



NAGALAND UNIVERSITY
(A Central University Estd. By the Act of Parliament No. 35 of 1989)
Headquarters : Lumami – 798627

No: NU/PF/BRNS/2016-3

Dated 22th August, 2016

Notification

This is to notify that the last date for submission of tender for the supply and installation of the items tendered under BRNS project dated 10th June, 2016 vide letter no NU/PF/BRNS/2016-2 is extended for another 10 days with effect from 22nd August, 2016.

All the reputed Original Equipment Manufacturers / Authorized Dealers/ Bidders may submit the quotations if desired. The quotation may be sent to

Project Investigator
BRNS project
Department of Chemistry
Nagaland University
Lumami -798627, Nagaland Email : dipaksinha@gmail.com

The quotation may only be submitted now for the following items

1. Item No : Pocket Gamma survey meter

One No (quantity)

Application	Gamma exposure meter for wide range gamma dose rate
Detector	Geiger-Muller counter
Measurement range	0.01 μ Sv/h – 130 mSv/h
Energy range (\pm 30%)	0.04 – 3 MeV
Operating condition Temp: RH :	-10 to 50 °C Upto 95% at 35 °C
Weight	not more than 300 gm
Size	not more than 150 X 100 X 50 mm
Power requirement	Battery operated
Battery life	Typically six months
Communication with computer	USB interface

2. Passive equipment

2.1 Pin holes type twin cup dosimeters

200 nos

- Simultaneous measurement of radon and thoron using LR-115 (type-II) detector
- Single entry face for both radon and thoron diffusion.
- Discrimination of radon/thoron should be carried out by pin-holes. No additional membrane should be required for radon-thoron discrimination. Thoron entry into the radon chamber through pin-holes should be within 2 %.
- Material: Light weight plastic such ABS with inside metal coating
- Materials should be free from radon/thoron absorption
- Outside coating by a decorative colour preferably wooden
- Easy fixing metal holder for LR-115 detectors of minimum size of 3 cm x 3 cm with suitable number of pin holes for thoron cut off.
- Provision for dosimeter numbering as per user request
- Sensitivity should be at least 0.017 track/cm²/day/(Bq/m³) for radon and 0.01 track/cm²/day/(Bq/m³) for thoron detection
- Proper sealing should be provided at each threading using Neoprene 'O' ring. Maximum allowable leakage in sealed condition is 0.0005 h⁻¹
- Deployment arrangement: vertically with chain lock system at top with gas entry face downward
- Design should be approved by RP&AD, BARC

2.2 Fabrication of the badge-holders for DTPS/DRPS

200 nos

Specifications:

1. The badge should be of dimensions ~6cm x 3 cm.
2. It should have two slots to accommodate two detectors each of dimension 3x3 cm².
3. The badge should have two parts. The lower part should have a clip for suspension. The upper part should have two brackets to make the detector grip tight.
4. The material of the badge should be acrylic/hard plastic.
5. The weight should be ~ 20 gms.

2.3 Fabrication of the Wire-mesh capped holders for Direct Thoron Progeny Sensor (DTPS) and Direct Radon Progeny Sensor (DRPS)

200 Nos

Specifications:

The Wire-mesh capped holder will have two parts.

1. The upper part will have two sections having wire-mesh, such that each section will have the dimension of 22 x 22 mm².

2. The total dimension of the upper part will be: length 66 mm, thickness 12 mm, breadth 34 mm.
3. The base will have dimensions: length 66 mm, thickness 2 mm, breadth 34 mm.
4. The distance between the wire-mesh and the detector should be 1 cm.
5. The upper part should fit in tightly on the base.
6. The material of the badge should be acrylic/hard plastic.
7. A clip should be fitted at the back-side of the base to use it as personal dosimeter.
8. The weight should be ~ 20 gms.

2.4 Fabrication of integrated sampler (DTPS/DRPS WL monitor)

Specifications:

1. The material of the sampler should be light metal/aluminium.
2. One end of the sampler should be open-faced and the other end should be close-faced for attachment to pump.
3. Distance between the wire-mesh and the detector and that between the Filter-paper and the detector should be 3 mm.
4. The diameter of the sampler should be ~5.5 cm, and height ~1.5 cm.



(Project Investigator)

BRNS Project