

**UNIVERSITY OF KERALA**  
**(Abstract)**

Budget Speech 2013-'14 – Proposal of Sample Analysis at University Departments  
– Approved - Orders issued.

**ADMINISTRATION 'Misc.' SECTION**

Ad.Misc/BIC/Sample Analysis/2013-'14      Dated, Thiruvananthapuram 27-11-2013.

- Read:- (1) Minutes of the meeting of the Senate held on 6<sup>th</sup> & 7<sup>th</sup> of March 2013 - Budget Speech item no: 31.  
(2) Item no: 4 of the minutes of the meeting of the Budget Implementation Cell held on 25.09.2013 appendix to item no: 24.29 of the minutes of the meeting of the Syndicate held on 10.10.2013  
(3) Minutes of the meeting of the Budget Implementation Cell held on 28.10.2013 appendix to item no: 24.47 of the minutes of the meeting of the Syndicate held on 16.11.2013  
(4) Endorsement FOS 4177/Fin II /2013-'14 dated 23.10.2013

**ORDER**

The proposal of ' Sample Analysis to be conducted at the University Departments, envisaged in the Budget Speech 2013-'14, was approved by the Senate, at its meeting held on 6<sup>th</sup> & 7<sup>th</sup> of March 2013, vide paper (1)above.

The Syndicate, has resolved to approve the detailed proposal including the specified fee rates submitted by the Vice Chairman, CSS (also the Dean, Faculty of Science) and the Dean, Faculty of Applied Science for conducting Sample Analysis at University Departments vide paper (2) above.

The Syndicate,, vide paper (3) above, has resolved to remit the fees collected by way of conducting various Sample Analyses at University Departments to the Kerala University Fund.

The Finance has agreed to the proposed rates for conducting Sample Analyses, vide paper (4) above.

Sanction has therefore been accorded by the Vice Chancellor to the Heads of the University Departments/Co-ordinator, PURSE Programme/Honorary Directors of Centres being permitted to conduct various Sample Analyses for Kerala University students, students from other Academic institutions, external Educational and Research institutions and Industrial Entrepreneurs levying specified fee to the Kerala University Fund at the rates detailed below:

**(The rates suggested are meant for the existing facilities in the University and also for future additions)**

SL. NO:	FACILITY/ EQUIPMENT	RATES				REMARKS
		Kerala University Students	Students from other academic institutions	R&D Institutions	Industry	
1	FTIR (Perkin Elmer Model Spectrum 100)	100	200	350	500	Per sample
2	GC-MS (Shimadzu 5050A- Model)	250	350	1000	2000	„

3	Anti-Microbial activity assay					
	• Anti-bacterial	150	200	500	1000	2 cultures
	• Anti-fungal	150	200	500	1000	2 cultures
	• Anti-yeast	150	200	500	1000	2 cultures
4	CHNS	450	600	1400	2900	Per sample
5	SEM	400	500	1000	1500	„
6	EDS	300	500	1000	1000	„
7	SEM-EDS	600	750	1500	2500	„
8	Field Emission SEM	1000	1500	2500	3000	
9	Field Emission SEM +EDS	1300	1800	3000	3500	
10	Micro Raman	500	1000	1500	2000	
11	(a)TGA-DTA up to 700 Deg C	300	400	1000	1500	„
	(b)TGA-DTA Above 700 Deg C	500	850	1500	2500	„
	(Both @10 deg/min, extra charges for slow heating rate)					
12	UV-Vis (ordinary)	100	300	600	1400	„
13	(a) DSC, RT-300	400	650	1600	3500	„
	(b) DSC -50 to 400	400	750	1750	3600	„
	(c)DSC -100 to 500	500	950	1800	3600	„
	(all @10 deg/min, extra charges for slow heating rate)					
14	Proton NMR (CDCl <sub>3</sub> )	200	350	1000	1500	„
15	Proton NMR (DMSO)	300	450	1500	2000	„
16	Proton NMR (D <sub>2</sub> O)	300	450	1500	2000	„
17	Proton NMR (Method)	400	700	1500	2000	„
18	C <sup>13</sup> and other nuclie (CDDI <sub>3</sub> )	400	700	1500	2500	„
19	C <sup>13</sup> and other nuclie (DMSO)	450	800	1600	2600	„
20	C <sup>13</sup> and other nuclei (D <sub>2</sub> O)	600	1000	2000	3000	„
21	C <sup>13</sup> and other nuclie (methanol) [Charges for higher techniques as per instrument time]	750	1000	2000	3500	„
22	ICPAES-Initial Element	150	300	700	1000	„

23	ICPAES - Additional Element	100	150	200	400	„
24	ICPAES - Sample digestion	150	300	1000	2000	„
25	ICPAES - Sample Acid digestion	150	300	500	600	„
26	Mercury Analyzer	300	450	1000	2000	
27	UV-Visible Spectrometer ( Transmittance/Absorbance/Reflectance spectra)	200	300	400	500	
28	Photoluminescence spectra	300	400	600	1000	“
29	Atomic force microscopy	500	750	1000	1500	
30	Powder XRD pattern	300	500	700	1000	
31	GIXRD	300	500	1000	1500	
32	Potentiostat-Impedance	500	750	1000	1500	
33	XPS	750	1500	2500	3500	
34	HRTEM	1500	2000	3000	4500	
35	Photoconductivity Measurements	500	750	1000	1500	
36	FTIR Film Attachment MID IR	250	400	750	1000	
37	FTIR FAR IR	300	450	850	1200	

Orders are issued accordingly.

Sd/-  
**Naseema Beevi M.**  
Deputy Registrar (Acad.II)  
For **Registrar**

To

1. The Vice-Chairman, CSS
2. Dean, Faculty of Science
3. Dean, Faculty of Applied Science
4. Directors, Schools of Earth System Sciences/  
Life Sciences/ Physical and Mathematical Sciences/Technology
5. Heads of the Departments under the Faculties of Science and Applied Science
6. The Co-ordinator PURSE Programme
7. The Honorary Directors of concerned Centers
8. PS to VC/PVC
9. PA to Registrar/FO/CE/DPD
- 10.AR, Cash (R)
- 11.PRO/Enquiry/Audit VI/Fin.II /Govt. Auditor.
- 12.The Stock file / File Copy

Forwarded/By Order

**Section Officer**