



जवाहरलाल नेहरू उन्नत वैज्ञानिक अनुसंधान केंद्र  
(विज्ञान एवं प्रौद्योगिकी विभाग, भारत सरकार की स्वायत्त - मान्यता प्राप्त विश्वविद्यालय)

**JAWAHARLAL NEHRU CENTRE FOR ADVANCED SCIENTIFIC RESEARCH**

(An Autonomous Institution under Department of Science & Technology, Govt. of India - A Deemed University)

जक्कूर पोस्ट, बेंगलूर 560 064, कर्नाटका, भारत / Jakkur P.O., Bengaluru - 560 064. Karnataka, INDIA

JNC/PUR/CPMU/TKM/PI2-378/21-22/36/E

October 21, 2021

**NOTICE INVITING TENDER**

Jawaharlal Nehru Centre for Advanced Scientific Research, Jakkur invites sealed tenders in two bids (Technical & Commercial) from qualified and experienced Vendors for **1 No. of Online Gas Chromatography System** as per the terms and conditions below and as broad specifications shown in **ANNEXURE-I**

**TERMS & CONDITIONS:**

1. Any item not specifically mentioned in the technical specification but essential for successful implementation of the system (in the opinion of the bidder) must be brought to our notice and quoted accordingly.
2. At the time of installation, if it is found that some additional items are required to meet the operational requirement of the configuration, but not included in the bidder's original list of deliverables, the bidder shall supply such items to ensure completeness of the configuration at no extra cost.
3. Delivery period should be 4 weeks from the date of Purchase Order. Once delivered to onsite, the installation, commissioning and acceptance period will be within two weeks from the date of delivery of equipment.
4. The successful bidder immediately after the award of the Purchase Order shall prepare a detailed plan of installation as proposed to be followed by placement of the equipment, etc.
5. System Installation and integration of all supplied equipment and software shall be done by the successful bidder. Subcontracting in any form is not allowed.
6. Bidders should clearly specify after sales/service/application support/AMC capabilities. Bid validity should be 60 days.
7. Warranty and support: All supplied Equipment with Accessories – 3 years.
8. Provide all information as regards pre-installation requirements (i.e. room, environment) for system installation.
9. Detailed list of users of the system in India with contact details to be furnished.
10. Bid Security Declaration should be submitted in your Company Letter Head.
11. Performance Security: The successful bidder has to provide 3% Performance Security in the form of Bank Guarantee within 15 days after receiving Purchase Order. Letter of Credit will be established only after receipt of mandatory 3% Performance Security in advance.

  
के. भास्करा राव / K.BHASKARA RAO  
वरिष्ठ भंडार एवं क्रय अधिकारी / SR. STORES & PURCHASE OFFICER  
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12. Performance Bank Guarantee: Successful bidder has to submit 10% PBG valid for three years.
13. Payment terms: 100% Irrevocable Letter of Credit. 90% payment will be affected against documents through bank, balance 10% after installation & acceptance, commissioning and submission of Performance Bank Guarantee for 10% of Purchase Order value valid for three years from the date of installation/commissioning. For local supplies, payment terms are 30 days from the date of supply / acceptance and submission of Performance Bank Guarantee for 10% of Purchase Order value valid for three years from the date of installation/commissioning.
14. Late & delayed quotations will not be considered.
15. As time is the essence of the contract, delivery period mentioned in the Purchase Order should be strictly adhered to. Otherwise the successful bidder will forfeit Security Deposit. If the supplier fails to supply, install and commission the system as per specifications mentioned in the Purchase Order within the due date, the supplier is liable to pay liquidated damage of 0.5% of Purchase Order value per every week of delay subject to a maximum of ten percent beyond the due date. Such money will be deducted from any amount due or which may become due to the supplier. JNCASR reserves the right to cancel the Purchase Order in case the delay is more than ten weeks. Penalties, if any, will be deducted from the Security Deposit. The maximum amount of penalty shall be ten percent. Liquidated damages shall be levied on the Purchase Order value, freight, insurance and duties.
16. The place of Applicable Law / Jurisdiction is Bengaluru, Karnataka, India.
17. Decision of the President, JNCASR will be final.
18. **Shipping Terms:** Price quoted should be on FCA basis for imported items.
19. **Goods & Service Tax:** Please note that JNCASR is eligible for GST Concession under 45/2017 notification and IGST under 47/2017 notification, will issue a certificate to this effect. The prices can be quoted either in foreign denominations or in INR. Exchange rates as on the date of price bid opening will be taken into account for comparison purpose.
20. **Custom Duty:** Please note that JNCASR is eligible for customs duty exemption under 51/96 notification and will issue a certificate to this effect. C.D. Nil at present.
21. **Formats for price-bid:** Corresponding to each part in the technical bid there should be a pricing referring to the Part name in the technical bid and mentioning quantity, unit price and total price. If there are any other charges, they should be also added at the end. All pages have to be serially numbered. References if any to technical bid should be provided along with the exact location (page number, etc). You are required to use the price bid format given by us only for commercial tender.
22. **Warranty Replacements:** Any replacement of defective items during Warranty period is the responsibility of the successful bidder. The expenditure involved like freight charges, customs duty, insurance charges, clearance charges etc. are to be borne by the successful bidder.

