

Office of the Dean Research and Consultancy
Indian Institute of Engineering Science & Technology (IEST), Shibpur
Howrah-711 103

Project Code: DRC/DST/CEGESS/PC/007/18-19

Centre of Excellence for Green Energy & Sensor Systems
Indian Institute of Engineering Science & Technology (IEST), Shibpur
Howrah-711 103

Ref.: Tender Advt. No. CGE 1581, dated 21.01.2020

Notice Inviting Quotations

Sealed quotations are invited for the supply of:

Item: Ag Paste for Screen printing of Solar Cells.

As per the following technical specification. The technical specification can be downloaded from the website. The document can also be obtained from the Centre of Excellence for Green Energy & Sensor Systems (**Contact : Prof. H. Saha / Prof. P. Chaudhuri**) between 10.30 a.m. and 5.30 p.m. on all working days. The invitation is valid for 07 working days from the date of publication of this notice.

(A. Code DRC-T066/19-20)

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SECTION I: TERMS & CONDITIONS

1. The last date of receipt of quotation is valid **for 07 working days** from the date of publication of this notice. Quotations received later will not be entertained under any circumstances.
2. Potential supplier is to submit the quotations in Sealed Cover to the Centre of Excellence for Green Energy & Sensor Systems in the following address:

Prof. H. Saha / Prof. P. Chaudhuri
CEGESS
IEST, Shibpur
Howrah-711 103, India.

3. **Item name & tender code must be mentioned on cover otherwise the quotation will not be accepted.**
4. The price quoted should be inclusive of all Taxes in INR, duties and levies. Inclusion of Tax/Levy at a later stage will not be accepted. Freight, Insurance charges should be clearly indicated. If GST is chargeable then price quoted should be inclusive of GST in INR. @ 5%(**CGC will be provided by IEST, Shibpur**). Price should be CIF, IEST, Shibpur basic.
5. Vendor should have proven track record of supply in IEST, IIT, NIT, IISc.
6. Commercial Papers duly signed & must be attached.
7. Quotation has to be kept valid for acceptance for a period of 6 months without any modifications in its terms and conditions.
8. Documents to be submitted with the Quotations :
 - General Conditions (Section I) and Important Instruction (Client list) in original duly signed by the Proprietor/ Partner/ Director or any authorized person of the company as a token of acceptance of Terms and Conditions of Tender.
 - Latest Income Tax, Sales Tax, Professional Tax, CST clearance certificates and copy of valid Trade License. (Photo copy duly signed) (Compulsory).
9. IEST, Shibpur, reserves the right to accept / reject all or any of the tenders without assigning any reason whatsoever.
10. Custom Duty Exemption Certificate will be provided by the IEST (If applicable).
11. **No advance payment will be made before the delivery of the item.**

SECTION II: TECHNICAL SPECIFICATIONS :-

Item.

Ag Paste for Screen printing of Solar Cells

Solids (%) at 750°C	81–84
Viscosity (Pa.s.)	90–130
Resistivity (mΩ/sq/25μm)	8-12
Coverage (cm ² /g) (100μm track width, 18μm thickness, with SD 67/25 mesh)	115
Abrasion Resistance (ASTM Pencil Hardness)	2H

- **Screen Printing Equipment** Reel-to-reel, semi-automatic, manual.
- **Substrates** Rigid/Flexible with sputter coated TCO.
- **Screen Type** PET or stainless steel (SD 67/25 (280 mesh)).
- **Typical Drying Conditions** Substrate/cell dependent, 130–180°C/5–60 min.
- **Typical Circuit Line Thickness** 18μm for 50μm track width.
- **Clean-up Solvent** Ethylene Glycol diacetate.

Quantity required : 2 kg.