender or all the tenders.
  - b. To accept any tender in full or in part.
  - c. To reject the tender, offer not confirming to the tender terms.
14. The tender documents can be sent at the following address, and the document should reach us on/before **10 November 2022**.

The Chairman  
Department of Physics  
Indian Institute of Science,  
Bangalore 560012, Karnataka, India  
Email: roopan@iisc.ac.in  
Attention: Seababrata Mukherjee