



TESTING & ANALYTICAL CHARGES

AT CSIR- NIIST, TRIVANDRUM w.e.f. 05.07.2017

(GST @ 18% shall also be paid over and above the rates given below)



Division: Agro processing & Natural products

SL NO	Facility/ Equipment	Rate			Remarks
		For R&D Instt & SSI	Students	Industry	
1	GC-MS	1850	950	3650	Per sample
2	F.T.I.R	750	400	1500	“
3	DSC	1150	750	2250	“
4	HPLC	1500	1000	3000	“

Division: Biotechnology **A. Assays**

SL NO	Facility/ Equipment	Rate			Remarks
		For R&D Instt & SSI	Students	Industry	
1	Anti-microbial activity assay				
	(a) Anti-bacterial	1500	1150	3000	2 Cultures
	(b) Anti-fungal				2 Cultures
	(c) Anti yeasts				2 Cultures
2	Compositional analysis of biomass				
	(a) Cellulose and hemicelluloses	7500	5250	15000	Per sample
	(b) Carbohydrate analysis	7500	5250	15000	“
3	Alcohol analysis by GC	3750	2650	7500	“

B. Supply of Cultures

SL NO	Facility/ Equipment	Rate			Remarks
		For R&D Instt & SSI	Students	Industry	
1	Supply of culture(Freeze-dried)	650	500	3000	Per sample
2	Supply culture(active on slant)	950	750	4500	Fungi only
3	Freeze-drying of culture	3000	2250	15000	Ten ampoules

Division: Chemical Sciences & Technology

SL NO	Facility/ Equipment	Rate			Remarks
		For R&D Instt & SSI	Students	Industry	
1	IR Spectroscopy	600	350	1150	Per sample
2	500 MHz FTNMR				
	¹ H NMR	950	750	1850	Per sample
	¹³ C NMR	1850	1500	3650	"
	2D NMR	3650	3000	7250	"
	³¹ P NMR	1400	1150	2750	"
3	High Resolution Transmission Electron Microscopy (HRTEM)	8750	4400	17500	"
	Carbon Coated Grid	400	400	400	"
4	Scanning probe Microscope(AFM/STM)	4400	3150	8750	"
5	GCMS Analysis	950	650	1900	"
6	High Resolution mass Spectra	1900	1250	3750	"
7	Single Crystal XRD	11250	7500	25000	"
8	Transient spectra analysis	6250	3750	12500	"
9	Con-focal Raman	1250	900	2500	"

	Microscopy				
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Division: Materials Sciences and Technology Division

SL NO	Facility/ Equipment	Rate			Remarks
		For R&D Instt & SSI	Students	Industry	
1	Scanning Electron Microscopy (SEM)	3750	1900	7500	Per sample (Two pictures)
2	EDS Two frame analysis	3750	1900	7500	Per sample
3	EDS With X-ray dot mapping	9000	4500	18000	"
4	Liquid Nitrogen	150	150	200	Per litre
5	XRD analysis	1150	600	2200	Per sample
6	Optical Metallography (Leica DMRX microscope with digital camera and material work station)	1000	500	2000	Sample preparation charges extra
7	Stereomicroscope (Zeiss microscope with digital camera)	1000	500	2000	Per sample
8	Micro-hardness tesing(clemex,js 2000)	1150	600	2250	"
9	Mechanical Testing facilities Instron UTM; 10 ton static Universal testing Machine(Instron,UK,Model;1195-5500R)	1500	1150	3000	"
10	Brinell/Vickers Hardness Testing;Imported hardness tester INDENTEC,UK	650	350	1250	"
11	Instron Dynamic test system for fracture roughness, fatigue etc;10 ton	9000	4500	18000	(6 hrs Maximum)

