

**Government of India  
Bhabha Atomic Research Centre  
Nuclear Agriculture & Biotechnology Division**

Ref: NA&BTD/2019/ 85259

Date: 06.05.2019

**Sub: Quotation for optimization of *B. thuringiensis* fermentation process using pilot-scale fermentation facility**

Sealed Quotations are invited for the following work as per specifications given below:

Complete optimization and standardization of fermentation process using 30L working volume fermentor. Parameters for optimisation should include air, agitation, temp, back pressure, pH (online)), any acid/alkali dosing, seed inoculation, yield optimization, microbiological work (to check contamination), downstream processing using filtration, ultrafiltration, microfiltration and spray-drying if required along with related accessories. Total 30 batches in pilot-scale fermentation facility.

**Terms and conditions**

1. The firms should quote the rate per batch and the rate should include complete facility usage like fermentation, downstream processing, spray drying along with related accessories, utilities, manpower, electricity, raw material like media components and testing charges.
2. The firm will have to sign a non-disclosure agreement (NDA) to maintain the secrecy of the protocol and isolates.
3. The media components will be provided on request to the interested parties. Final media composition will be provided at the time of issuing work order.
4. The regulatory permission to procure media component like molasses has to be obtained by the party.
5. The cost should include the taxes as applicable
6. The facility should have all the regulatory permissions to undertake large scale fermentation and laboratory studies.
7. The interested parties may contact Dr. Ramesh S. Hire for any technical queries.

**Quotations in sealed cover (with company seal, PAN, GST and TAN numbers), giving details of price, time required to complete the work etc. may be sent to**

**Head,  
Nuclear Agriculture and Biotechnology Division  
Bhabha Atomic Research Centre, Trombay,  
Mumbai-400085**

Kind Attn: Dr. Ramesh Hire, Tel: 25592292, email: rshire@barc.gov.in

- The sealed quotations should reach on or before May 20, 2019 by 1800 h.
- “Quotation for optimization of *B. thuringiensis* fermentation process using pilot-scale fermentation facility” should be mentioned on the top of the envelope.
- The envelope with quotations must be sent via India Post, and not by any other means.