

Tender No. CIE/TPRA/002/2019

Name of the Equipment: Atomic Absorption Spectroscopy

Minutes of Pre-bid meeting held on 1-2-2019 for above is appended below:

Item No.`	Section No	Points raised by Vendor	IITM clarifications
Required specifications	2	How many lamps to quote?	Committee has approved following quantity of lamps, Please include all the necessary lamps (EDL) for the contaminants mentioned in the Table 1. Instrument with eight or more lamp positions will be preferred.
Required specifications	3	Whether automated dosing and dilution is required for both automizers?	Committee has decided following specifications, Automated dosing and dilution accessory for both flame and furnace atomizer.
Required specifications	4	FIAS is a vender name and it must be removed.	Committee has accepted the suggestion and specifications are decided as given below, Facility to use computer controlled continuous flow hydride generator for the analysis of hydride forming elements, should be capable to connect with flame as well as furnace to achieve very low level detection.
Required specifications	5	Whether transversally heated graphite furnace is necessary?	Committee has retained specifications, Transversally heated graphite furnace with software-controlled change between flame and furnace.
Optional specifications	1	Whether longitudinal Zeeman correction is required?	Committee has accepted the suggestion and required specifications are decided as given below, Background correction facility with Deuterium lamp for flame automizer and longitudinal Zeeman correction for furnace automizer.
Required specifications	9	Whether autosampler is required for both automizers?	Committee has approved following specifications, Fully automated system with autosampler for automatic loading of samples for flame and furnace automizers.
Optional specifications	2	Whether PMT detector can be also quoted?	Committee has accepted the suggestion and required specifications are decided as given below, High resolution monochromator and solid state detector/PMT with high quantum efficiency with

			maximum possible wavelength range.
Required specifications	11	Accessories to quote?	Committee has described accessories requirement as given below, Please quote essential accessories required for smooth operation of AAS with aforementioned requirements.
Optional specifications	3	Whether all lamps for all the optional elements need to be quoted?	Committee has approved following quantity of lamps, Please include all the necessary lamps (EDL) for the contaminants mentioned in the Table 1. Instrument with eight or more lamp positions will be preferred.

Table 1

Sr. No.	Element	Detection range		Unit
		Lower limit (must be equal to or less than)	Upper limit (must be equal to or more than)	
1	Calcium	10	1000	mg/l
2	Magnesium	10	1000	mg/l
3	Chromium	5	100	ug/l
4	Barium	10	100	ug/l
5	Copper	5	100	ug/l
6	Mercury	0.1	100	ug/l
7	Cadmium	0.4	40	ug/l
8	Selenium	5	50	ug/l
9	Arsenic	1	100	ug/l
10	Iron	10	100	ug/l
11	Lead	4	100	ug/l
12	Beryllium	0.4	50	ug/l
13	Thallium	5	100	ug/l

14	Antimony	5	100	ug/l
15	Aluminum	0.1	0.2	mg/
16	Silver	5	100	ug/l
17	Nickel	70	1000	ug/l
18	Zinc	1	15	mg/l
19	Bismuth	1	100	mg/l
20	Boron	0.5	50	mg/l
21	Manganese	0.4	40	mg/l

TENDER NOTICE

Item No.̀	Section No	Points raised by Vendor	IITM clarifications
Tender Notice Instructions to the Bidder	Schedule Payment	Vendors requested for 100% LC advance payment against Performance guarantee	ICSR decided to retain the original Terms and Conditions

GENERAL TERMS AND CONDITIONS

Item No.̀	Section No	Points raised by Vendor	IITM clarifications
General Terms and Conditions	Warranty	The cost should include 24 months warranty of the overall system and CIP upto Chennai	The cost should include for 5 years warranty of the overall system and CIP upto Chennai
General Terms and Conditions	Technical Bid should comprise of the following:	EMD should not be enclosed in the Technical Bid	The EMD should be sent in a sealed cover