	Dynamic testing machine Instron, UK				
12	Model 8801 Wear & friction monitor DUCOM Instruments Model TR20LE	1000	500	2000	Per sample
13	Surface area Analyzer Tristar 3000-BET	3750	1900	7500	"
14	Thermo gravimetric/Differential thermal analyzer- Diamond TG/DTA Perkin Elmer	3650	1850	7250	Per Sample Simultaneous analysis
15	FT IR	750	400	1500	Per sample
16	Trace Element analysis AAS	1600	1250	3150	"
17	2D XRD Charges	3150	2500	6250	"
18	Energy Dispersive X-ray Fluorescence	950	750	1900	"
19	PPMS Charges/Hr	1250	950	2500	"
20	Dilatometry	1900	1250	3750	"
21	X-ray photo electron Spectroscopy (XPS)	4000	3000	8000	
22	Thermal Conductivity Testing(Xe-Flash Technique)	3200	2000	6250	-

Division: Process Engineering & Environmental Technology

A. Instrumental Analysis

SL NO	Facility/ Equipment	Rate			Remarks
		For R&D Instt & SSI	Students	Industry	
1	Particle size analysis/Sedigraph 5001 Micromeritics upto 2 um	2200	1150	4400	Per sample
	Particle size analysis/Sedigraph 5001 Micromeritics upto 1um	2650	1350	5250	"
2	Brightness meter Color touch ISO, Technidyne Corpn, Brightness	1450	750	2900	"
3	Zeta Potential Analyzer	3400	1700	6650	"
4	Viscometer Haake Viscosity (single) of liquid	2250	1150	4400	"
	With sample preparation	3400	1700	6650	"

B. Chemical & Physical Characterization

SL NO	Facility/ Equipment	Rate			Remarks
		For R&D Instt & SSI	Students	Industry	
1	SiO ₂ , Al ₂ O ₃ , TiO ₂ , CaO, K ₂ O, Na ₂ O, Fe ₂ O ₃ , LOI	5650	2900	11150	Per sample
2	Determination of SiO ₂ , Al ₂ O ₃ , Fe Determination of	2900	1450	5420	"

	SiO ₂ ,Al ₂ O ₃ ,TiO ₂				
3	Determination of SiO ₂ , only	1850	950	3650	“
4	Determination of Al ₂ O ₃ only	1850	950	3650	“
5	Determination of Fe ₂ O ₃ only	1850	950	3650	“
6	Determination of Fe ₂ O ₃ and TiO ₂	1850	950	3650	“
7	Determination of SiO ₂ ,Al ₂ O ₃	2250	1150	4500	“
8	Determination of Al ₂ O ₃ , Fe ₂ O ₃	1900	950	3750	“
9	Determination of SiO ₂ , Fe ₂ O ₃	2250	1150	4500	“
10	Determination of Na ₂ O, K ₂ O	1900	950	3750	“
11	Determination of K ₂ O, Na ₂ O, CaO	350	1850	7250	“
12	LOI	1900	950	3750	“
13	K ₂ O, Na ₂ O, Fe ₂ O ₃	3750	1900	7500	“
14	Ash content for carbonaceous materials	1900	950	3750	“
15	Iron oxide for Fe ₂ O ₃ only	1900	950	3750	“
16	Complete chemical analysis of high alumina refractories (Al ₂ O ₃ , more than 60% and SiO ₂ , Al ₂ O ₃ ,MgO, CaO, K ₂ O, Na ₂ O,LOI	5450	2750	10850	“
17	Sieve Analysis (one sieve anal.)	750	400	1500	“
18	Coarse particle in clay per IS:505-1979	950	500	1850	“
19	Grit content	850	450	1650	“
20	Slaking test	500	350	1000	“
21	True specific gravity	1000	500	2000	“

22	Apparent specific gravity/relative density	1250	600	2450	“
23	pH value	500	250	950	“
24	Water soluble matter in clay	500	250	950	“
25	Acid soluble matter in clay	600	350	1100	“
26	Bleachability(reductive)	3350	1700	6650	“
27	Physico Chemical Analysis of Water	2850	-	6250	
28	Physico Chemical Analysis of Water+Microbiological testing	4750	-	8750	
29	Microbiological Testing of Water	1200	-	2250	

