### 3.1.1. The institutions research facilities are frequently updated and there is well defined policy for promotion of research which is uploaded on the institution website and implemented

Research and Development activities is an integral part of CUKs academic endeavor. University has paid attention for promoting research temperament among its faculty and students by putting in place the state-of-the-art facilities and upgrading them periodically.

### 1. INFRASTUCTURE

**a. Laboratories, Equipment and Softwares:** CUK has state-of-the-art research laboratories equipped with both basic and advanced instruments to support research in science, engineering, and technology departments. Faculty members in science and engineering departments are provided with a research lab to carry out individual research. These facilities are continuously upgraded with the support of institutional funding as well as extra-mural grants. Important equipment are maintained under AMC and fitted with required power back-up. Some important instruments mobilized in different departments are as follows.

Department	Equipment and Softwares
Physics	Tabletop X-ray Diffractometer, Atomic Force Microscope, Closed Cycle Cryogenic System, Magneto Optic Kerr Effect Set-up, Vector Network Analyzer, RF -DC sputtering System and more.
Chemistry	Raman Spectrometer, Fluorescence spectrometer, IR Spectrometer, UV Visible Spectrometer, Electrochemical Workstation, Solid State peptide synthesizer, Liquid state Chromatography Setup. Advanced analytical Softwares: SciFinder, Schrodinger softwares
Geology	Polarizing Microscopes, Image analysis ready computers
Life Science	Centrifuges, Deep freezers, Microscopes, PCR and RT- PCR setups, cell culture facilities
Psychology	Electroencephalogram (EEG)
Mathematics	Workstations
Engineering	Robotics kit, IOT and Control system setup
Computer Science Department	Several Workstations, Matlab and other softwares

**b.** Sophisticated Instrumentation Center: Recently, with the funding support from Higher Education Funding Agency (HEFA), university is upgrading the research facilities across the science departments. The instruments like high frequency NMR, 9 KW thin film XRD and single crystal XRD, Field Emission Scanning Electron Microscope, (FE-SEM), Liquid Chromatography-Mass Spectrophotometer (LC-MS) are being procured. Several new buildings such as Animal house are being built.

**c**. **Non-science departments:** University is also supporting and upgrading the research facilities across non-science departments. All the departments under different schools are provided with computers, necessary softwares, databases, resource and, funding for field trips and attending seminars and conferences. To name a few, English language lab is established in the Dept. of English. Departments of Fine arts is replenished with new instruments almost every year.

### 2. LIBRARY RESOURCES:

The university library provides access to a vast collection of books, research journals, e-resources, and databases. This supports students and faculty in their research endeavors by providing the necessary academic resources.

## **3. INNOVATION AND INCUBATION CENTER:**

To promote entrepreneurship and innovation, an incubation center is being established, which supports start-ups and innovative projects by providing necessary resources and mentorship. The center houses soft skill training and tinkering lab in making (Under furnishing).

# 4. RESEARCH POLICY:

The university has a well-defined research policy which is uploaded in the university website. However, recently, as per the direction of UGC and in compliance with the NEP 2020, an overarching Research and Development Cell has been established which is working on the research road map of the university.



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