INDIAN INSTITUTE OF TECHNOLOGY-KANPUR

(DEPARTMENT OF MECHANICAL ENGINEERING & NUCLEAR ENGINEERING & TECHNOLGY PROGRAM)

Subject: Request for Uploading the Tender Document on institute web site.

Enquiry NO: *SP/NET-ME/2014-2015-01* *closing date: 27th February 2015*
Through: *Head, Mechanical Engineering*

Name of Item: "Combined Neutron and Gamma Survey Meter"

Sealed quotations are invited in two bid system (separate envelops for technical & commercial) by the undersigned for Purchase of combined neutron and gamma survey meter as per following specifications.

A combined neutron and gamma survey meter is desired to simultaneously measure gamma and neutron radiation levels. The survey meter should have a spectroscopic gamma-detector which can identify isotopes and measure their dose-rates. Further, the survey meter should also have the ability to detect and measure dose-rates for neutrons.

- A portable gamma-neutron survey meter with capability to measure dose rates as:
  - Gammas dose rates between 0.1 µSv/hr – 1000 µSv/hr (at least)
  - Neutron count rates 1 cps – 10,000 cps (cps=counts per second), or equivalent dose levels (will need to explain how energy-dependent dose levels are calculated).
- Must have the ability to identify isotopes based on acquired gamma-spectrum and inbuilt nuclide libraries
- The gamma detector should be protected against neutrons
- Should be sensitive to neutron spectra with high mean energies, such as those from alpha-neutron sources (>4 MeV mean neutron energy)
- Total weight less than 5 kg
- The unit must be wireless (will need to run on battery)
- Battery life should be at least 8 hours after a single full charge
- Operating temperatures: 0 °C to 50 °C (at least)
- Must be operable in high humidity (>80%)
- Must demonstrate shock and vibration resistance – meet ANSI N42.34.
- Must come with dust/slash/spray protection
- The unit must have legible read-out screen clearly indicating dose levels and count rates
- Must have the ability to set alarms for gamma and neutron radiation levels based on user specifications
- Must be in compliance with ANSI N42.34
- User's manual and instructions should be included
- Training must be provided at the time of delivery and installation
- Required ancillary parts such as cables, wires, lines, caps, casings etc. must be included.

Terms & Conditions

1. Payment: As IITK standard terms.
2. Taxes: as applicable
3. Delivery: earliest possible time
4. Validity of quotation: 60 days.
5. Inspection: to be carried out at our place.
6. Please attach proprietary certificate if it is applicable.
7. Warranty one year.

(Dr Shikha Prasad)
Northern Block Laboratories
Department of Mechanical Engineering
Indian Institute of Technology-Kanpur-208016
Mail: shikhap@iitk.ac.in
Phone :(O) +91-512-259-6973 (M) +91-983-932-2548

Head
Department of Mechanical Engineering & Nuclear Engineering & Technology Program