

# Dr. B. Borooah Cancer Institute

(Regional Cancer Centre)

**Gopinath Nagar, A. K. Azad Road, Guwahati-781016, Assam, India**

No.BBCI/ Misc-27 / RPP-IV/ NIT/ **2360** / 2016

Date : 21.09.2016

## NOTICE INVITING QUOTATION

Dr. B. Borooah Cancer Institute, Gopinath Nagar, Guwahati-16 invites quotations from the reputed company, authorized supplier / dealer etc. for supply & installation of **Waterproof 0.6cc Volume Therapy level Cylindrical Ion Chamber along with Electrometer** for absolute dosimetry in high energy Gamma photon, X-ray Photon and electron beam.

### Technical specifications:

#### [A] Specification for the 0.6cc Ion Chamber

1.0 Standard of the Product	Please specify
1.1 Measuring Quantities	Absorbed dose to water, air kerma, exposure
1.2 Reference Radiation quality	Co-60
1.3 Nominal Sensitive volume of the chamber	0.6 cc
1.4 Nominal Chamber Voltage	Please Specify
1.5 Design	Preferably waterproof, vented, fully guarded
1.6 Reference Point	Please Specify
1.7 Polarity effect	Please Specify
1.8 Leakage Current	Please Specify
1.9 Directional response in Water	Please Specify
1.10 Cable leakage	Please Specify
1.11 Nominal response	Please Specify
1.12 Stability	Please Specify
1.13 Ion collection efficiency	Please Specify details
<b>2. Materials and measures</b>	
2.1 Wall of sensitive volume	Please Specify details
2.2 Dimension of sensitive volume	Please Specify
2.3 Central Electrode	Please Specify details
2.4 Build up cap	Please Specify details
2.5 Extension Cable	Please Specify details
<b>3. Useful Ranges</b>	
3.1 Chamber Voltage	Specify the Range
3.2 Radiation Quality	Please Specify details
3.3 Field size	5cm x 5 cm to 40 cm x 40 cm
3.4 Temperature	Preferably 10 <sup>0</sup> c to 50 <sup>0</sup> c
3.5 Humidity	Preferably upto 90%
3.6 Air pressure	Specify range

**The chamber should fit to the Chamber jig of existing Water Phantoms and Slab Phantoms in the Department.**

## [B] Technical Specification for the Electrometer

1.1 Standard of the Product	Please Specify
1.2 Application	Dose and dose rate measurements in Radiation Therapy
1.3 Measurable quantities	Charge, Current, absorbed dose to water, absorbed dose rate to water, air kerma rate, Exposure, exposure rate
1.4 Charge measuring range and Current measuring range	Please specify the ranges
1.5 Resolution of charge and current measurements	Please specify
1.6 Stability	Please specify
1.7 Linearity	Please specify
1.8 Accuracy of Charge and Current measurements	Please specify
1.9 Time Interval of measurement	Min =            Max =
1.10 Temperature range	Preferably (10—50) <sup>0</sup> c
1.11 Air Pressure range	Please specify
1.12 Humidity	Preferably upto 90%
1.13 Process of nullification	Please specify
1.14 Leakage current	Please specify
1.15 Interface	Please specify
1.16 Power requirements	Please specify
1.17 Chamber voltage	Please specify details

**The electrometer should be compatible with any ion chamber of any volume.**

### **Terms & conditions:**

1. The quotation must accompany the following user manuals and certificates.
  - (a) User / Technical / Maintenance manuals to be supplied in English.
  - (b) Operators, configuration and utility programme manuals.
  - (c) Operators, configuration and utility programme manuals
  - (d) Certificate of calibration and inspection
2. All information asked for must be provided in the same order as in the specifications. Incomplete and ambiguous information will not be accepted.
3. Any other matter which is necessary for proper and optimum functioning of the equipment / instrument but has been overlooked here should also be compiled with.
4. Installation & training:

The successful quotationer shall have to supply & install the system to this Institute at his own risk and responsibility and in good condition in all respects.

After successful installation expertise from the supplier should give proper demonstration to the professional staff of the Institute for the use of the equipments.
5. The warranty of the system should be for a minimum period of 12 (twelve) months.
6. The price should be inclusive of all charges. Taxes, if any, should be shown separately.

7. The rate should be quoted both in figure and in words.
8. The rate if accepted will remain valid for 1(one) year from the date of acceptance and there will no change under any circumstances during the period.
9. Payment will be made on submission of bill after successful supply of the items after observing the requisite formalities.
10. Incomplete quotation not in conformity with the terms and conditions as in this quotation notice will be rejected outright.
11. The undersigned reserves the right either to accept or to reject any or all the quotations without assigning any reason thereof and is not bound to accept the lowest quotation.

The quotation along with terms and conditions shall be submitted to the '**Director, Dr. B. Borooah Cancer Institute, Guwahati-781016**' latest by **28<sup>th</sup> September 2016**.



**Director**  
Dr B Borooah Cancer Institute  
Guwahati-781016