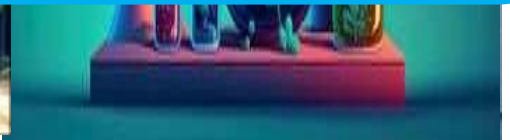




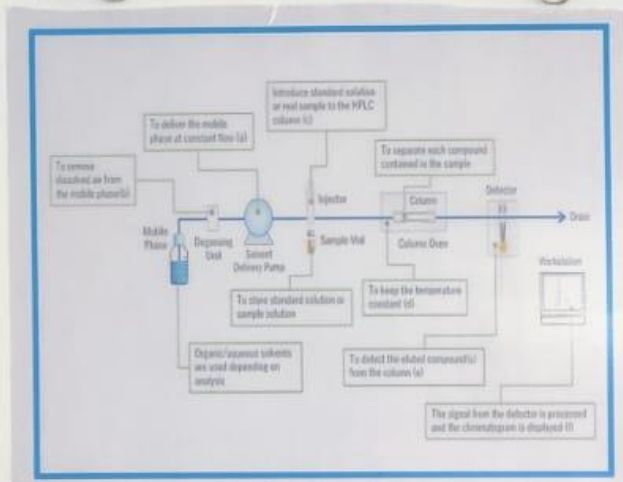
# JNTUA-Oil Technological and Pharmaceutical Research Institute



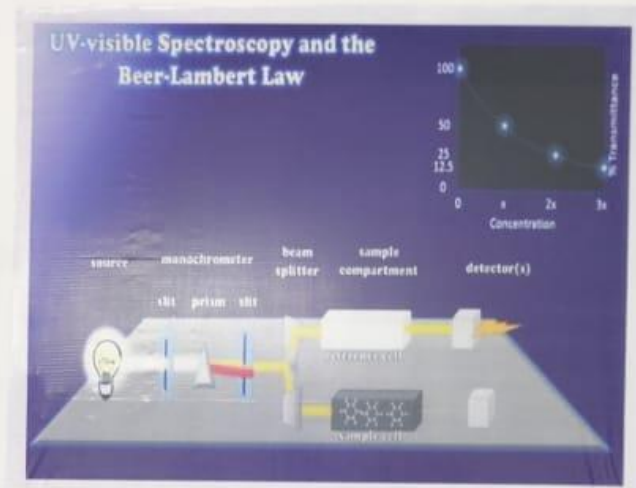
## DEPARTMENT OF PHARMACEUTICAL ANALYSIS



The JNTUA-OTPRI department of pharmaceutical analysis guarantees that all B.Pharm, Pharm. D., and M.Pharm students receive a high-quality education regarding modern instrumental techniques in pharmaceutical analysis. It comprises basic research on the identity, stability, content, and purity of starting materials, excipients, and active medicinal ingredients. Impurities are usually the result of the synthesis of the active ingredients and are monitored in compliance with ICH guidelines and pharmacopoeia standards. Providing fundamental knowledge that makes concepts simple to understand is essential to upholding the pharmaceutical industry's integrity and improving patient care globally. It offers the scientific basis for regulatory decisions and encourages accountability and openness in the production of pharmaceuticals.



ULTRAFAST LIQUID CHROMATOGRAPHY (UPLC)  
LC-20 AD PDA DETECTOR SOFTWARE - LC SOLUTIONS



UV-VISIBLE SPECTROPHOTOMETER  
DOUBLE BEAM 1800

ULTRA SONICATOR  
220MH SOLTECH

GAS CHROMATOGRAPHY  
TRACE GC



# Aim

To develop skilled pharmaceutical analysts who can satisfy the needs of the pharmaceutical industry in terms of analysis, raw and finished material quality control, standards, and regulatory body compliance. To also offer quality assurance to the pharmaceutical industry for the production of bulk or formulation drugs.

# Objectives

To acquire the skills necessary to work in the pharmaceutical industry on developing new analytical techniques, tools, and methodologies, as well as conducting analytical research, validating such techniques, and meeting international standards. The department is actively involved in the following areas of teaching, research, and training and development:

To offer a top-notch, specialized education in order to prepare students for careers in the pharmaceutical industry.

To enhance people's quality, talent, and abilities so they can become prosperous pharmaceutical analysis experts

## Research Areas

QbD based analytical method development

Short-term/accelerated, mid-term and long-term stability testing of formulations

Pre-formulation (physicochemical parameters & excipient compatibility) studies

Reverse engineering of complex products and sameness strategy development for regulatory submission

Degradation profiling of drug substances and drug products

## Core Competence

Our educational strategy includes a crucial and essential element of providing the pharmaceutical industry with professionally trained individuals who are not constrained by traditional curriculum and possess the abilities, attitudes, and skills of a professional manager, enabling them to function effectively and efficiently in the industry.

On-the-job training designed to provide students a better understanding of the intricate and real-world reality of contemporary pharmaceutical company while also observing human dynamics

Robust connections with business and industry, especially in the areas of training, seminars, teaching, and job

placement in the pharmaceutical sector

## Instruments Available

HPLC Shimadzu with PDA detector (UFLC)

UV-visible spectrophotometer

Flame photometer

Fluorimeter







