

INDIAN INSTITUTE OF TECHNOLOGY KANPUR
DEPARTMENT OF CIVIL ENGINEERING

Enquiry No: CE/HWRE/SG/2017-18/5

Date: Jan 17, 2018

Subject: Quotation for supply of Bubble Column Photo bio-reactor

With reference to the subject mentioned above, you are invited to submit the quotation in a sealed cover in order to reach us by February 28, 2018 in the form of a hard copy to the address mentioned below. Only the original manufacturer or a certified dealer/agency may submit quotation. Dealers/agency must include the relevant certificate.

The document should contain detailed technical specification showing compliance with each required specification outlined below. Please note that each part will be checked at the time of installation for compliance. If any of the part is found to be non-compliant with this set of specification, the reactor will be returned and the vendor will be black-listed.

The Financial Bid should include the detailed price quotation clearly including the cost of the equipment, taxes, service charges, shipping and handling charges, if any. Please note that IIT Kanpur is entitled for a GST rate of 5% for the items to be used for research. The relevant certificate will be provided at the time of purchase order.

Specification for Bubble Column Photo bio-reactor:

Bubble Column: Cylindrical; minimum effective volume 15 L; made of Acrylic or similar not-easily breakable materials; must have provisions for: Inlet/Outlet, attachment of LED strips, attachment of pH and temperature probes, CO₂ sparger.

pH probe: Sealed gel filled with water tight connections, BMC connector; pH range 0-14;

Temperature probe: Stainless Steel RTD Sensor Probe (Pt100 type)

LED strip: color: white; 400-500 lms per 0.5 meter; at least 4 strips placed longitudinally in the cylinder at 90° angles; lifespan > 50,000 hrs;

CO₂ sparger: SS316 (or higher grade) sintered sparger; 5 micron

LED time controller: multi-program options with at least 16 on/off settings;

Fasteners: minimum SS304 for all fastener set

Gasket: all Silicone gaskets

Ball valves: sampling and outlet valves

Bottom stand: SS support stand at bottom for the entire assembly

Terms and Conditions

1. Warranty/Guarantee should be clearly mentioned.
2. Maximum education discount should be offered.
3. Validity of quotation should be at least for 60 days.
4. Normal payment terms for the Institute will be applicable.
5. Quotation should carry proper certification like agency certificate, proprietary certificate, etc.

Dr. Saumyen Guha
Department of Civil Engineering
IIT Kanpur, Kanpur 208016