



University College of Engineering and Technology, Bikaner
(Constituent College of Bikaner Technical University, Bikaner)
(Established by the Govt. Act No. 29 of 2017)

TEQIP-III

CORRIGENDUM

IFB No. :- TEQIP-III/RJ/gceb/63

Package Name:- XRF Refractometer

Date : 19/06/2019

Please note following for participation in IFB No. TEQIP-III/RJ/gceb/63 for XRF Refractometer.

1. Last date for Sale of Bidding Document: Date: 01-July-2019 Time:10:00 hrs.
2. Last date and time for Receipt of Bids: Date: 01-July-2019 Time: 11:00 hrs.
3. Time and Date of Opening of Bids: Date: 01-July-2019 Time: 12:00 hrs.
4. Section VI starting at page no. 53 of SBD is replaced with Annex 1.
5. Price schedule in Bid Form (Section VII) are to be submitted in sealed envelope separately with bid form.

Nodal Officer, Procurement (TEQIP-III)

UCET, Bikaner



SECTION VI: TECHNICAL SPECIFICATIONS

Specification for Energy Dispersive XRF (EDXRF) system

Energy Dispersive table top X-ray Fluorescence Spectrometer (Computer Controlled, micro-processor based direct excitation) for qualitative & Quantitative multielement analysis.

General:

Elemental range	Na to U
Concentration range	ppm to 100%
Excitation type	Direct

Sample Handling & Presentation:

Sample types	Should be possible to handle solids, pressed pellets, fused beads, Liquid & powder samples
Medium for analysis	Should be vacuum/helium for pressed pellet, solid & fused beads.
Dust reservoir	Should have a built-in dust reservoir to collect sample spillages.
Sample diameter	40mm

Generator :

Power output	10Watt or more
Maximum Voltage	50KV or more
Maximum Current	2mA or more

X-Ray Tube :

Power output	10Watt or more
Maximum Voltage	50KV or more
Maximum Current	2mA or more
Tube Anode	Pd/Ag



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Optics :

Primary Beam filter	Automatic & software driven.
No. of filters	Minimum 6 filters.

Detector :

Detector type	High resolution Silicon Drift Detector
Detector cooling	Peltier cooling, without any need for liquid Nitrogen or external water.
Detector resolution	less than 145ev @5.9Kev at 200.000 cps.

Software :

Instrument handling software	Operational & Calibration software to be offered. Standard softwares for performing chemical analysis of Cement(PPC&OPC-43 grade) and Reinforcement Steel(Fe-500, Fe-550, Fe-500D). Standard software for performing chemical analysis of other elements.
Diagnostic software	The XRF system must have built-in diagnostic software.

Computer& Printer:

- Suitable external computer to be offered.
- Printer should be offered.

UPS:

- UPS: suitable online UPS with at least 30 minutes backup for smooth running of the offered ED-XRF system in case of power failure.

Sample Preparation Equipment:

1. **Pellet Press:** Minimum 25 Ton capacity. The quotation must include suitable die for making 40 mm sample, Boric acid/ Cellulose/ Wax binder and minimum 1000 nos. aluminum cups for making pellet.



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- 2. Automatic Pulveriser with Cr Steel Bowl,** Feed size 5 mm, Output size 200 mesh--
To be quoted as option.

Pre dispatch demo:

- Pre dispatch demo to be provided on your expenses.

Training:

- On-site training to be provided on your expenses.

Installation & Commissioning:

- Installation commissioning to be done by the factory trained engineers.

MISC REQUIREMENTS

- Sample tray.
- 10 positions sample tray.
- Sample spinner.
- 100 P1 cups, 500 pre-cut poly propylene foil.
- Standardless soft software.