

## Charges for the users of the equipment's maintained at USIC♦

| S No | Name of the Equipment                                          | Status                 | Charges in Rs.                               |                                                                    |                                                          |                                                    |
|------|----------------------------------------------------------------|------------------------|----------------------------------------------|--------------------------------------------------------------------|----------------------------------------------------------|----------------------------------------------------|
|      |                                                                |                        | Internal                                     | External<br>(Govt. Colleges and Universities)<br>Including 18% GST | External<br>(Private Institutions )<br>Including 18% GST | External<br>(Industries etc.)<br>Including 18% GST |
| 1.   | Raman Spectroscopy with temperature variation (Charges for RT) | Working                | 80 per sample/390 per Hr. for RT             | 1416 per hr for RT                                                 | 1770 per hr for RT                                       | 2950 per hr for RT                                 |
| 2.   | FTIR spectroscopy                                              | Working                | 30 per sample/160 per hr                     | 708 per hr.                                                        | 885 per hr.                                              | 1416 per hr.                                       |
| 3.   | NMR (Liquid) (Proton, Carbon* & multi nuclei*)                 | Working                | 10/sample for proton<br>20/sample for carbon | 295/sample for proton<br>590/sample for carbon                     | 354/sample for proton<br>708/sample for carbon           | 472/sample for proton<br>826/sample for carbon     |
| 4    | MAS NMR (Solid)                                                | Working                | 325 per hr                                   | 1770 per hr                                                        | 2242 per hr                                              | 2950 per hr                                        |
| 5.   | LN <sub>2</sub> (Supply)                                       | Purchased from outside | 20 per liter                                 |                                                                    | Not for external users                                   |                                                    |
| 6.   | Vibrating Sample Magnetometer                                  | Working (RT)           | 325 per hr                                   | 1180 per hr                                                        | 1475 per hr                                              | 2360 per hr                                        |
| 7.   | Scanning electron Microscope (SEM) with EDAX (with coating)    | Working                | 325 per hr                                   | 1770 per hr                                                        | 2124 per hr                                              | 2950 per hr                                        |
| 8.   | CHNSO elemental analysis <sup>#</sup>                          | Working                | 195 per sample                               | 1180 per sample                                                    | 1475 per sample                                          | 2360 per sample                                    |
| 9.   | Circular Dichroism Spectroscopy                                | Working                | 65 per hr                                    | 295 per hr                                                         | 354 per hr                                               | 590 per hr                                         |
| 10   | Up Conversion Spectroscopy                                     | Working                | 130 per hr                                   | 1180 per hr                                                        | 1475 per hr                                              | 2360 per hr                                        |
| 11   | Confocal Microscopy                                            | Working                | 325 per hr                                   | 1180 per hr                                                        | 1475 per hr                                              | 2360 per hr                                        |
| 12   | Ultracentrifuge                                                | Working                | 65 per hr                                    |                                                                    | Not for external users                                   |                                                    |
| 13   | Impedance Spectroscopy                                         | Working                | 130 per hr                                   | 590 per hr                                                         | 738 per hr                                               | 1770 per hr                                        |
| 14.  | FESEM with EDAX (with coating)                                 | Working                | 650 per hr                                   | 2360 per hr                                                        | 2950 per hr.                                             | 4720 per hr                                        |
| 15   | TGA-DTA                                                        | Working                | 65 per hr                                    | 354 per hr                                                         | 443 per hr                                               | 1180 per hr                                        |

