

B. K. Birla College (Autonomous), Kalyan

Conducted by *Kalyan Citizens' Education Society*
Affiliated to the *University of Mumbai*



'College of Excellence' status by UGC

Reaccredited (3rd Cycle) by NAAC with **'A' Grade** (CGPA - 3.58) (2014-23)

'Best College Award' by University of Mumbai (2008-09)

'Performance Excellence Trophy - 2011 in Education' by IMC RBNQA Trust

'Star Status' to the Depts. of Botany, Chemistry, Microbiology, Physics and Zoology ;
Depts. of Mathematics, IT and CS Under **'Star College Scheme'** of DBT, Govt. of India

ISO 9001 : 2015 Certified





Consultancy Services

Sophisticated Analytical
Instrument Facilities



(BKBCK SAIF)

Facilities at BKBCCK SAIF

HPLC, GC, HPTLC, AAS, UV-Vis Spectroscopy, XRD, Flame Photometry, FTIR,
CPS, BET, AFM

Tablet Physical Testes (dissolution, Disintegration, Hardness, Friability)
Stability Studies for Herbal and Pharmaceutical Formulations

For further Information Contact

Dr. Sonali Patil (Incharge, Dept. of Bioanalytical Sciences – 9768837968)

Email Id : SAIFConsultancy@bkbirlacollegekalyan.com

Visit College Website: www.bkbirlacollegekalyan.com



Steps to acquire Facility



The samples should be submitted in the prescribed format indicating the information called for as well as your special requirement, if any.



The details of the analysis to be carried out should be sent to SAIFConsultancy@bkbirlacollegekalyan.com .
The quotation for the same will be forwarded through this Email ID.



While submitting samples for more than one analysis separate samples are to be sent for each.



Further the payment to be done accordingly.



Only on receipt of the payment along with the samples, they will be registered for analysis and taken up for measurement as per the seniority/queue of the users of the instrument concerned.

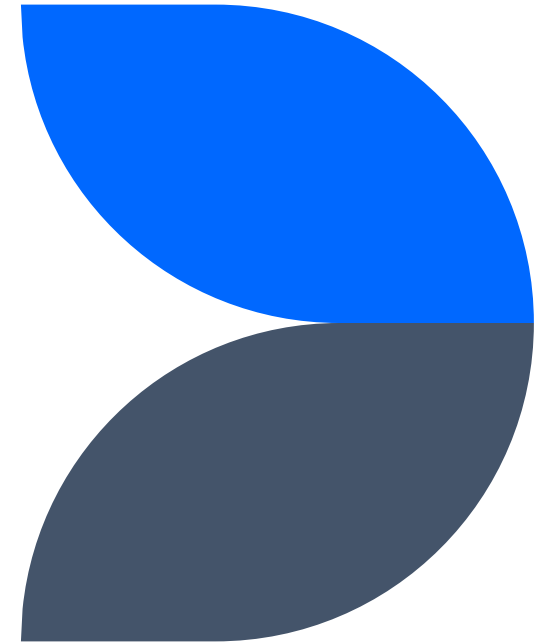


As soon as the analysis is over, the spectra along with the receipt / bill will be sent to the users.



An Important note

As per the guidelines of the, in all publications of research work, where in the analytical services have been made use of, the Institute name shall be acknowledged. Kindly send us the publication reference (Journal name/volume number/names of the authors/date of issue of the publication etc) to us.



Please note that :

The charges mentioned are for analysis of samples received from users within India only.

For overseas users, please contact by Email directly.

Charges are subject to change periodically

Mode of Payment

Please note the current policy on payment of analysis charges: Our current policy requires analysis that payment be received before the samples can be registered and analysis taken up.

Please make sure that the payment is received along with the samples. Payments are to be made by cash only (For change in mode of payment contact on email ID)

The charges include GST

Please note that the testing charges now include a GST component of 18% which has been revised from 15% in accordance with Government of India instructions.

"These are the minimum charges. Additional charges may be levied depending on the nature and complexity of the problem.

Important to Note the Following points



The analytical data / spectra are provided only for research / development purposes. These can not be used as certificates in legal disputes.

Service charges are payable at prevailing rates.

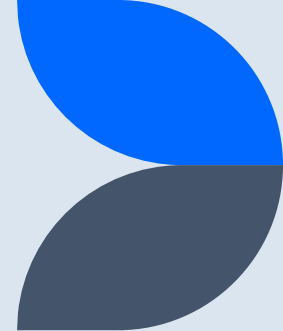
Samples, letter and payment should be sent in the same cover only. If Samples are received without covering letter and cash, the samples will be sent back to the user without any further intimation/notice. Separate Sample should be sent for different analysis. Samples are not analysed till Payment is received.

If you are sending samples for multiple Analysis. Please send separate samples for each analysis.

Please send the samples in quantity as mentioned in the brochure. Samples are not recovered, unless a special request is made.

In all correspondence related to analysis our reference/registration number must be mentioned

Important to Note the Following points



Radio-active material should be clearly mentioned and handed over personally.

Unstable and explosive compounds are not accepted for analysis.

Services are rendered to only those users who regularly give us feed -back about the and use of the result ,e.g. thesis, patent, process publication etc.

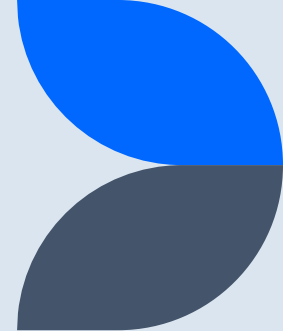
Research fellows and students are advised to send there application and samples through their Supervisor or Head of department.

Interpretation of spectra is not undertaken normally. In special cases this service can be provided on payment on extra charges.

