



**NATIONAL INSTITUTE OF TECHNOLOGY, DURGAPUR**  
**राष्ट्रीय प्रौद्योगिकी संस्थान, दुर्गापुर**  
(An Institute of National Importance under the Ministry of Education)  
MAHATMA GANDHI AVENUE, DURGAPUR, BURDWAN (W), PIN-713209, INDIA

**NOTICE INVITING TENDER**

Ref. no. NITD/PHY/AKC/OH-35/2025-26/01

Date: 16-01-2026

Quotations are invited from reputed vendors for the supply of one unit of **Omni Directional Planetary Ball Mill with Zirconia Jar** for the Department of Physics, NIT Durgapur. The detailed specifications are given below.

**Deadline for receipt of the physical bids at NIT Durgapur is 5 pm, 27<sup>th</sup> January, 2026.**

a. Electrical requirements	200-240V AC, 50-60 Hz, 0.75 kW
b. Material Feed Size	Brittle materials of less than 10 mm, others less than 3 mm
c. Final Fineness	< 100 nm
d. Grinding method	Dry/wet/ high-energy alloying grinding/ vacuum grinding
e. 360° speed (variable frequency adjustable)	18°/min
f. Speed ratio (revolution: rotation)	1:2
g. Planetary speed (variable frequency adjustable)	Maximum revolution 0-450 rpm, rotation 0-900 rpm.
h. Speed control mode	PLC variable frequency control system
i. Transmission mode	gear drive
j. Maximum Batch Size / Feed Quantity/Jar	4 x 100 mL
k. Grinding Jar Volume acceptability	50 mL & 100 mL
l. Operation mode	Two or four tanks work at the same time
m. Maximum continuous working time	72 hours (timer 0-9999 h)
n. Program control	Controlled by high tech micro computer chip, and it can run forward and reverse repeatedly (0-999 min) and forward, pause, reverse, pause and forward (0-999 min) alternately according to the setting procedure, especially suitable for the need for cooling or intermittent operation.
o. Weight	<100 Kg
p. Jar Material	Zirconia
q. Jar sealing	The milling jar shall be vacuum-tight with provision for vacuum evacuation and leak-proof sealing before and during ball milling.

r. Jar volume	50 ml
s. Number of Jars	2
t. Zirconia balls	Balls of zirconia with diameters of 2 mm, 3mm and 5 mm each to be provided. Minimum number of balls for each type should be 10.
u. Other	<p>1) Catalogue of the OEM must be provided original catalogue showing the detail specifications.</p> <p>2) Bidder /manufacturer should have a service office and a service engineer based in Kolkata, WB.</p> <p>3) At least one PO of the quoted item sold by the bidder to be provided. Full contact information of the buyer should also be included.</p> <p>4) Compliance sheet against each of the desired specification should be submitted. Comments like "yes/agreed/ will be given at the time of supplying/confirmed/will be completed" are NOT ACCEPTABLE for specifications where numerical values are desired.</p>
v. Warranty clause	1 year manufacturer's warranty from the date of installation.
w. Price & payment	<p>1) Price: Quoted price should be FOR Durgapur (in Indian Rupees)</p> <p>2) Payment: 100 % on commissioning and satisfactory performance and on submission of Performance bank guarantee (PBG) of 5% of the base price with fourteen months validity from the date of delivery of the item.</p>
x. Bid validity and delivery clause	<p>1) Quotation submitted by the vendor should be valid for at least 60 days</p> <p>2) The item should be delivered to NIT Durgapur within 6 weeks from the date of issuance of the purchase order failing which the order may stand cancelled.</p> <p>3) The bid must be submitted in a closed envelope marked with "Quotation for Omni Directional Planetary Ball Mill with Zirconia Jar".</p> <p>4) The Institute reserves the right to accept or reject any quotation without assigning any reason thereof.</p>

The quotations must reach the following address on or before **27.01.2026 (by 5:00 PM)**:

*Prof. Amit K. Chakraborty*  
*Department of Physics*  
*National Institute of Technology Durgapur*  
*Mahatma Gandhi Avenue*  
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**Prof. Amit K. Chakraborty**  
**(Indenter)**

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