| | Bnubaneswar | | |
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| SI. No. | Analytical Instrument Facility | Developmental Charges (`) | |
| 1 | Identification of Polymer / Plastic Materials | ` 6,000.00 / Sample | |
| 2 | Transmission Electron Microscopy (TEM) | ` 3,000.00 / Sample | |
| | Sample Preparation for TEM (by Cryomicrotomy). Liquid Nitrogen cost as per actual | ` 2,000.00 / Sample | |
| 3 | Scanning Electron Microscopy (SEM) | ` 3,000.00 / Sample | |
| 4 | Hotstage Optical Microscope | ` 1,500.00 / Sample at Room Temperature (RT) | |
| | | ` 3,000.00 / Sample at High Temperature (HT) | |
| 5 | Gel Permeation Chromatography (GPC) | ` 10,000.00 / Sample (Per Single Run) | |
| 6 | Fuel Cell (Single Stack) Performance Analysis | ` 2,500.00 / Sample | |
| 7 | Atomic Force Microscope (AFM) | ` 3,000.00 / Sample | |
| 8 | Dynamic Mechanical Analysis (DMA), RT-300°C @10°C/min | ` 2,000.00 / Sample | |
| 9 | Differential Scanning Calorimetry (DSC) (-) 70 to 300°C @ 10°C /min | ` 2,000.00 / Sample | |
| 10 | Thermo Gravimetric Analysis (TGA) RT-800°C @10°C/min | ` 2,000.00 / Sample | |
| 11 | X-Ray Diffraction (XRD) | ` 3,000.00 / Sample | |
| 12 | Parallel Plate Rheometer | ` 1,100.00 / Sample | |
| 13 | FTIR Spectroscopy | ` 2,000.00 / Sample | |
| 14 | CHNS/O Elemental Analyzer | ` 3,500.00 / Sample | |
| 15 | Thermal Conductivity Tester (Guarded Hot Plate) | 1,200.00 / Sample / Per Temperature | |
| 16 | Environmental Test Chamber | ` 200.00 / Hour | |
| 17 | Melt Compounding with Micro Compounder | 2,500.00 / Batch | |
| | Universal Testing Machine (UTM) (5 nos) (Tensile) Room Temp (23°C) | ` 1,300.00 / Sample | |
| 18 | Below Ambient Temperature, Liquid Nitrogen cost as per actual | ` 2,000.00 / Sample | |
| | Above Ambient Temperature (50° C to 200°C) | ` 2,000.00 / Sample | |
| 19 | Universal Testing Machine (UTM) (5 nos) (Flexural/Compressive) | ` 1,100.00 / Sample at RT | |
| | | ` 2,000.00 / Sample at above & below Room Temperature (Liquid Nitrogen charges as actual) | |
| 20 | Weather-O-Meter (Xenon Exposure) | 190.00 / hr. for first 100 hrs. | |
| | | 175.00 / hr. for subsequent hrs. | |