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# जवाहरलाल नेहरू उन्नत वैज्ञानिक अनुसंधान केंद्र

(विज्ञान एवं प्रौद्योगिकी विभाग, भारत सरकार की स्वायत्त - मान्यता प्राप्त विश्वविद्यालय)

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23. **Submission of Proposal:** The proposal should be submitted in a sealed two bid system. One containing sealed technical bid and the other one a sealed price bid. The bidder name, the nature of the envelope (either technical bid or price bid) must be clearly mentioned on top of each of the envelope. The sealed proposals must be addressed to Senior Stores & Purchase Officer, JNCASR. The proposals should be submitted at the Stores & Purchase Department, JNCASR.
24. **Evaluation of bids:** Technical bids will be evaluated by JNCASR. Price bids of technically qualified bidders only will be opened on date and time that will be decided by the JNCASR.
25. Public Procurement (preference to “**Make in India**”) order 2017 will be considered as per order No. P-45021/2/2017-PP (BE-II), dated 28.05.2018.

IMPORTANT DATES	
Last date for submission of bids (Two-bid system)	<b>November 10, 2021 up to 3.00 PM</b>
(a) <b>Technical Cover :</b> Technical Specs. Commercial Terms and Conditions, Brochures, Compliance statement EMD & Bill of quantities without Price Information.	
(b) <b>Price bid cover:</b> With complete specs & item wise Rates to be indicated.	
Opening of technical bids :	<b>November 10, 2021 at 4.00 PM</b>
Opening of commercial bids :	<b>Will be informed later</b>

(K. Bhaskara Rao)

Sr. Stores & Purchase Office

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**Tender specifications of online Gas Chromatography**

Gas chromatography	Necessary detectors and accessories to measure H <sub>2</sub> , CO, CO <sub>2</sub> (Balance gas), CH <sub>4</sub> , C <sub>2</sub> H <sub>4</sub> , C <sub>2</sub> H <sub>6</sub> : each at 10 ppm level. Methanol, Ethanol, IPA liquid injection	
Budget	20 lakh INR	
	Item	Description
1	Gas Chromatograph	<ul style="list-style-type: none"> <li>Column Oven can accommodate two columns with maximum temperature range up to 450 degree C with set point resolution of 0.1-degree C.</li> <li>It should support 15 ramps &amp; maximum temperature ramp rate of 100 degree C/min.</li> <li>Cool down of Oven from 400 degree to 50 degree in less than 4.5 minutes.</li> <li>Auto retention time adjustment feature</li> <li>Retention time locking calibrant to be quoted - 25 nos X 2 mL</li> <li>Touch screen display.</li> </ul>
2	Inlet	<ul style="list-style-type: none"> <li>1 no. Split Splitless Injector for split, split less with fully EPC and pressure range upto 100 p.s.i.</li> <li>Maximum temperature should be 400-degree C.</li> </ul>
3	Auto Sampler/Injector	<ul style="list-style-type: none"> <li>Auto sample injection device</li> <li>Software controlled sampler.</li> <li>2 ml vial volume for liquid injection</li> <li>Vial capacity 12 or more.</li> </ul>
4	Flame Ionization Detector (FID) – 1 No	<ul style="list-style-type: none"> <li>Maximum temperature should be 400 degree C or more.</li> <li>minimum detection limit should be as low as 1.4 Pg C/sec or better</li> <li>Data acquisition rate of more than 500 Hz.</li> <li>Flameout detection and re-ignition should be possible.</li> </ul>
5	Thermal conductivity detector – 2 no.	<ul style="list-style-type: none"> <li>Temperature range up to 400°C or above</li> <li>Minimum Detection quantity: 400 pg tridecane/mL with He carrier</li> </ul>

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6	Gas sampling valve	<ul style="list-style-type: none"> <li>• Linear dynamic range: &gt;105 ±5 %</li> <li>• Automated 6- port valve with heating up to 180°C – 1no</li> <li>• 10-port valve with heating up to 180°C – 1no</li> <li>• Heated valve actuator – 3 nos.</li> <li>• 1mL sampling loop – 2 nos.</li> <li>• GAS Sampling loop each one no.0.25cc, 0.5cc, 1cc, 2CC, 5CC and 10 CC.</li> </ul>
7	Software	<ul style="list-style-type: none"> <li>• Original software with license to control GC and data analysis</li> </ul>
8	Accessories	<ul style="list-style-type: none"> <li>• Compatible PC &amp; Printer</li> <li>• Gas Purification panel</li> <li>• Interested vendors can visit and inspect the site and distance from lab to cylinder place.</li> </ul>
9	Consumables	<ul style="list-style-type: none"> <li>• 2mL Screw cap vial &amp; cap with septa- 100 nos.</li> <li>• Septa – 100 nos</li> <li>• Liner – 5 nos.</li> <li>• PLOT column : 60M X0.53mm ID 1nos.</li> <li>• 1.8M, 1/8" , 2mm -Hayesep column – 2nos.</li> <li>• 1Ft, 1/8 mol.sieve 60/80,2mm column – 2no.</li> <li>• 2m, 1/8" 2mm Shincarb – 2no.</li> <li>• Ferrule 0.53mmid column – 20 nos</li> <li>• Septa Non-Stick BTO Inlet 11mm 100 nos</li> <li>• FID Jet, universal fit – 2 nos</li> <li>• Auto injector syringe 10ul – 6nos.</li> <li>• DB-624 30M X 0.32mm id X1,8um – 1no.</li> </ul>
10	Warranty	<ul style="list-style-type: none"> <li>• 3 Year warranty on complete instrument.</li> </ul>
11	Installation and Training	<ul style="list-style-type: none"> <li>• Installation should be done by factory trained engineer, followed by operational training 2 days.</li> </ul>

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