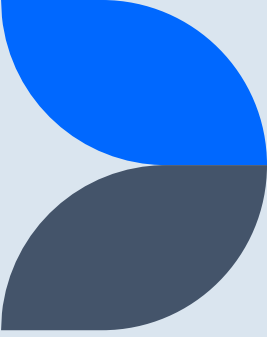
If you want samples back Please inform to particular lab or mention in your letter. Kindly collect your samples back at the time of collecting your report. Samples which are not collected within a week from the date of report collected/sample analysis will be disposed of immediately without any further notice.

We do not provide any accommodation. You have to arrange on your own.

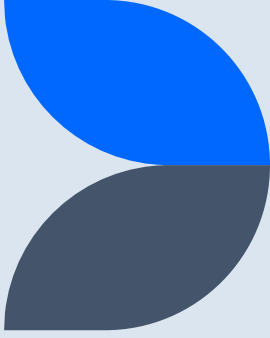
BKBCK SAIF is equipped with sophisticated instruments to carry out spectral measurements, structure determination and chemical analysis. The details of instrument are given in the following table:



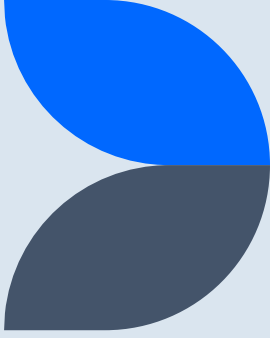
Instrument	Purpose	Limitations
FTIR	The infrared spectrum originates from the vibrational motion of the molecule. The vibrational frequencies are a kind of fingerprint of the compounds. This property is used for characterization of organic, inorganic and biological compounds. The band intensities are proportional to the concentration of the compound and hence qualitative estimations are possible.	Generally organic compounds and many inorganic compounds give useful results. Heavy metal compounds some times absorb at lower wave-number (low energy) region only, which may not be covered by the instrument we have.
GC	Qualitative and quantitative estimation of volatile organic solvents by comparing the retention time and Area under curve with respect to standard	Only organic compounds of low molecular weight (< 600) can be analyzed. Metal ions shall not be present. For GC and detector the columns available are limited.



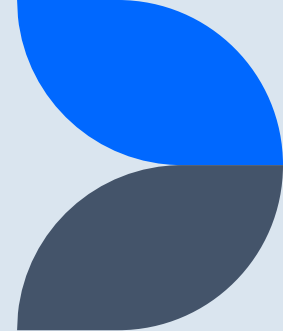
Instrument	Purpose	Limitations
HPLC	Qualitative and quantitative estimation of pharmaceutical or biological compounds by comparing the retention time and Area under curve with respect to standard. Method validation for reverse phase HPLC and Stability studies for some drug samples	Samples should be submitted in clear aqueous form. Solids suspensions, highly viscous, highly acidic, highly alkaline and organic solutions cannot be analysed as such.
HPTLC	Separation ,identificatrion of plant phytoconstituents and thus used for getting unique fingerprint of plant samples. Can also be used for qualitative and quantitative estimation of drug samples. Stability studies for ayurvedic drugs.	Samples should be submitted in clear aqueous form. Solids suspensions, highly viscous, highly acidic, highly alkaline and organic solutions cannot be analysed as such. If standardization has to be carry out references have to be submitted. Only estimation if there, standard has to be provided with the sample.



Instrument	Purpose	Limitations
AAS	Adsorption spectrometry is based on the principle that atoms or ions in an excited state tend, to revert back to the ground state and in so doing emit characteristic wavelength and intensity of that light is proportional to the concentration of that particular element in the sample solution. This technique is used for quantitative and quality determination of the metals and metalloids in the following sample.	Samples should be submitted in clear aqueous form. Solids, suspensions, highly viscous, highly acidic, highly alkaline and organic solutions cannot be analysed as such. A minimum final volume of 25 ml of the sample solution is required for analysis.
AFM	Applications of atomic force microscopy (AFM) include biochemistry applications (imaging the structure of biological molecules, cellular components, cells or tissues), chemistry, materials science and nanotechnology applications (imaging of polymers, nanostructures or other materials) and physics. Surface morphology can be studied.	Only Thin film analysed or Sample must be dispersed in water.



Instrument	Purpose	Limitations
UV-VIS Spectrophotometer	Detection of compounds having light absorbing chromophore. Can be utilized for finding out maximum wavelength of absorption and thus estimation of compounds	Samples should be submitted in clear aqueous form. Solids, suspensions, highly viscous, highly acidic, highly alkaline and organic solutions cannot be analysed as such. A minimum final volume of 10 ml of the sample solution is required for analysis. Standards need to be provided if calibration curve is required.
CPS	Particle size analysis is used to characterize the size distribution of particles in a given sample. Particle size analysis can be applied to solid materials, suspensions, emulsions and even aerosols. There are many different methods employed to measure particle size.	Sample must be dispersed or dissolve in water.



Instrument	Purpose	Limitations
Tablet Physical Tests	Quality control studies for physical parameters of tablet dosage forms like strength, disintegration capacity and friability.	Samples should be coated or uncoated tablet only. Minimum 20 tablets are required.
X-Ray Diffraction	It a non-destructive test method used to analyze the structure of crystalline materials. XRD analysis, by way of the study of the crystal structure, is used to identify the crystalline phases present in a material and thereby reveal chemical composition information.	Finely grained powders should be submitted. Powder samples having a minimum weight of 0.01g can be analyzed.
Flame Photometry	A photoelectric flame photometer is a device used in inorganic chemical analysis to determine the concentration of certain metal ions, among them sodium, potassium, lithium, and calcium. Group 1 and Group 2 metals are quite sensitive to Flame Photometry due to their low excitation energies.	Sample must be powder that can be dispersed or dissolve in double distilled water

Thank you