

Minutes of Meeting

Pre-Bid Meeting – Molecular Beam Epitaxy (MBE) Tender

Organized by: Plaksha University

Date: 29 May 2026

Time: 11:30 AM onwards

Mode: Online

Attendees from Plaksha University

- Mr. Abhay Sharma – Registrar
- Mr. Jitin Sahni – Chief Operating Officer
- Mr. Umesh Sharma – Chief Financial Officer
- Mr. Somveer Singh – Assistant Associate Director – Finance
- Prof. Praveen Kumar – Faculty Lead / Technical Committee
- Mr. Sumon Dutta – Sr. Manager - Procurement
- Mr. Harjee Banga – Manager - Procurement
- Mr. Gurpreet Singh – Asst. Manager - Procurement

Participating Vendors / Bidders

- Dynotech Instruments Pvt. Ltd
- Kastech Technologies / UHP Tech
- XYTEL India
- Anarghya Innovations & Technology Pvt. Ltd.
- Mack International

Agenda

- Discussion on technical specifications of the MBE tender
- Clarifications on commercial terms
- Vendor queries and discussion on possible amendments
- Clarification on submission timelines and process

Vendor-wise Discussions & Clarifications

1. Dynotech

Queries Raised

- Clarification sought on:
 - Retention money (5%)
 - Performance Bank Guarantee (3%)
- Vendor suggested that generally only one of the two is applicable.
- Vendor to submit consolidated technical queries via email by Monday evening.

Response

- Commercial terms noted by the university team.
- Formal response to be shared separately.
- Vendor requested additional time to compile technical queries.

Action

- Vendor to submit consolidated technical queries via email by Monday evening.

2. Mack International

Technical Queries Raised

- Reduction in Nitrogen Plasma growth rate requirement from $>2.5 \mu\text{m/hr}$ to approximately $1.2\text{--}1.4 \mu\text{m/hr}$.
- Clarification on substrate temperature specification at thermocouple position.
- Clarification regarding manipulator mounting orientation.

Clarifications Provided

- Technical committee to review the growth rate request.
- Substrate temperature specification confirmed at thermocouple position.
- Manipulator mounting to be corrected as:
 - Vertical top-mounted configuration
 - Existing sidewall reference identified as typographical error.

Action

- Vendor to formally email all technical observations.

3. Anarghya Innovations & Technology Pvt. Ltd.

Key Technical Discussions

- Proposal to reduce RHEED specification from 15 keV to 10 keV for cost optimization.
- Request to allow equivalent thickness monitor systems instead of specified model.
- Discussion on substrate temperature requirements for hBN growth.
- Suggestion to eliminate heating facility in preparation / load-lock chamber for cost optimization.
- Proposal to avoid duplicate TMP in growth and load-lock and proposed to share pumping configuration.
- Discussion on edge exclusion and layer homogeneity criteria from 2.5% to 5%.
- Clarification sought on acceptable stainless steel grades and equivalents.
- Suggestion to revise nitrogen plasma growth rate specifications to around $1 \mu\text{m/hr}$
- Commercial query regarding simultaneous applicability of retention money and bank guarantee.
- Clarification on EMD submission through Bank Guarantee.

Clarifications Provided

- Equivalent or better specifications acceptable subject to performance compliance.
- Preparation chamber heating justified to avoid contamination during degassing.
- Larger TMP requirement retained for nitrogen plasma handling.
- Technical committee to evaluate optimization suggestions.
- Bank Guarantee acceptable for EMD submission.
- Material equivalents acceptable where technically suitable.

Action

- Vendor to submit all recommendations formally via email for committee review.

4. XYTEL India

Technical Queries Raised

- Requirement of differential pumping in 15 keV RHEED system.
- Clarification on layer homogeneity acceptance criteria.
- Clarification regarding demonstration scope for standard systems.
- Query regarding mandatory software-based control versus manual control systems.
- Discussion regarding equivalent suppliers/components for lead time optimization.

Clarifications Provided

- Technical committee to review and evaluate all proposals.
- Mission-mode nature of project highlighted; timely delivery emphasized.
- Equivalent components may be considered if performance requirements are maintained.

Action

- Vendor to submit detailed technical and commercial observations through email.

5. Kastech Technologies / UHP Tech

Technical Queries Raised

- Clarification on future integration provisions in software and controls.
- Clarification on future ports and characterization facilities.
- Query regarding minimum number of ports/effusion cells.
- Clarification regarding viewport positioning and sample transfer visibility.
- Proposal to use copper gaskets instead of silver gaskets.
- Discussion on load-lock chamber heating mechanism.
- Query regarding delivery lead time.
- Clarification regarding AMC scope beyond warranty period.

Clarifications Provided

- Future integration provisions intended for optional future upgrades including RGA and additional cells.
- Minimum seven effusion cell ports to remain mandatory considering future research requirements.
- Viewport intended for visibility during sample transfer and loading operations.
- Copper gaskets acceptable provided vacuum performance requirements are met.
- Comprehensive and non-comprehensive AMC options to be quoted separately.
- Delivery timeline linked to mission-mode project requirements.

Action

- Vendor to formally submit all queries already shared with procurement and technical teams.

Commercial Discussions:

The following commercial matters were discussed:

- Retention Money vs Performance Bank Guarantee applicability
- EMD submission through Bank Guarantee
- AMC structure post warranty period
- Delivery timelines
- Payment terms

Key Decisions / Changes

1. All vendors to submit formal technical and commercial queries via email.
2. Technical committee to review all proposed deviations and optimization requests.
3. Any approved changes/amendments will be communicated formally to all bidders and uploaded to Plaksha University website as an amendment
4. Tender submission timelines remain unchanged unless officially amended.
5. Equivalent validated components/specifications may be considered subject to meeting required performance criteria.
6. Considering that a 5% retention amount is already being maintained under Clause 5, the requirement for submission of a Performance Bank Guarantee (PBG) under Clause 7.4 is removed.
7. Clause No 7.8 to be amended to include proposals for both CAMC and NCAMC.