

SOLID STATE AND STRUCTURAL CHEMISTRY UNIT
Indian Institute of Science, Bangalore

Request for Quote for the procurement of
Time-Correlated Single Photon Counting Electronics
Indian Institute of Science, Bangalore
(Last Date: 4th July 2022)

This is an RFQ (Request for Quote) for *Time-Correlated Single Photon Counting Electronics* in SSCU, IISc Bangalore. India-based as well as global OEMs and their distributors are invited for submitting bids.

Procedure:

1. Vendors will be required to submit a technical proposal and a commercial proposal in **two separate sealed envelopes**. Only vendors who meet the technical requirement will be considered for the commercial negotiation.
2. **The deadline for submission of proposals is 4th July 2022, 5:00 pm Indian Standard Time.** The proposals should arrive as a sealed hardcopy.

The bids should be addressed to:

The Chairman,
Solid State and Structural Chemistry Unit,
Indian Institute of Science,
Bangalore 560012, India.

The sealed bids should be sent to the office of:

Prof. Vivek Tiwari,
Solid State and Structural Chemistry Unit,
Indian Institute of Science,
Bangalore 560012, India.
Office: 08022932336
E-mail: vivektiwari@iisc.ac.in

3. The technical proposal should contain a technical compliance table with 5 columns.
 - a. The first column must list the technical requirements, in the order that they are given in the technical requirement below.
 - b. The second column should provide specifications of the instrument against the requirement (please provide quantitative responses wherever possible).
 - c. The third column should describe your compliance with a “Yes” or “No” only. Ensure that the entries in column 2 and column 3 are consistent.
 - d. The fourth column should **clearly state the reasons/explanations/context** for deviations, if any. Without clear explanation, just stating “Yes” and “No” will not be considered.

- e. The fifth column can contain additional remarks from the OEM. You can use this opportunity to highlight technical features, qualify response of previous columns, or provide additional details.
4. The commercial proposal should have the price of the item. All the accessories, including wiring, adapters and softwares needed for the tool to function as per the technical specification, must be listed in the quotation.
5. As an option, please provide itemized cost for any suggested accessories/add-ons that may enhance the usability, capability, accuracy, or reliability of the tool. Vendors are encouraged to quote for as many add-ons as their tool portfolio permits.
6. The commercial bid must include the price of the item in Indian currency, indicating the following separately:
 - a. equipment price
 - b. CIP-IISc Bangalore shipping
 - c. Total
7. Vendors are encouraged to highlight the advantages of their tools over comparable tools from the competitors.
8. If multiple items can fulfil the requirements, vendors can submit multiple bids.
9. Any questions can be directed to Prof. Vivek Tiwari, Solid State and Structural Chemistry Unit, Indian Institute of Science, Bangalore 560012, India. vivektiwari@iisc.ac.in

Terms and Conditions:

1. Your quotation should clearly indicate the terms of delivery, delivery schedule, entry tax, and payment terms. The quotations should be on CIP-IISc Bangalore basis.
2. The validity period of the quotation should be at least 90 days.
3. The vendor is responsible for the installation of the item at the IISc campus.
4. The RFQ must include references of at least 5 previous installations of quoted part, preferably in India. Please provide the names and contact addresses of the referees so that they can be contacted independently if required. All other things the same, more number of references may be given preference.
5. The vendor should be able to repair and maintain the equipment once it is installed in India. Clarify if periodic (preventive) maintenance can be done by a trained on-site engineer (i.e. IISc employee) or requires a specialist from the OEM. The vendor should have qualified technical service personnel for the equipment based in India and must assure a response time of <24 hours after receiving a service request.
6. If the maintenance can be done by training a IISc employee, please specify the cost of this training, as an additional option. If maintenance must be done by OEM, as an additional option, provide cost of an annual maintenance contract (AMC) for 3 years, post warranty. The AMC must cover 1 scheduled and 1 emergency visit per year. It must also indicate who will service the AMC, an Indian agent, or the OEM. The AMC cost must also include an itemized list of spares that are essential for the scheduled visits.

7. Necessary training to operate the procured item and required literature support should be provided without additional cost.
8. Vendors should undertake to support the item with spares and software bugfixes, if any, for the next 5 years.
9. Please indicate the warranty provided with the tool. No travel claims must be made by vendor for servicing during the warranty/guarantee period.
10. The lead-time for the delivery of the equipment should not be more than 3 months from the date of receipt of our purchase order.
11. 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.
12. Wherever requested in this specifications sheet, data must be supplied along with technical compliance documents. Technical bids without supporting data will be deemed as technically non-compliant.
13. All guaranteed specifications will have to be demonstrated, upon request, in an active installation. Failure to demonstrate any promised specifications will be deemed as technical non-compliance.
14. Printed literature and published papers in support of all compliance to the prescribed specifications may be provided.
15. Technical evaluation by the institute must include demonstration to verify functionalities and capabilities of the item quoted. Any discrepancy between the promised specifications and demonstrated specifications will be deemed as technical non-compliance. If need arises, the vendor must be ready to physically visit IISc for a techno commercial discussion.
16. The technical specifications given below are highly desired. However, we reserve the right to lower technical specifications to obtain a more competitive price.

Technical Requirements:

The item should be research grade *Time-Correlated Single Photon Counting Electronics* Module with following specifications:

1. **Timing to Digital Conversion:**
 - A. electronically adjustable delay or +/-100 ps or larger
 - B. minimum time binning width of 5 ps or lesser
 - C. maximum count rate of greater than 10^6 counts/sec
 - D. maximum possible syncing rate of >76 MHz
 - E. rms precision of 15 picoseconds or better
 - F. histogram mode with >200 ns range possible with best time binning width
 - G. time-tagging mode to be included as an optional accessory
 - H. Count resolution of greater than 12 bits
2. **Channels:** At least 2 independent channels suited for either 1 sync and 1 detector, or 2 detector operations. Both channels should have a constant fraction discriminator (CFD). Two matched signal cables compatible with the module should be included.
3. **PC interface:** USB 2.0 or higher interface, should be compatible with Windows 10 or higher versions of Windows.

4. Software Controllability:

- A. DLL libraries for custom LabView programming to be included
- B. Windows 10 compatible software for data acquisition from the TCSPC module to be included. The software interface should be capable of inputting and displaying measurement parameters, displaying measurement results in the form of graphs, loading and saving data to the host PC.
- C. Hardware controllability for add-ons such as monochromators through the software in point 4B may be preferred.

5. Warranty: Minimum two years from the date of installation.

A DETAILED COMPLIANCE STATEMENT WITH RESPECT TO ABOVE MENTIONED SPECIFICATION SHOULD BE ENCLOSED ALONG WITH THE OFFER.