|    |                                                      |         |                                                                             |                                                                               |                                                                               |                                                                               |
|----|------------------------------------------------------|---------|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| 16 | Modulated Differential Scanning Calorimetry (MDSC)   | Working | 325 per hr                                                                  | 1770 per hr                                                                   | 2124 per hr                                                                   | 3540 per hr                                                                   |
| 17 | Powder XRD*                                          | Working | 20 per sample (@RT) or 80 per hr 325 per hr (LT)                            | 590 per sample (@RT) 1180 per hr (LT)                                         | 738 per sample (@RT) 1475 per hr (LT)                                         | 1180 per sample (@RT) 2360 per hr (LT)                                        |
| 18 | High resolution mass spectrometer (HRMS)             | Working | 65 per sample                                                               | 944 per sample                                                                | 1180 per sample                                                               | 1770 per sample                                                               |
| 19 | Millipore                                            | Working | Deionized: 10/lit Ultra-pure: 25/lit                                        |                                                                               | Not for external users                                                        |                                                                               |
| 20 | Single Crystal X-Ray Diffractometer                  | Working | 1000 sample                                                                 | 3540 sample                                                                   | 4425 sample                                                                   |                                                                               |
| 21 | Flow Cytometer Cell Sorter                           | Working | 50 for Analysis 100 for Cell sorter                                         | 59 for Analysis 118 for Cell sorter                                           | 118 for Analysis 236 for Cell sorter                                          | 354 for Analysis 590 for Cell sorter                                          |
| 22 | UV Vis Spectrophotometer Liquid                      | Working | 40 per sample                                                               | 295 per sample                                                                | 354 per sample                                                                | 413 per sample                                                                |
| 23 | UV Vis Spectrophotometer Solid                       | Working | 50 per sample                                                               | 354 per sample                                                                | 443 per sample                                                                | 472 per sample                                                                |
| 24 | BET Surface Area Analyser                            | Working | 1000 per sample                                                             | 2360 per sample                                                               | 4950 per sample                                                               | 3540 per sample                                                               |
| 25 | Dynamic Mechanical Analyser (DMA)                    |         | 800 per hr                                                                  | 1416 per hr                                                                   | 1770 per hr                                                                   | 2950 per hr                                                                   |
| 26 | Laser Based Photoluminescence Spectroscopy           | Working | 50 per sample                                                               | 354 per sample                                                                | 375 per sample                                                                | 472 per sample                                                                |
| 27 | Electrochemical Workstation                          | Working | 150 per hour                                                                | 354 per hour                                                                  | 443 per hour                                                                  | 590 per hour                                                                  |
| 28 | Electron Spin Resonance                              | Working | 500 per hour/ 150 per sample                                                | 885 per hour/ 354 per sample                                                  | 1062 per hour/ 443 per sample                                                 | 1180 per hour/ 826 per sample                                                 |
| 29 | Particle Size Analyzer                               | Working | 200 per Sample                                                              | 1180 per Sample                                                               | 1475 per sample                                                               | 2360 per Sample                                                               |
| 30 | Inductively Coupled Plasma Mass Spectrometer (ICPMS) | Working | 500/sample (Liquid) 600/ sample (Solid) Upto 3 elements 50 each per element | 1180/sample (Liquid) 1770/ sample (Solid) Upto 3 elements 59 each per element | 1475/sample (Liquid) 2124/ sample (Solid) Upto 3 elements 59 each per element | 2360/sample (Liquid) 2950/ sample (Solid) Upto 3 elements 59 each per element |
| 31 | High Resolution Transmission Electron Microscope     | Working | 500 per hour for Imaging , 400 per hour for SAD/EDS                         | 1770 per hour for Imaging 944 per hour for SAD/EDS                            | 2360 per hour for Imaging and 1416 per hour for SAD/EDS                       | 2950 per hour for Imaging, 3124 per hour for SAD/EDS                          |

♦ These charges are subject to correction and USIC has every right to revise the charges depending upon the running cost of the instrument.

\***Carbon & multi nuclei:** The charges mentioned above corresponds to one sample with 512 scans. More than 512 scans, charges would be counted with multiplication (e.g.: 512, 1024, 1536 and so on)

#includes consumables

\*Typical scan range  $2\theta = 10$  to  $80^\circ$  with  $2^\circ$  per minute