

Biomass Laboratory
Center for Rural Development and Technology

Notice Inviting Quotations for “Automatic Nitrogen and Metal Analyzer with Digester”

Sealed quotations are invited in two bids (separate quotations for technical and financial bid in sealed covers and put together in a common outer envelope subscribing NIQ for Automatic Nitrogen and Metal Analyzer with Digester) for the requirement of Automatic Nitrogen and Metal Analyzer with Digester as per the specifications described below on or before October 23, 2013, 17:00 hrs. Quotations should be addressed and submitted to

Prof. Satyawati Sharma
Center for Rural Development and Technology
Indian Institute of Technology Delhi
Hauz Khas, New Delhi - 110016

Technical Specification for Automatic Nitrogen and Metal Analyzer with Digester

We require Automatic Nitrogen and Metal Analyzer with Digester along with relevant accessories for analysis of environment samples from sewage or drinking water.

1. Preprogrammed Visible Spectrophotometer

Wavelength Range: 400 to 900 nm
Wavelength Accuracy: ± 1.5 nm
Wavelength resolution: 1 nm
Data logging system should be based on Split beam technology, portable, compact design, and should be able to work with a battery / AC

2. Digestion Apparatus

Included
Heater assembly
Heat shield
Fractionating column with protector
Column baffle
Capillary funnel
Capillary funnel adapter
Digestion flask
Water aspirator
Goggles safety
Power supply 230 V
Temperature control 100-480°C
Aspirator capacity 11.5 L/minute
Water pressure 7.5 psi minimum

3. COD/TOC Digester

Power supply 100-240 V, 50/60 F

Satyawati

Programmable temperature range Ambient (37°C) to 165°C
Temperature stability ± 2°C

- USEPA approved reactor with closed reflux micro method pre-programmed microprocessor controlled unit for COD, TOC & Heavy Metals Sample Digestion
- Programmable Timer Range 0 to 480 minutes
- Heating Rate 20 to 165°C in 10 minutes
- Stored Programs COD 150°C 120 minutes; TOC 105°C 120 min; Fixed 100, 105, 30, 60, 150, 165°C, 120 minutes
- Compatibility - should be compatible with Data logging system, Warm up Time 10 minutes

4. TKN Reagent

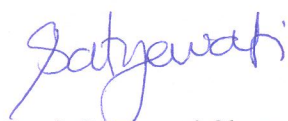
Range: 1 to 150 ppm (for 250 tests)

5. COD Reagent

Range: 0 to 1500 ppm (300 tests)

General terms and conditions: as per relevant rules of IIT Delhi

1. Validity of quotation should be minimum three months.
2. Payment mode should be clearly mentioned. Preferred payment mode is within 30 days of successful installation.
3. All bank charges outside India shall be on beneficiary's account and within India shall be on opener's account, in case of imported items.
4. **Propriety certificate may be enclosed in case of propriety items.**
5. In case of imported items, **Agency Certificate** from the principals/manufacturer should be enclosed.
6. Educational Institution discount should be given.
7. Minimum one year onsite comprehensive warranty is must without which the quotation will not be considered.
8. The Institute reserves the right to accept or reject any/all of the quotations without assigning any reasons thereof.



Prof. Satyawati Sharma