| SI. No. | Analytical Instrument Facility | Developmental Charges (`) |
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| 01. 140. | Analytical modulinent racinty | ` 65.00 / hr. for first 100 hrs. |
| 21 | Weather-O-Meter (UV Exposure) | 3.00 / hr. for subsequent hrs. |
| 22 | Compression Molding | 1,000.00 / Sheet |
| 23 | Density | ` 700.00 / Sample |
| | Twin Screw Extruder (Haake Polylab OS) (with pelletizer @100 gms per batch) | 3,000.00 (upto 4 hrs) |
| 24 | | 4,260.00 (per shift, 8 hrs) |
| | Melt Compounding using Haake Polylab OS (Batch Mixer@ 50 gm per batch) | 2,500.00 (upto 2 kg per grade per batch) |
| 25 | | ` 850.00 (for additional compounding per kg) |
| 200 | Twin Screw Extruder (OMEGA-25) | ` 3,000.00 (upto 4 hrs) |
| 26 | | ` 4,260.00 (per shift, 8 hrs) |
| 27 | Water Vapor Transmission Rate (WVTR) | ` 1,200.00 / Sample |
| 28 | Oxygen Transmission Rate (OTR) | ` 2,000.00 / Sample |
| 29 | Melt Flow Index (MFI) | ` 1,100.00 / Sample |
| 30 | Flammability (as per UL Standards) | ` 2,900.00 / Sample |
| | Sample Preparation by:- | |
| 31 | Contour Cutter | ` 500.00 (for 5 nos.) |
| 31 | Injection Moulding | ` 1,000.00 (for 10 nos) |
| | Injection Moulding (Micro Injection Jet) | 2,500.00 (for 5 nos.) |
| | Impact Test (IZOD & CHARPY) at RT | |
| 32 | Notched Un-notched | ` 1,100.00 / Sample |
| | | N 4 400 00 40 |
| 33 | Heat Deflection Temp (HDT) | ` 1,100.00 / Sample |
| 34 | Vicat Softening point (VSP) | ` 1,100.00 / Sample |
| 35 | Haze/Luminous Transmittance | ` 700.00 / Sample |
| 36 | Spin Coater | ` 700.00 / Sample |
| 37 | Cone Calorimetric Studies (03 nos. of Specimen) for Single Heat Flux | ` 20,000.00 / Sample |
| | Fatigue Test (Tension Mode) | |
| 38 | Upto1000 Cycles or per hour | ` 2,500.00 / Sample |
| | Subsequent 500 Cycles @ `250.00 | ` 250.00 / Sample |
| 39 | Gas Chromatography (GC) | ` 3,000.00 / Sample |
| 40 | Toxicity Test | ` 50,000.00 / Sample |

