

LABORATORIES

SVS College of Pharmaceutical Education and Research Tembhurni, is well-equipped with some of the most defined and technically modern laboratories to provide a superior level of practical education to its students. The laboratories are specifically designed with excellent facilities to meet the requirements of P.C.I. New and advanced instruments are added to the laboratories each year thus keeping them self-contained with high quality chemicals, instruments, equipment and glassware.

MAJOR LABS

- Pharmaceutics
- Pharmaceutical chemistry
- Pharmacology
- Microbiology and Biotechnology
- Biochemistry
- Computer Lab
- Machine Room
- Central Instrument Lab
- Pharmacognosy
- APHE Lab
- Biopharmaceutics Lab
- Tissue Culture Lab

PHARMACEUTICS LABORATORY:

This laboratory mainly deals with the development of dosage forms and its evaluation. For this, essential facilities such as Friability, Dissolution Testing Apparatus, Clarity Testing Apparatus, Bottle filling and crimping machine etc. are available in the laboratory.



Working in the Pharmaceutics Laboratory

Working in the pharmaceutics laboratory for development of newer drug delivery systems.





Working in the pharmaceuticals laboratory.

PHARMACEUTICAL CHEMISTRY LABORATORY:

In this lab, students learn about synthesis of pharmaceutical compounds, its re-crystallization (purification), identification and analysis. It is supported by instruments like Rotary Vacuum Evaporator, Double Beam, Polarimeter, Refractometer, Melting Point Apparatus etc., which are available in the central instrument room.

Student working on the soxhlet extraction assembly in the Pharmaceutical chemistry laboratory. The apparatus is used for extracting the crude drugs of plant origin.





Working on analytical procedure in the Pharmaceutical Chemistry laboratory.

Faculty explaining the details of the distillation procedure to students in the Pharmaceutical Chemistry laboratory.



PHARMACOLOGY LABORATORY:

Pharmacology involves experimental demonstration of drug effects on different tissues & organs. It is tested on animals like frogs, guinea pigs etc. The lab houses an array of instruments for experimenting on isolated animal tissues, behavioural studies on animals including pole climbing, actophotometer, hole board, Plus maze, Rota rod, eddy's hotplate, analgesimeter etc.



Faculty demonstrating the handling of laboratory animals and injecting drugs intraperitoneally in the Pharmacology lab

Students identifying the effect of drugs on isolated animal tissues in the pharmacology laboratory.



APHE LABORATORY:

Anatomical diagrams of important organs are displayed in this laboratory to facilitate the students to understand the importance of experimental pharmacology. Anatomical models of different organs are also present in the laboratory for proper study of the organ. Anatomy Physiology and Health Education Laboratory, provides deep knowledge of body parts and organ (with help of models & charts) and tissue. Various minor experiments are conducted on human blood, determination of B.P. It also impact the knowledge about health education and use of first aid in emergency.



Students working in Anatomy Lab

PHARMACOGNOSY LABORATORY :

It mainly deals with medicinal natural products (Herbal Drug). Students learn about source, family, chemicals constituents & uses, along with microscopy, isolation and identification of phytoconstituents. The instruments include muffle furnace, high capacity extractors, flask shakers, evaporators etc.

Anatomy Students exploring the mysteries of herbal medicine in the Pharmacognosy Laboratory .





Working with herbals in the Pharmacognosy laboratory.

Extracting herbal drugs and analysing them using TLC in the Pharmacognosy laboratory



MICROBIOLOGY AND BIOTECHNOLOGY LABORATORY:

This state-of-art laboratory is designed for sterile manufacturing and quality control of injectables and ophthalmic is equipped with high quality chemicals, Laminar Air Flow, UV light, HEPA filters and other requirements needed for aseptic room sterility testing, microbial assay. It also has facility for biotechnological & tissue culture techniques available in these laboratores including BOD incubator, Culture Racks, Shaking water bath, orbital shaking incubator etc.



Students working in aseptic conditions in the microbiology lab for growing of microbial cultures.

MACHINE ROOM:

The Machine room houses rotary tablets press, ointment filling machine, tablet coating machine, collapsible tube crimping machine, mixers, dryers and other equipments.

CENTRAL ANALYTICAL INSTRUMENTATION ROOM:

This houses sophisticated analytical instruments like Quaternary Gradient HPLC System, U.V. Visible Spectrophotometer, Brookfield Viscometer, Phase-contrast microscope, Fluorimeter, Polarimeter, Colorimeter, Digital Ph Meter, Digital Balances (1mg sensitivity), Potentiometer etc. The college has plans to procure modern instruments like HPTLC, FTIR, Gas Chromatograph, Carbon dioxide incubator, PCR workstation etc.

The Central Instrument room of the institute houses an array of sophisticated analytical Instruments. In this picture a student is seen working on the Phase contrast Microscope with a camera attachment for directly taking images of the slides.





A student working on the high capacity probe sonicator used for the preparation of novel drug delivery systems.

Students working on different sophisticated analytical equipment in the Instrument laboratory



Working with the most sophisticated analytical instruments, The UV-Visible spectrophotometer (in close-up).

Working with the quaternary gradient HPLC system in the instrument lab.



Students working in the instrument lab on some instruments.

MEDICINAL GARDEN:

We have a very well planned and maintained, medicinal garden. The medicinal plants procured from various herbal gardens and wild are being maintained in the college campus. Students learn about basic information regarding their sources, family, chemicals constituents and uses. There is a collection of more than 100 plants of medicinal importance.

Students exploring the herbal garden of our college that houses around 100 species of important herbal plants.



ANIMAL HOUSE:



A modest animal house is constructed with all facilities for animals like mice, guinea-pigs, etc. for conducting experiments based on the B.Pharm course. The animals are maintained in conformation with C.P.C.S.E.A. norms.

COMPUTER LABORATORY:

The significance of Information Technology in pharmacy education cannot be sidelined, and, with an aim to maximize the use of technology, all necessary provision has been made, including a centrally located, well maintained, state-of-the-art computer laboratory. All work-stations throughout the campus are networked via LAN, thus enabling constant access to the internet for all academic related needs. A foundation course will be provided to the students at the onset of their academic year to make them acquainted with the World Wide Web consortium and how technology can be used to its full potential in assisting them with all their academic related research during the course.



MUSEUM :



The Campus is also home to its own museum gallery which presents a very broad reflection of pharmaceutical industry. It includes the various pharmaceuticals dosage forms & provides knowledge of Novel Drug Delivery Systems (N.D.D.S.).