

Ref No: PG_Research_CESE/NV/Dec/01 Dated 14-12-2011
LAST DATE: 23-12-2011

Techno-commercial quotation is sought in closed sealed envelope to the undersigned on or before December 23, 2011, for the supply of “**Cryogenic Ball-Mill**” with the following specific features of the instrument:

The equipment should work for cryogenic grinding and the grinding jar should continually cooled with liquid nitrogen from the integrated cooling system before and during the grinding process. The liquid nitrogen should circulate through the system and continually replenish from an autofill system in the exact amount which is required to keep the temperature at -196 °C. The system should avoid direct contact with LN₂ and makes the operation very safe. The equipment should be versatile for cryogenic, wet and dry grinding at room temperature. The grinding jar of the equipment should perform radial oscillations in a horizontal position. The inertia of the grinding balls should cause the impact with high energy on the sample material and pulverize it.

It should be suitable for following applications: animal feed, bones, chemical products, food, hair, oil seeds, paper, plant materials, plastics, sewage sludge, soils, tablets, textiles, tissue, waste samples, wood, wool. In addition, there should be the following features:

3 different grinding modes (cryogenic, dry or wet at ambient temperature)

Material feed size*	≤ 8 mm
Final fineness*	~ 5 μm
Batch size / feed quantity*	max. 20 ml
No. of grinding stations	1
Typical mean grinding time	10 min / 1 min (cooling / grinding)
Cell disruption with reaction vials	Yes
Type of grinding jars	screw top design
Material of grinding tools	5 ml / 25 ml / 35 ml / 50 ml

Terms & Conditions:

- (i) Prices should be quoted on FOB basis as well as in Rupees
- (ii) Prices should include installation and on-site training
- (iii) Warranty should at least be for two year.
- (iv) Validity of quotation should be at least for 60 days
- (v) Authorized agents must attach proper agency certificate issued by principal supplier within 1 month.
- (vi) Attach proprietary certificate in case manufacturer is sole manufacturer.

Kindly send your best offer (Technical & Commercial) so as to reach us on or before December 23, 2011 to the following address. Kindly mention the enquiry number and last date on the top of envelop.

Nishith Verma

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