| I IMatariale in Sail | SI. No. | Analytical Instrument Facility | Developmental Charges (`) |
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| Contact Angle Measurement | 41 | Spread of Flame | ` 7,500.00 / Sample |
| Particle Size Analysis ` 2,000.00 / Sample | 42 | Smoke Density | ` 7,500.00 / Sample |
| High Temperature GPC Biodegradation as per ISO 17088:2012 (Specifications for Compostable Plastics under Composting Condition.(Aerobic Biodegradability) ISO 17556:2019 - Biodegradability of Plastic (Measuring the Oxygen demand in a Respirometer or the amount of Carbon dioxide evolved) 47 | 43 | Contact Angle Measurement | ` 1,500.00 / Sample |
| Biodegradation as per ISO 17088:2012 | 44 | Particle Size Analysis | ` 2,000.00 / Sample |
| 46 | 45 | High Temperature GPC | ` 10,000.00 / Sample (Per Single Run) |
| 47 Materials in Soil (Measuring the Oxygen demand in a Respirometer or the amount of Carbon dioxide evolved) 32,000/- shall be charged per month as per the test demands not more than 02 years 48 Surface Resistivity 1,100.00 / Sample 49 Volume Resistivity 1,100.00 / Sample 50 Arc Resistance 1,100.00 / Sample 51 Dielectric Test 1,100.00 / Sample 52 Taber Abrasion 875.00 / Sample 53 Tear Test 750.00 / Sample 54 Co-efficient of friction 850.00 / Sample 55 Limiting Oxygen Index 1,200.00 / Sample 4 Shore A 500.00 / Sample 56 Shore A 500.00 / Sample 57 GCMS 500.00 / Sample 57 GCMS 6,000.00 / Sample 59 Raman Spectrometer 3,000.00 / Sample 60 ICP-MS 750.00 / Element. Digestion charges 61 Glove Box 3,000.00 / Shift | 46 | (Specifications for Compostable Plastics under | ` 3,75,000.00 / Sample |
| 49 Volume Resistivity 1,100.00 / Sample 50 Arc Resistance 1,100.00 / Sample 51 Dielectric Test 1,100.00 / Sample 52 Taber Abrasion 875.00 / Sample 53 Tear Test 750.00 / Sample 54 Co-efficient of friction 850.00 / Sample 55 Limiting Oxygen Index 1,200.00 / Sample Hardness: * Shore A 500.00 / Sample * Shore D 500.00 / Sample * Rockwell Hardness 500.00 / Sample/per injection 58 BET 5,000.00 / Sample 59 Raman Spectrometer 3,000.00 / Sample 60 ICP-MS 750.00 / Element. Digestion charges 1,500.00 / Sample 1,500.00 / Sample | 47 | Materials in Soil (Measuring the Oxygen demand in a Respirometer | charges of `32,000/- shall be charged per month |
| 50 Arc Resistance 1,100.00 / Sample 51 Dielectric Test 1,100.00 / Sample 52 Taber Abrasion 875.00 / Sample 53 Tear Test 750.00 / Sample 54 Co-efficient of friction 850.00 / Sample 55 Limiting Oxygen Index 1,200.00 / Sample Hardness: * Shore A 500.00 / Sample * Shore D 500.00 / Sample * Rockwell Hardness 500.00 / Sample 57 GCMS 6,000.00 / Sample/per injection 58 BET 5,000.00 / Sample 59 Raman Spectrometer 3,000.00 / Sample 60 ICP-MS 750.00 / Element. Digestion charges 1,500.00 / Sample 1,500.00 / Sample 61 Glove Box 3,000.00 / Shift | 48 | Surface Resistivity | ` 1,100.00 / Sample |
| 51 Dielectric Test 1,100.00 / Sample 52 Taber Abrasion 875.00 / Sample 53 Tear Test 750.00 / Sample 54 Co-efficient of friction 850.00 / Sample 55 Limiting Oxygen Index 1,200.00 / Sample Hardness: * Shore A 500.00 / Sample * Shore D 500.00 / Sample * Rockwell Hardness 500.00 / Sample 57 GCMS 6,000.00 / Sample/per injection 58 BET 5,000.00 / Sample 59 Raman Spectrometer 3,000.00 / Sample 60 ICP-MS 750.00 / Element. Digestion charges 1,500.00 / Sample 1,500.00 / Sample 61 Glove Box 3,000.00 / Shift | 49 | Volume Resistivity | ` 1,100.00 / Sample |
| 52 Taber Abrasion 875.00 / Sample 53 Tear Test 750.00 / Sample 54 Co-efficient of friction 850.00 / Sample 55 Limiting Oxygen Index 1,200.00 / Sample Hardness: ** * Shore A 500.00 / Sample * Shore D 500.00 / Sample * Rockwell Hardness 500.00 / Sample 57 GCMS 6,000.00 / Sample/per injection 58 BET 5,000.00 / Sample 59 Raman Spectrometer 3,000.00 / Sample 60 ICP-MS 750.00 / Element. Digestion charges ** 1,500.00 / Sample 1,500.00 / Sample ** 1,500.00 / Sample 1,500.00 / Sample | 50 | Arc Resistance | ` 1,100.00 / Sample |
| 53 Tear Test ` 750.00 / Sample 54 Co-efficient of friction ` 850.00 / Sample 55 Limiting Oxygen Index ` 1,200.00 / Sample Hardness: ' 500.00 / Sample • Shore A ` 500.00 / Sample • Rockwell Hardness ` 500.00 / Sample 57 GCMS ` 6,000.00 / Sample/per injection 58 BET ` 5,000.00 / Sample 59 Raman Spectrometer ` 3,000.00 / Sample 60 ICP-MS ` 750.00 / Element. Digestion charges ` 1,500.00 / Sample ` 1,500.00 / Sample 3,000.00 / Sample ` 3,000.00 / Shift | 51 | Dielectric Test | ` 1,100.00 / Sample |
| 54 Co-efficient of friction ` 850.00 / Sample 55 Limiting Oxygen Index ` 1,200.00 / Sample 60 Hardness : ` 500.00 / Sample • Shore A ` 500.00 / Sample • Shore D ` 500.00 / Sample • Rockwell Hardness ` 500.00 / Sample 57 GCMS ` 6,000.00 / Sample/per injection 58 BET ` 5,000.00 / Sample 59 Raman Spectrometer ` 3,000.00 / Sample 60 ICP-MS ` 750.00 / Element. Digestion charges ` 1,500.00 / Sample ` 1,500.00 / Sample ` 3,000.00 / Sample ` 3,000.00 / Sample | 52 | Taber Abrasion | ` 875.00 / Sample |
| 55 Limiting Oxygen Index 1,200.00 / Sample 56 Hardness: | 53 | Tear Test | ` 750.00 / Sample |
| Hardness: Shore A Shore D Rockwell Hardness GCMS GCMS GOMS Sound / Sample 500.00 / Sample 750.00 / Sample | 54 | Co-efficient of friction | ` 850.00 / Sample |
| • Shore A • Shore D • Rockwell Hardness 57 GCMS 500.00 / Sample 500.00 / Sample 500.00 / Sample 6,000.00 / Sample/per injection 58 BET 5,000.00 / Sample 59 Raman Spectrometer 3,000.00 / Sample 750.00 / Sample 750.00 / Sample 1,500.00 / Sample 750.00 / Element. Digestion charges 1,500.00 / Sample 750.00 / Sample 750.00 / Sample | 55 | Limiting Oxygen Index | ` 1,200.00 / Sample |
| 56 • Shore D • 500.00 / Sample • Rockwell Hardness • 500.00 / Sample 57 GCMS • 6,000.00 / Sample/per injection 58 BET • 5,000.00 / Sample 59 Raman Spectrometer • 3,000.00 / Sample 60 ICP-MS • 750.00 / Element. Digestion charges • 1,500.00 / Sample • 3,000.00 / Shift | | Hardness : | |
| • Shore D • Rockwell Hardness 500.00 / Sample 500.00 / Sample 600 ICP-MS • Shore D • South of South of Sample 500.00 / Sample 600 ICP-MS • South of Sample 500.00 / Sample 750.00 / Element. Digestion charges 750.00 / Sample | 56 | Shore A | ` 500.00 / Sample |
| 57 GCMS ` 6,000.00 / Sample/per injection 58 BET ` 5,000.00 / Sample 59 Raman Spectrometer ` 3,000.00 / Sample 60 ICP-MS ` 750.00 / Element. Digestion charges ` 1,500.00 / Sample ` 1,500.00 / Sample 61 Glove Box ` 3,000.00 / Shift | | Shore D | ` 500.00 / Sample |
| 58 BET \$ 5,000.00 / Sample 59 Raman Spectrometer \$ 3,000.00 / Sample 60 ICP-MS \$ 750.00 / Element. Digestion charges \$ 1,500.00 / Sample \$ 3,000.00 / Shift | | Rockwell Hardness | ` 500.00 / Sample |
| 59 Raman Spectrometer 3,000.00 / Sample 60 ICP-MS 750.00 / Element. Digestion charges 1,500.00 / Sample 3,000.00 / Shift | 57 | GCMS | ` 6,000.00 / Sample/per injection |
| 60 ICP-MS \[| 58 | BET | ` 5,000.00 / Sample |
| 60 ICP-MS | 59 | Raman Spectrometer | ` 3,000.00 / Sample |
| | 60 | ICP-MS | |
| 62 Electrospinning 3,000.00 / Batch | 61 | Glove Box | ` 3,000.00 / Shift |
| | 62 | Electrospinning | ` 3,000.00 / Batch |

