



RAMAKRISHNA MISSION ASHRAMA

(A Branch Centre of Ramakrishna Mission, P.O. Belur Math, Dist. Howrah, W.B. 711202)

Divyayan Krishi Vigyan Kendra

11 & 12, Swami Vishuddhananda Road • Morabadi • Ranchi - 834008 • Jharkhand • India

Tele. : 0651-2551008, 2551970 • Fax : 0651-2552427 • E-mail : ranchi.morabadi@rkmm.org • Website : rkmranchi.org

Ref: KVK/211/ 253 /2024

August 9, 2024

Invitation of sealed Quotation with financial and technical specification for installation, delivery, commissioning of Atomic Absorption Spectrophotometer (AAS) along with other accessories.

Sealed Quotations are invited from reputed Manufacturers/firms/company/dealer for installation, delivery, commissioning of Atomic Absorption Spectrophotometer (AAS) along with Hybrid Vapour Generator, Air Compressor at our KVK, Ranchi campus. The technical specification of the unit are as given below:

A. Absorption Spectrophotometer (AAS)

Sl. No.	Description of Component	Capacity/Qty Material
1	Type	Flame System
2	Light Source	4 Lamps Automatic Turret, Automatic Alignment
3.	Optical System	High Resolution 1800lines/mm grating, True Double Beam Optics
4.	Wavelength Range	180nm ~ 900nm
5.	Accuracy	≤ 0.1nm
6.	Repeatability	±0.02nm
7.	Spectral Bandwidth	0.1,0.2nm,0.4nm,0.7nm,1.4nm,2.0nm(Automatic Switching and alignment
8.	Baseline Stability	≤ ±0.002A/30min (static),≤ ±0.005A/30min(Dynamic)
9.	Absorbance Range	0 ~ 4 A
10.	Detector	Photomultiplier Tube (PMT)
11.	Background Correction	High Speed Self-reversal (BGC-SR) method: High Speed D2 lamp method (BGD-D2)
12.	Burner Head	Titanium alloy combustion head, 50&100mm
13.	Atomization Chamber	Polyphenylene Sulphide spray chamber
14.	Nebulizer	Adjustable nebulizer (Platinum capillary)
15.	Detection Limit	0.7µg/ml
16.	Precision	RSD≤0.5%
17.	Ignition Type	Microcomputer control, Automatic ignition
18.	Interface	Computer and USB interface communication

- Donations are exempted from Income Tax under Section 80-G of the Income Tax Act 1961.
- All correspondence are to be addressed to the Sactetary, Ramakrishna Mission Ashrama.

'Arise, Awake, & Stop Not Till The Goal Is Reached" _Swami Vivekananda



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- | | |
|--------------------|---|
| 19. Software | PC communication software to control AAS, Data Processing and analysis. |
| 20. Sampler System | Auto |
| 21. Injection Pump | Double equipped with special cleaning pump |

B. Hybrid Vapour Generator

1. It should help to detect the low temperature elements such as Hg, As, Pb etc.
2. It should be highly automatic
3. Sensitivity $\leq 1\text{ng/ml}/1\%A$
4. Measurement Time 25-35 Seconds

C. Oil-Free Air Compressor

1. Air Flow 118 L/min
2. Speed 1400RPM
3. Max. Pressure 8 Bar
4. Restart Pressure < 5 Bar
5. Tank Capacity 24 Liter
6. Noise Level 52dB

D. Recirculating Water Chiller

1. Cooling Mode Compressor Cooling
2. Temperature Controller PID Controller
3. Temperature Range 5°C to 35°C
4. Cooling Capacity 1300W @ 25°C
5. Pump Pressure ≤ 1.3 Bar
6. Pump Flow ≤ 15 Liter/min
7. Tank Volume 8 Liter

E. Lamps for element analysis

1. 11 (Eleven Lamps) for Zn, Cu, Mn, Fe, Co, Cd, As, Pb, Ni, Hg, Mo and Cr

F. Desktop Computer

1. I3/I5 12th Generation CPU with 8GB RAM 21 inch LED display, Key Board, Mouse with original Windows 11 Operating System
2. 1 TB SSD with HDD

G. UPS

3KVA Online UPS with separate Battery Pack with 1hr power backup

H. 2(Two) 5 Star inverter Split AC

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Terms and conditions:

1. All the components with minimum 2year warranty.
2. Quotation should be made as per the specification without any variation
3. The last date of submission of quotation is 16.08.2024 .
4. The quotation received either in incomplete form or after the due date will not be considered and treated as cancelled.
5. There is no advance provision and payment will be made after installation, delivery, commissioning of Atomic Absorption Spectrophotometer (AAS).
6. Execution of orders shall be carried out within **10 days** of issue of purchase order
7. The bidder must have executed 5 projects of similar in nature for Govt. department/organization Proof of execution of such orders to be enclosed along with quotation.
8. Payment will be made only after successful after installation, delivery, commissioning of Atomic Absorption Spectrophotometer (AAS)
9. Total 10 Test Trail Runs to be conducted after Installation.

Quotations should reach following address before 16.08.2024 failing which the quotation will not accepted.

Address:

Secretary

Ramakrishna Mission Ashrama

Divyayan Krishi Vigyan Kendra

Morabadi, Ranchi – 834008

Jharkhand

Swami Bhaveshananda
Swami Bhaveshananda
Secretary

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