

Instruments available presently in CEMARF

SI No	Name of the Instrument	Cost, Rs in lakhs	Application
1.	UV-Vis Spectrophotometer	4.0	To measure the concentration of metal ions and compounds
2.	CHNS Elemental Analyser	22.0	To find the composition, structure and purity of the synthesised compounds
3.	Thermogravimetric Analyser	21.0	To find the thermal stability and purity of the compounds
4.	FT-IR Spectrophotometer	10.0	To identify and study the functional groups and structure of the compound.
5.	Cyclic Voltmeter	20.0	To study the electrochemical activity and to design electrochemical sensors and electrochemical clean energy systems

Instruments Which are Under the Process of Procurement

SI No	Name of the Instrument	Cost, Rs in lakhs	Application
1.	Spectrofluorimeter	11.50	To measure the concentration and quantum efficiency of fluorescent compounds
2.	Nanodrop UV-Vis Spectrophotometer	10.75	To find the concentration of biological molecules and purity
3.	Millipore water Purification System	8.40	To obtain highly pure water for various cell culture, synthesis and chromatographic analysis
4.	Automated Microtome	5.31	Histological studies and other applications from tissue sectioning .
5.	Refrigerated Centrifuge	3.10	To settle colloidal particles and biological molecules without denaturing at low temperature

6.	Light microscope with Camera	3.25	To image the surface of cells and other surfaces and record the photograph
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Proposed Instruments for CEMARF and Justification

SI No	Name of the Instrument	Cost, Rs in lakhs	Application
1.	Powder X-Ray Diffractometer	50.0	To study the crystalline nature, defects and internal structure of compounds Useful for Physics, Chemistry, Mineral Processing and Applied Geology
2.	Scanning Electron Microscope	100.0	To find the surface morphology, composition and shape on the surface at nano and microscale. Applied to study the surface of cells, rocks and materials. Useful for almost all the fields and departments for surface characteristics
3.	Gas chromatography	50.0	To analyse gaseous as well as volatile compounds for identification, separation and purity. Useful for Life sciences and Chemistry

Advisory Committee of CEMARF

Sl No	Name and Address	Designation
1.	Registrar VSK university	Chairman
2.	Dean, Pure Science VSK university	Member
3.	Dean Applied Science VSK university	Member
4.	Senior Professor from Science VSK university	Member
5.	Senior Professor Other University	External Member
6.	Senior Professor Other University	External Member
7.	Senior Professor Other University	External Member
8.	Director, CEMARF VSK university	Member Secretary

