## EQUIPMENT USAGE CHARGES FOR NCPRE TOOLS

<table>
<thead>
<tr>
<th>S.No</th>
<th>Resource Name</th>
<th>Internal Faculty</th>
<th>National Labs, University, R&amp;D organizations and start-ups</th>
<th>Industry for profit organization</th>
<th>Slot</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>18650 Cell Semi Auto Winding Machine</td>
<td>300</td>
<td>450</td>
<td>1040</td>
<td>Hrs</td>
</tr>
<tr>
<td>2</td>
<td>2 inch Annealing Furnace</td>
<td>200</td>
<td>300</td>
<td>750</td>
<td>Hrs</td>
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<tr>
<td>3</td>
<td>2 inch Boron diffusion</td>
<td>200</td>
<td>300</td>
<td>750</td>
<td>Hrs</td>
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<td>4</td>
<td>2 inch phosphorus diffusion</td>
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<td>Hrs</td>
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<tr>
<td>5</td>
<td>4 Target E Beam Evaporator System</td>
<td>300</td>
<td>450</td>
<td>1200</td>
<td>Hrs</td>
</tr>
<tr>
<td>6</td>
<td>Adhesion Tester</td>
<td>500</td>
<td>750</td>
<td>1900</td>
<td>Sample</td>
</tr>
<tr>
<td>7</td>
<td>DektakXT Stylus Profiler</td>
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<td>8</td>
<td>DI Water System</td>
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<td>Hrs</td>
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<td>9</td>
<td>Diffusion Furnace</td>
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<td>750</td>
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<td>Per run</td>
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<td>10</td>
<td>Filteration machine for battery slurry</td>
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<td>1000</td>
<td>Hrs</td>
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<td>Final Sealing Machine</td>
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<td>12</td>
<td>Fluke Thermometer</td>
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<td>Hrs</td>
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<td>13</td>
<td>Four Probe System</td>
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<td>225</td>
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<td>Sample</td>
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<td>14</td>
<td>Fume Hood</td>
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<td>500</td>
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<td>15</td>
<td>Glove box</td>
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<td>1000</td>
<td>Hrs</td>
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<tr>
<td>16</td>
<td>Glove Box-1 with Spincoater and Hot Plates(Inert atmosphere)</td>
<td>300</td>
<td>450</td>
<td>650</td>
<td>Hrs</td>
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<tr>
<td>17</td>
<td>Glove Box-2 with Evaporator (Inert atmosphere)</td>
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<td>Hrs</td>
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<td>Glove Box-2 with Semi Probe (Inert atmosphere)</td>
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<tr>
<td>19</td>
<td>Glove box-3 with spin coater, Hot plate &amp; weighing balance</td>
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<td>650</td>
<td>Hrs</td>
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<tr>
<td>20</td>
<td>Greateyes EL/PL imaging tool</td>
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<td>450</td>
<td>2000</td>
<td>Hrs</td>
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<td>21</td>
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<td>Hot Air Oven</td>
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<td>In-House Solar Simulator</td>
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<td>Hours 2</td>
<td>Hours 3</td>
<td>Unit</td>
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<td>LAF (spincoater)</td>
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<td>LAF (UVCS)</td>
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<td>Lifetime Characterization and Suns Voc Measurement System</td>
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<td>Light Beam Induced Current</td>
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<td>NCPE Clean Bench for Mono wafers</td>
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<td>per wafer</td>
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<td>Power planetary vacuum mixer</td>
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<td>Quantum Efficiency Measurement System</td>
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<td>33</td>
<td>Saw damage removal 5&quot; wafer</td>
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<tr>
<td>35</td>
<td>Semi Auto Winding machine for pouch cell 2.5AH</td>
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<td>850</td>
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<td>Semi-Auto Stacking machine</td>
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<td>Hrs</td>
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<td>Single Point Pneumatic welding for cylinder cell assembling</td>
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<tr>
<td>38</td>
<td>Solmetric IV Tracer - 1500</td>
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<td>Hrs</td>
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<td>Hrs</td>
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<td>43</td>
<td>Tab tester for pouch</td>
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<td>150</td>
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<td>Hrs</td>
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<td>44</td>
<td>Texturization of Multicrystalline 25 wafers</td>
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<td>375</td>
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<td>46</td>
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<td>Ultrasonic tab welder (cathode tab)</td>
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<td>UV Exposure System</td>
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<tr>
<td>49</td>
<td>UV-Vis-NIR Spectrometer - Lambda 950 (NCPRE)</td>
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<td>600</td>
<td>2100</td>
<td>Hrs</td>
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<td></td>
<td>Procedure</td>
<td>University Cost</td>
<td>R&amp;D Cost</td>
<td>Hours</td>
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<td>525</td>
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<td>51</td>
<td><strong>SEM Image</strong> (surface OR Cross section)</td>
<td><strong>University</strong>: Rs.1050</td>
<td><strong>R&amp;D</strong>: Rs.2625</td>
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<td><strong>SEM Image</strong> (Surface + Cross Section)</td>
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<td><strong>R&amp;D</strong>: Rs.3750</td>
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<td>EDS Mapping</td>
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