Division: ENVIRONMENTAL TECHNOLOGY, PE & ET DIVISION

Proposed Testing & Analytical charges

SL NO	Facility/ Equipment	Method/ Instrument	Rate			
			For R&D Instt & SSI	Students	Industry	Charges for additional samples(50% for students,20% for Industry)
1	Colour comparison	Visual	350	200	650	100
2	Conductivity	Conductivity Meter-Schott	600	350	1100	150
3	pH	pH Meter Systronics 320	1250	650	2450	250
4	Suspended solids	Gravimetry	1350	700	2600	250
5	Settle able solids	Gravimetry	1350	700	2600	250
6	Volatile Suspended solids	Gravimetry	1500	750	3000	250
	Dissolved solids	Gravimetry	1350	700	2600	250
8	Total solids	Gravimetry	1350	700	2600	250
9	Turbidity	Nephelometry/ELICO Nephelometer	600	350	1100	150
10	Acidity	Titrimetry	1350	700	2600	250
11	Alkalinity	Titrimetry	1350	700	2600	250
12	Aluminium	VA,Colorim				250

		etry 746,VA TraceAnaly zer,Elico	1500	750	3000	
13	Arsenic	VA,746 Trace Analyzer	3000	1500	6000	500
14	Boron	Colorimetr y, Elico	1500	750	3000	250
15	BOD	5- Day,20@C	2100	1100	4100	375
16	Cadmium	VA,746VA Trace Analyzer	1350	700	2600	250
17	Calcium	Titrimetry	1350	700	2600	250
18	Carbon dioxide	Titrimetry	1350	700	2600	250
19	COD	Dichromat e	1500	750	3000	250
20	Chloride	ISE	1350	700	2600	250
21	Chloride(Resi dual)	Titrimetry	1350	700	2600	250
22	Chromium	VA,746 VA Trace Analyzer	3000	1500	6000	500
23	Cobalt	VA,746 VA Trace Analyzer	1500	750	3000	250
24	Copper	VA,746 VA Trace Analyzer	1500	750	3000	250
25	Dissolved Oxygen(DO)	DO Meter	1500	750	3000	
26	Fluoride	ISE	1350	700	2600	250
27	Hardness	Titrimetry	1350	700	2600	250
28	Iron	VA,Colori metry 746 VA Trace Analyzer	1350	700	2600	250
29	Lead	VA,746 VA	1350	700	2600	250
30	Manganese	VA,746 VA				250

		Trace Analyzer	1500	750	3000	
31	Magnesium	Titrimetry	1350	700	2600	250
32	Nickel	VA,746 VA Trace Analyzer	1500	750	3000	250
33	Nitrate	Colorimetry, Elico	1500	750	3000	250
34	Nitrite	Colorimetry, Elico	1350	700	2600	250
35	Nitrogen(Ammoniacal)	ISE/Distillation	2100	700	2600	250
36	Nitrogen(Kjeldahda)	ISE/Distillation	2100	1100	4100	400
37	Oil & Grease	Gravimetry	1350	700	2600	250
38	Phenols	Colorimetry, Elico	1350	700	2600	250
39	Phosphate(Ortho)	Colorimetry, Elico	1350	700	2600	250
40	Phosphate(Total)	Colorimetry, Elico	2100	1100	4100	400
41	FlamePhotometry,Systonics 128	Chem.Lab	200	150	350	100
42	Silica	Colorimetry, Elico	1350	700	2600	250
43	Sodium	Flame photometry, Systonics 128	1350	700	2600	250
44	Sulphate	Turbidimetry Gravimetry	1350	700	2600	250
45	Sulphide	Iodometry	1500	750	3000	250
46	Tin	VA,746 VA Trace				250

		Analyzer	1500	750	3000	
47	Vanadium	VA,746 VA Trace Analyzer	3000	1500	6000	500
48	Zinc	VA,746 VA Trace Analyzer	1500	750	3000	250
49	Microbiological testing total plate count	Spread plate, Laminar flow, Chamber	1500	750	3000	250
	Total Coliform count	MPN, Laminar flow chamber	1500	650	3000	250
	Faecal streptococci	MPN, Spread plate, Laminar flow chamber	2100	1100	4100	400
	Suspended solids	MPN, Laminar flow chamber	2150	1100	4100	400
50	TOC analyzer	Combustion method LiquiTOC II ElementaR	6000	3000	12000	1000
51	Perchlorate analysis	IC method	2250	1500	4500	
52	Perchlorate analysis	Electrode method	1150	750	2250	