## INDIAN INSTITUTE OF TECHNOLOGY KANPUR

## DEPARTMENT OF CHEMISTRY

## DATED: 21/04/2016

Kindly send us urgent sealed quotations for the following items against tender number **IITK/CHM/JKB/16-17/3**. Quotations should be addressed to Prof. Jitendra K. Bera, Chemistry Department, IIT Kanpur, Kanpur - 208016. The last date for receipt of sealed quotations was **09/05/2016**, extended upto 25.5.2016 for submission of quotations.

S.	Item	Specifications
<b>S.</b> <b>No.</b> 1.	Item Solvent Purification System (Imported)	<ul> <li>Specifications</li> <li>External Dimensions: 1300 mm (W) x 2032 mm (H) x 1070 mm (D)</li> <li>System Control: Manual</li> <li>Operation: Hand Valves Dispense Solvent</li> <li>Material: Stainless Steel (1.4301 / US 304)</li> <li>Castors and levelling feet for Easy Mobility: should be included</li> <li>Manifold: Stainless Steel Piping with Three Way Hand Valve</li> <li>Work Shelf: Height adjustable Shelving with spill tray</li> <li>Clamping Posts: should be Included</li> <li>Vacuum Pump: Oil Free Diaphragm Pump with speed: 20 L/min, vacuum less than 8 mbar.</li> <li>Solvent Flow Rate: &lt;1,000 ml / Minute</li> <li>Electrical Power: 230 V / 50-60Hz, 10 Amps, 115V/50-60Hz, 15 Amps for Vacuum Pump</li> <li>Integrated Safety Cabinet, Fire resistivity type 90, to house 5 solvent reservoirs.</li> <li>Vapor Removal / Exhaust: Vapor Hood with 4" Connection &amp; Emergency Cut-off Valve</li> <li>Process: Closed Loop System</li> <li>Dispensing: From SPS and / or from Glove box system</li> <li>Inlet Pressure: Inlet Pressure Set Between 4.0 bar and 6.0 bar</li> <li>Working Pressure: Working Pressure Set between 0.3 bar and 0.5 bar</li> <li>Purge hose: included type PTFE</li> <li>Solvent Regulation: Independent Regulator for Each Solvent to adjust flow rate and pressure.</li> <li>Solvent Line Material: Color Coded Stainless Steel Line (1.4301 / US 304)</li> <li>Dispensing adapter: Teflon, NS 14/23</li> <li>Particle Filtration: Filter Columns Equipped with Pre-Filters</li> <li>5 Double Purification stainless steel columns (2 columns per solvent).</li> <li>Each Column capacity should be at least one gallon.</li> <li>8 00L solvent capacity, before replacement of the double purification column.</li> <li>5 Solvent Reservoirs Stainless steel (1.4301 / US 304).</li> <li>17L capacity per reservoir.</li> <li>5 x 250 ml round bottom collection flask with:</li> <li>1 x NS 29/32 connection with ground neck.</li> </ul>

con for contum plum, with DTEE out off cools
cap for septum plug; with PTFE cut-off cock.
1 x NS 14/23 opening with ground neck and PTFE cut-off cock on the
bottom.
<ul> <li>Big openings with DN40 flanges on the columns for an easy load</li> </ul>
replacement.
<ul> <li>System should be fully enclosed - purification columns and reservoirs.</li> </ul>
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<ul> <li>Integrated vapor collection hood over the solvent dispensing spigots.</li> </ul>
Proper Grounding of Electro Static Charging and Emergency cut off.
<ul> <li>System should follow European Safety Standards.</li> </ul>
<ul> <li>System should be CE and UL certified.</li> </ul>
<ul> <li>Specifications should be supported by original brochures and catalogues.</li> </ul>
<ul> <li>Company should have latest authorization from the principal.</li> </ul>
<ul> <li>Record of sale of at least 20 units to IITs, IISERs and IISc should be</li> </ul>
included.
<ul> <li>Local service (Kanpur / Lucknow) should be available.</li> </ul>
<ul> <li>One year warranty from the date of arrival on delivery site.</li> </ul>