

# INDIAN INSTITUTE OF TECHNOLOGY, KANPUR

## REQUEST FOR QUOTATION

**Tender No.: IITK/4i-Lab./2016-2017/03**

**Date: 22/12/2017**

**Sealed two bid system type tender separately are invited 3 D Printer SLS as per details given below.**

**Tender Opening date: 22/12/2017**

**Tender Closing Date: 28/12/2017**

### **Tender Document for 3 D Printer SLS.**

|                              |  |
|------------------------------|--|
| Technology                   | The <b>SLS</b> ( laser sintering machine ) for professional application  |
| Print Volume                 | Should be 120 X 120 X 170 XYZ mm or Bigger sizes are preferable.   |
| Dynamic in x/y ,Z resolution | For x/Y 70 to 80Microns 25 Microns to 150 mlcrons  |
| Material                     | Open source and high strength polyamide material with melting point of minimum 170 degree  |
| Parameters                   | Open parameters should be provided for R&D<br>User should able to adjust Laser speed, Inside temperature and surface temperature   |
| Software                     | Machine should be provided with printing software and stl repair software  |
| Supported Formats            | VRML (*.vrl, *.vrm, *.x3dv), Rhino (*.3dm), Sketchup (*.skp), OBJ (*.obj), 3DS (*.3ds, *.prj), PLY (*.ply, *.zcp), ZPR (*.zpr), X3D (.x3d), 3MF (*.3mf), DXF (*.dxf), STL (*.stl) or more  |
| Software Editing Tools       | <ul style="list-style-type: none"><li>• should able to cut parts with cutting lines</li><li>• should able to perform Boolean operations (Unite, Subtract, Intersect)</li><li>• should able to turn surfaces into printable solids</li><li>• should able to modify and editing the geometry of parts with the extrude and offset tool</li></ul> |
| Analysis Tools               | Should contains measurement and analysis tools to ensure the quality of printed parts  |
| Visualization                | Software should able to Highlight errors in parts  |
| Compatibility                | Software should be compatible with other 3d printing technologies as well<br>Software should have provision to add machine parameters for build preparation  |
| Repair Tools                 | <ul style="list-style-type: none"><li>• Software should solve the most common .stl file errors in one click</li><li>• Software wizard should guide through the fixing process step-by-step when facing complex errors</li></ul>  |
| Power Supply                 | Machine should able to run on standard 230 V Power   |
| UPS                          | Machine should be provided with appropriate online UPS   |
| Performance                  | Supplier must submit at least 03 installation certificates of same or equivalent professional 3d printing technology including IIT's and industry  |
| System Properties            | Compatible with 3shape, Orchestrate 3D, Dental Wings and Exocad design software<br>Any STL file of a model designed from an impression or an intra oral scanner can be printed<br>Capable of printing orthodontic models, partials, surgical guides and bite guards  |

### **Other Terms & Conditions.**

Tender to be submitted in two separate envelop each for Technical & Price bid, kept in separate envelop addressed to under sign.

1. Tender must reach before date or on 28/12/2017 up 3.30 Pm to the mentioned ADDRESS.
2. Maximum Discount to be offered keeping in view IIT's being nonprofit making organizations.
3. Only authorized dealers need to participate. Certificate submission with tender is mandatory.
4. Institute reserves the right to reject offer/tender without assigning any reason.

### **All Quotation to be send:**

Prof.Ramkumar J, FIE(I)  
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Ram Tiwari Chair Professor  
Associate Dean for Student Activities (ADSA)  
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