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| SI. No. | Analytical Instrument Facility | Developmental Charges (`) |
| 63 | 3D Printer | ` 750.00 / Hour + Material cost as per actual |
| 64 | NMR(F19, C13,H1, Solution state) | ` 2,500.00 / Sample |
| 65 | Electrochemical work station | ` 750.00 / Hour |
| 66 | Battery Tester | ` 750.00 / Hour |
| 67 | UV visible/NIR | ` 850.00 / Sample |
| 68 | Flurospectrometer | ` 850.00 / Sample |
| 69 | 3D bluelight scanner | ` 2,000.00 / Sample |
| 70 | Solar Simulator | ` 2,000.00 / Hour |
| 71 | Semiconductor Parameter Analyser with Probe Station (Temperature) | ` 500.00 / Sample |
| 72 | Impedence Anlyser with Temperture | ` 1,100.00 / Sample without temperature |
| | portano | ` 2,000.00 / Sample with temperature |
| 73 | Salt Spray | ` 300.00 / Hour |
| 74 | Two Roll Mill | ` 500.00 / Batch |
| 75 | Freeze Dryer (lypoliser) | ` 200.00 / Hour |
| 76 | Life Cycle Analyser Software | ` 300.00 / Hour |
| 77 | Plasma Cleaner(Ar,O3) | ` 200.00 / Sample |
| 78 | Capillary Rheometer (Melt Viscosity) | ` 2,600.00 / Sample |
| 79 | LC / HRMS | ` 10,000.00 / Sample |
| 80 | Gloss | ` 700.00 / Sample |
| 81 | Determination of the ultimate Anaerobic Biodegradation under High-Solids Anaerobic-Digestion conditions - Method by analysis of released biogas for first 06 months (as per ISO 15985) | ` 3,75,000.00 / Sample |

