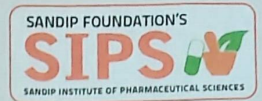




**SANDIP**  
FOUNDATION

SANDIP FOUNDATION'S

# SANDIP INSTITUTE OF PHARMACEUTICAL SCIENCES



NAAC Accredited

**COURSES OFFERED**

## **HANDS-ON ANALYTICAL INSTRUMENT TRAINING**

In collaboration with  
**Reliable Analytical lab**

Under  
**IQAC**  
SIPS

2023  
2024

### **Add on / Value added Certificate Courses**

Our Program structures offers students the flexibility to enhance their academic experience by enrolling in this Course every academic year, with option to take one course per semester. This approach allows students to delve deeper into their areas of interest, diversify their skill set and tailor their learning journey to align with their career aspirations.

### **COURSE OBJECTIVES III**

- To enable students understand the principle and working of various analytical instruments.
- To provide hands on experience and enable students operate the analytical instruments.
- To enable students use the analytical instruments for practical applications.

### **COURSE OUTCOMES III**

- The students will be able to understand the working principle of various analytical instruments.
- The students will be able to handle and operate the scientific instruments.
- The students will be able to use the analytical instruments for practical applications.

Campus: Mahiravani, Trimbak Road,  
Tal & Dist. Nashik-422213, Maharashtra, India.

☎ 1800-233-2714

✉ sandipfoundation@gmail.com

🌐 www.sips.sandipfoundation.org

# Course Module - Analytical Techniques (30Hr)

## Theory (10 hours)

Modules	Content	No. of hours	Name of Faculty
Module 1	<b>Spectral Methods</b> a) UV-Visible spectroscopy b) IR spectroscopy c) Spectrofluorimetry d) Flame emission spectroscopy and Atomic absorption spectroscopy e) NMR spectroscopy f) Mass Spectrometry	04	Prof. P. L. Unde
Module 2	<b>Chromatographic Techniques</b> a) High Performance Liquid chromatography b) High Performance Thin Layer Chromatography c) Ion exchange chromatography d) Gas chromatography e) Ultra High Performance Liquid chromatography f) Affinity chromatography g) Gel Chromatography	04	Prof. S. S. Yelmame
Module 3	<b>Hyphenated Techniques</b> LC-MS, GC-MS, LC-NMR, LC-IR, CE-MS, GC-IR	02	Prof. S. P. Dudhe
<b>Practical (20 hours)</b>			
1	Simultaneous estimation of multi-drug component containing formulations by UV spectrophotometry	04	Prof. K. N. Ahire
2	To perform the assay of Paracetamol of given tablet formulation by RP-HPLC method.	04	
3	To perform the Validation of an analytical method for a drug by UV-VIS spectrophotometer.	04	Prof. S. S. Yelmame
4	Interpretation of organic compounds by FT-IR	04	Prof. H. U. Chikhale
5	Estimation of riboflavin/quinine sulphate by fluorimetry.	04	

### NOTE

- Kindly conduct this Theory and Practical Session as per Timetable provided.
- Mutually adjust the time if overlapping with faculty member in Certification Course.
- Must submit Geotag Photos, Attendance and Notes if any.

#### CHIEF PATRON

Hon'ble Dr. Sandip N. Jha  
**Chairman**  
Sandip Foundation

#### PATRON

Prof. Pramod Karole  
**Academic Facilitator**  
Sandip Foundation

#### CONVENER

Dr. Laxmikant B. Borse  
**Principal**  
SIPS, Nashik

#### COORDINATOR

Mr. Shankar S. Yelmame

#### REGISTRATION DETAILS

Mr. Prashant Unde  
7276429279