

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

**Project Code: DRC/DST/CEGESS/HS/006/10-11**

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

**Notice Inviting Quotations**

Sealed quotations are invited for the supply of

**Item 1. Silicon Wafer N-Type**

**Item 2. Silicon Wafer N- PV-FZ**

**Item 3. Screen**

as per the following technical specification. The technical specification can be downloaded from the website. The document can be also obtained from the Centre of Excellence for Green Energy & Sensor Systems (contact: Prof. H. Saha) between 10.30 a.m. and 3.00 p.m. on all working days. The invitation is valid for 7 working days from the date of publication of this notice.

**Dean (R & D)**

**(A. Code DRC-T003/17-18)**

## **SECTION I: TERMS & CONDITIONS**

1. The last date of receipt of quotation is valid **for 7 working days** from the date of publication of this notice. Quotations received later will not be entertained under any circumstances.
2. Potential supplier are to submit the quotations in Sealed Cover to the Centre of Excellence for Green Energy & Sensor Systems in the following address:  
  

**Prof. Hiranmay Saha**  
**Chair Professor & Project Investigator**  
**CEGESS**  
**IEST, Shibpur**  
**Howrah-711103, India**
3. Item name must be mentioned on cover
4. The price quoted should be inclusive of all Taxes in INR (applicable only for Indian vender) duties and levies. Inclusion of Tax/Levy at a latter stage will not be accepted. Freight, Insurance charges should be clearly indicated upto CIF IEST, Shibpur

## SECTION II : TECHNICAL SPECIFICATIONS

Item 1.

### Silicon Wafer N-Type

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#### Specifications (Silicon Wafer N-Type) :

- Grade Prime-FZ
- Size: D\* = 4 inch
- Orientation : <100>
- Resistivity : 5-10 ohm/cm
- Thickness : 0.5 mm
- Surface : Double side polished
- Type – N type

#### Item 2. Specifications

Dimension- 125 mm x 125mm (pseudo square).  
material type- PV-FZ,  
type- N,  
dopant- Phosphorus,  
grade- pseudo square,  
thickness- 200- 230 micrometer,  
resistivity- 1-3 Ohm-cm,  
finish- as-cut,  
quantity- 15  
orientation- <100>

**Minority carrier lifetime range –2000µSec**  
**Carbon and oxygen - <2E16 atoms/cm<sup>3</sup>**

**Item 3.** Technical Specifications for Back & Front Stencil

**1. Front Contact Screen:**

30Micron opening– 51nosFinger - 76MM – 2Busbar

30Mic,2BB-Mesh 360/16

Frame Size 350X350MM

EOM:15+/- 2micron

Tension-26+/-1N

**2. Screen Back Side AL:**

76x76 mm, full open

Mesh 250/30

Frame Siz:350X350MM

EOM:6+/-1Micron

Tension-26+/-1N