The charges for Liquid Nitrogen shall be as per actual to fulfill the test requirement for Mechanical, DMA, Cryo-milling, Sample preparation through Cryomicrotomy for TEM, etc. (subject to the availability Liquid Nitrogen)

The Charges listed above do not include cost of consumables or other charges for value added services. Rate of value added services and consumables are listed below.

Note:

- 1. GST as per the applicable rates.
- 2. The minimum test charges `1,500/- per assignment (excluding of taxes)
- 3. Test Charges for overseas test assignment at three times of the test charges and payment be in terms of USD.
- 4. Urgent samples on an immediate basis can be done at double the above mentioned rates.
- 5. The analytical data / spectra are provided only for research / development purposes. These cannot be used as certificates in legal disputes. Developmental test charges are payable in advance, by crossed bank draft in favour of "CIPET LARPM" payable at Bhubaneswar

For transferring of fund:

| Account No. | 120028051434 |
|---|---|
| Name of the Account | CIPET SARP LARPM Holding Account |
| Name of Bank | Canara Bank |
| Name of the Branch | College of Engineering Bhubaneswar (CEB) - 751024 |
| IFSC Code | CNRB0018009 |
| MICR Code | 751015024 |
| Vendor Code on gbiz portal of Canara bank | CVM500000017309 |

- 6. Samples and payment should be sent preferably in the same cover. Separate samples should be sent for different analysis. Samples will not be analyzed till payment is received.
- 7. In all correspondence related to analysis our reference number must be mentioned.

- 8. Radio-active material should be clearly mentioned and handed over personally.
- 9. Unstable and explosive compounds are not accepted for analysis.
- 10. Services are rendered to only those users who regularly give us feed-back about the end-use of the results, e.g., thesis, patent, process, publication etc.
- 11. Interpretation of spectra is not undertaken normally. In special cases this service can be provided on payment of extra charges.

All Communications should be addressed to:

Principal Director & Head / Sr. Principal Scientist
CIPET: SARP-LARPM
B/25, CNI Complex, Patia, Bhubaneswar – 751 024, Odisha
Ph.: +91-674-2701734 / 2742852

E-mail: larpmtesting@cipet.gov.in