



# Indian Institute of Technology Kanpur

Dept Of Material Science and Engineering

**Enq. No.: MSE/SNL/PRT-1**

**Enquiry Dated: Sep 10, 2013**

**Closing Date: Sep 18, 2013**

Structural Nanomaterials Lab, IIT Kanpur invites quotations for one portable Surface Roughness Tester (complying with or better than the specifications mentioned in Appendix A). The stylus-based portable Roughness Tester should be capable of analyzing all the elements with roughness ranging from 0.01 $\mu$ m to 40 $\mu$ m. The portable roughness tester will be used for measuring the flat and curved surface roughness of multicomponent alloys and should be provided with advanced software for high accuracy and repeatability. The Equipment should be able to operate for long hours with excellent stability. The closing date for the above item is Sep 30th, 2013.

Terms and Conditions:

1. Only authorized venders may quote.
2. Maximum education discount, if any, should be offered
3. Validity of quotation should be at least for 60 days
4. Prices should be on CIF and FOB separately (if imported)
5. Price for indigenous items should be FOR (inclusive of everything)
6. Warranty should be for at least three years after installation (specify clearly)
7. Normal payment terms for the Institute will be applicable
8. Quotation should carry proper certifications like agency certificate, proprietary certificate, etc.
9. Delivery should be made within 6 weeks (specify in quotation)
10. The indenter reserves the right to withhold placement of final order. The right to reject all or any of the quotations and to split up the requirements or relax any or all of the above conditions without assigning any reason is reserved.

Kindly send your quotations in sealed envelopes latest by 18<sup>th</sup> Sep 2013 to:

**Mr. Deepak Kannaujia**  
**Western Lab 104D**  
**Dept of Material Science and Engg**  
**IIT Kanpur, U.P. 208016, India.**  
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**Appendix A**  
**Technical Specifications for Portable Roughness Tester**

Sr. No.	Parameter	Required Specification <sup>1</sup>
1.	Description	One stylus-based Portable Roughness Tester with working software to measure surface roughness of range of 0.01µm to 40µm. Should be able to calculate Ra, Rz, Ry, Rq, Rt, Rp, Rmax, Rm, R3z, S, Sm Sk, tp
2.	Model Name	Clearly mention make, model and model number of the equipment being offered.
3.	Battery Capacity	<ul style="list-style-type: none"> <li>• Long Lasting (preferably rechargeable Li-ion)</li> <li>• Should be able to take more than 3000 measurements</li> <li>• Charger should be included</li> </ul>
4	Power Supply of Charger	Instrument should work at 220V, 50 Hz
5.	Detection range	<ul style="list-style-type: none"> <li>• Ra and Rq range 0.01 µm to 40 µm</li> <li>• Rz, Ry, Rp, Rt, R3z: 0.02 to 160 µm</li> <li>• Cut-off length upto 2.5mm</li> </ul>
6.	Detector	<b>The detector should give the surface roughness profile of flat as well as curved surface (include accessories if needed)</b>
7.	Display features	<ul style="list-style-type: none"> <li>• Stylus position indicator</li> <li>• 0.001 µm resolution for display</li> </ul>
8.	Standard	<ul style="list-style-type: none"> <li>• Conforms to international Standards ISO, DIN, ASME, JIS</li> <li>• Roughness test plate to be included</li> </ul>
9.	Analysis Capabilities	<ul style="list-style-type: none"> <li>• Should be capable to operate on various surfaces, not only flat but also outer cylinder, outer cone, grooves</li> </ul>
10.	Software	<ul style="list-style-type: none"> <li>• The software should be interactive and user-friendly, meant for easy control, operation, data-capture and data-analysis</li> <li>• Status of analysis as well as of instrument should be continuously displayed on the screen</li> <li>• Separately list along with prices for additional software offered for smooth control of equipment and accurate data analysis</li> <li>• The instrument should be installed with latest available version of software for control, operation and analysis.</li> <li>• The supplier should upgrade the software as and when the up gradations become available for at least five years from installation</li> <li>• Interface cable should be included (preferably RS232)</li> </ul>
11.	Documentation	<ul style="list-style-type: none"> <li>• Two sets of operating manuals for the equipment and control system should be provided in hard copies</li> <li>• A soft copy of the above manuals should also be provided in a CD/DVD</li> </ul>
12.	After-sales Service	<ul style="list-style-type: none"> <li>• The supplier should provide a prompt after-sales service such as regular instrument maintenance, troubleshooting and fixing</li> <li>• The list of service centers in India should be included.</li> </ul>
<sup>1</sup> . Above specifications are desirable and the actual specifications for your systems should be clearly mentioned.		