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प्लाज्मा अनुसंधान संस्थान

INSTITUTE FOR PLASMA RESEARCH

परमाणु ऊर्जा विभाग, भारत सरकार का एक सहायता प्राप्त संस्थान



An Aided Institute of Department of Atomic Energy, Government of India

इन्दिरा पुल के पास, भाट, गांधीनगर – 382 428 भारत दूरभाष: (079) 2396 2020/2021/2028 फैक्स: 91-079-23962277

वेब: www.ipr.res.in

NEAR INDIRA BRIDGE, BHAT DIST. GANDHINAGAR - 382 428 (INDIA) Phone: (079) 2396 2000/2026/2332

Fax : 91-079-23962277 Web : <u>www.ipr.res.in</u>

ENQUIRY

ENQUIRY NO : IPR/EQF/18-19/058

Date : 15-05-2018

Due on : 21-06-2018 by 1:00 PM IST

Please send your offer in sealed envelope specifying Enquiry No, Date & Due Date, ALONG WITH your credentials for the following items which we are interested to import directly against Foreign Trade Policy 2015-2020.

Important Note:

Please note that e-mail quotations are not acceptable however you may send your queries (if any) to importpurchase@ipr.res.in

Please ensure your sealed quotation reaches this office not later than above mentioned due date and time.

Kindly go through the following documents properly before quoting which are available on the IPR web portal i.e., http://www.ipr.res.in/documents/tender terms.html / attached herewith.

- 1) Instructions to the bidders & Terms and conditions (refer Form No: IPR-FP-01.V3)
- 2) Bidding format

GST for Goods and Services (IGST/CGST/SGST TAX BENEFITS): Please refer clause no: 14 of Form No: IPR-FP-01.V3

QUOTATION SHOULD BE ADDRESSED TO PURCHASE OFFICER ONLY

Sr No	Description	Quantity
1	Residual Gas Analyzer (RGA) (Quadrupole type) with	1.0 Nos.
	essential Accessories.	

Note: Please quote with complete technical details (Technical

compliance sheet and product data sheet).

Encl: Refer attached sheet for detailed technical specification.

Sd/-

Mr. D. Ramesh Purchase Officer-II

Information to Vendors: We are working towards a single platform for our future requirement. Hence, please refer IPR website i.e, http://www.ipr.res.in/documents/tenderseng.html for our future requirement.

<u>Technical specifications for Residual Gas Analyzer (RGA) (Quadrupole type)</u> with Essential Accessories

- 1. **Quantity**: 1 nos.
- 2. **Mass range** : 1-100 amu
- 3. **Filament type**: Replaceable dual Thoria / Yttria coated Iridium filament
- 4. **Resolution**: Less than or equal to 1 amu
- 5. **Maximum operating pressure**: Greater than or equal to 10^{-4} mbar.
- 6. **Minimum detectable partial pressure**: Less than or equal to 10^{-10} mbar
- 7. **Units of pressure:** mbar/ Pa/ torr or any other (Please mention).
- 8. **Mounting flange**: 35 CF/40 CF
- 9. Bake out temperature (without electronics): Greater than or equal to 200 C
- 10. Ion source parameters (electron energy, emission current, ion energy) should be programmable.
- 11. Electron beam degassing of ion source should be provided.
- 12. Overpressure protection of the filament should be provided.
- 13. Control unit should have visual status indication for filament on/off, power on/off, communication and degas on/off.
- 14. **Serial Interface**: RS-232 /RS-485 should be available. Communication cable of length 3 m or more should be supplied.
- 15. If available, please quote for Ethernet interface with RJ 45 connector also.
- 16. RGA should come with Windows compatible software for Windows 2000 and above environment.
- 17. It should have analog mode, bar graph mode, leak detection, multi trend mode and background subtraction mode.
- 18. Log and linear formats of pressure display should be provided.
- 19. Data export facility to ASCII and other Windows devices should be provided.
- 20. **Input Voltage** : 220 V, 50 Hz
- 21. RGA should come with all interconnecting leads, cables, tool kits and manual.
- 22. Additional Accessories:
 - (a) Spare filament assembly for the RGA: 2 nos.
 - (b) Please quote for all other essential accessories.
- 23. Calibration data for RGA should be supplied. If there is extra cost involved in the calibration and generation of data, then vendor should mention this cost separately.

Acceptance Criteria:

- 1. Vendor should provide calibration certificate for RGA and conformity certificate that complies with the specifications before the delivery of product to get dispatch clearance from IPR.
- 2. The installation and acceptance tests (as per serial Nos. 5, 6, 10, 11, 12, 17, 18, and 19) for the RGA shall be carried out by the vendor's representative at IPR site.

Warranty:

At least one year warranty from the date of installation against all sorts of manufacturing defects, faulty and poor workmanshi

<u>Technical specifications for Residual Gas Analyzer (RGA) (Quadrupole type) with Essential Accessories</u>

S.N	IPR Specification		Vendor's details
Tech	nical Specification	Requirement	
1	Quantity	1 nos.	
2	Mass range	$\leq 1 \times 10^{-3} \mathrm{mbar}$	
3	Filament type	Replaceable dual Thoria / Yttria coated Iridium filament	
4	Resolution	Less than or equal to 1 amu	
5	Maximum operating pressure	Greater than or equal to 10 ⁻⁴ mbar.	
6	Minimum detectable partial pressure	Less than or equal to 10 ⁻¹⁰ mbar	
7	Units of pressure	mbar/ Pa/ torr or any other (Please mention).	
8	Mounting flange	35 CF/40 CF	
9	Bake out temperature (without electronics)	Greater than or equal to 200 C	
10	Ion source parameters (electron energy, emission current, ion energy) should be programmable.	Confirmation required.	
11	Electron beam degassing of ion source should be provided.	Confirmation required.	

12	Control unit should have visual status indication for filament on/off, power on/off, communication and degas on/off.	Confirmation required.		
13	Overpressure protection of the filament should be provided.	Confirmation required.		
14	Serial Interface : RS-232 /RS-485 should be available. Communication cable of length 3 m or more should be supplied.	Confirmation required.		
15	If available, please quote for Ethernet interface with RJ 45 connector also.	Confirmation required.		
16	RGA should come with Windows compatible software for Windows 2000 and above environment.	Confirmation required.		
17	It should have analog mode, bar graph mode, leak detection, multi trend mode and background subtraction mode.	Confirmation required.		
18	Log and linear formats of pressure display should be provided.	Confirmation required.		
19	Data export facility to ASCII and other Windows devices should be provided.	Confirmation required.		
20	Input Voltage: 220 V, 50 Hz	Confirmation required.		
21	RGA should come with all interconnecting leads, cables, tool kits and manual.	Confirmation required.		
22	Additional Accessories: (a) Spare filament assembly for the RGA: 2 nos. (b) Please quote for all other essential accessories.	Confirmation required.		
23	Calibration data for RGA should be supplied. If there is extra cost involved in the calibration and generation of data, then vendor should mention this cost separately.	Confirmation required.		
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Warranty:				
1	At least one year warranty from the date of installation against all sorts of manufacturing defects, faulty and poor workmanship.	Confirmation required.		

Date: Bidder's Sign and Official Stamp