

## Antra Skillup Series 2022



The poster is for the Antra SkillUp Series 2022, featuring a blue background with white and yellow text. At the top left is the LJ University logo with the tagline 'University with a Difference'. To its right is the Antrapreneur logo with the tagline 'THE BUSINESS INCUBATOR'. The main title 'Antra SkillUp Series 2022' is in large, bold, white letters. To the right of the title, it says 'Duration: One Week' and 'Date: 26th December to 31st December, 2022'. Below the title, it says 'In association with L J Institute of Pharmacy' next to a circular logo. The main heading is 'Hands-on Training on Advanced Analytical Instrument'. Below this, under the heading 'WHAT DO YOU LEARN?', there are four numbered points: 1. Handling of HPLC, UV AND IR SPECTROSCOPY Instrumentation; 2. Trouble shooting in operation of HPLC, UV AND IR SPECTROSCOPY; 3. Data analysis and its interpretation; 4. Sampling techniques in analytical chemistry. To the right of these points is a box titled 'VALEDICTORY FUNCTION' which includes a location pin icon, 'LJ Institute of Pharmacy 3rd Floor Auditorium', a clock icon, 'Date: 31st December, 2022', and 'Time: 1pm Onwards'. At the bottom left, it says 'Supported by:' followed by logos for SSIP (Government of Gujarat) and NewGen IEDC (Department of Science & Technology, Government of India).

**Antra SkillUp Series 2022**

Duration: One Week  
Date: 26th December to 31st December, 2022

In association with L J Institute of Pharmacy

**Hands-on Training on Advanced Analytical Instrument**

**WHAT DO YOU LEARN?**

1. Handling of HPLC, UV AND IR SPECTROSCOPY Instrumentation
2. Trouble shooting in operation of HPLC, UV AND IR SPECTROSCOPY
3. Data analysis and its interpretation
4. Sampling techniques in analytical chemistry

**VALEDICTORY FUNCTION**

LJ Institute of Pharmacy  
3rd Floor Auditorium

Date: 31st December, 2022  
Time: 1pm Onwards

Supported by:  
SSIP GOVERNMENT OF GUJARAT  
NewGen IEDC DEPARTMENT OF SCIENCE & TECHNOLOGY GOVERNMENT OF INDIA

**Name of the event:** Antra Skillup Series 2022(Hands-on Training on Advanced Analytical Instrument)

**Date of event:** 26-12-2022 – 31-12-2022

**Duration:** 1 Week

**Venue:** LJ Institute of Pharmacy

**Organizing body(s):** Antrapreneur The Business Incubator

**Type of the event:** Workshop

**No. of participants:** 48

**Brief Description of the event:** The Hands-on Training on Advanced Analytical Instrument was on HPLC (High Performance Liquid Chromatography), UV (Ultraviolet Spectroscopy), and IR (Infrared Spectroscopy) offers participants a unique opportunity to gain practical knowledge and skills in three essential analytical techniques and sophisticated instruments used in various scientific and industrial fields. The workshop focused on HPLC, a liquid chromatographic technique widely employed for the separation, identification, and quantification of chemical compounds in simple as well as complex mixtures. Participants learned about the principles of HPLC, instrument operation, column selection, sample preparation, and data analysis. Through hands-on exercises, the participants got the chance to practice method development, calibration,

and troubleshooting, ensuring a comprehensive understanding of this versatile analytical tool. The workshop also covered UV Spectroscopy, highly employed to determine the concentration and identification of chemical compounds by measuring their absorption of ultraviolet light. Participants learned about the instrument operation, measurement techniques, and interpretation of spectra. Through practical exercises, the participants acquired skills in preparing and analyzing samples, establishing calibration curves, and applying UV spectroscopy in various analytical applications. Participants were also gained insights into the IR Spectroscopy, its theory, instrument operation, sample handling, and spectral interpretation of unknown compounds. By the end of the training, participants can expect to have a solid understanding of HPLC, UV, and IR techniques, along with the ability to independently operate the instruments, troubleshoot common issues, and interpret analytical results.

### **Testimonials of the Event**

I had the privilege of managing and operating the hands-on training workshop on HPLC, UV, and IR spectroscopy. It gives me great satisfaction to express that the workshop was a resounding success, equipping participants with invaluable knowledge and practical skills in various spectroscopic techniques. It was a privilege to guide participants through the details of HPLC, UV, and IR spectroscopy, demystifying complex concepts and relating them to practical applications. The interactive exercises and practical demonstrations fostered a hands-on approach, enabling participants to build their confidence and proficiency in the spectroscopic techniques. I am thankful for the opportunity to have managed and operated such an informative and empowering workshop and look forward to further empowering individuals through future workshops and training sessions. I wholeheartedly recommend this workshop to anyone seeking to enhance their understanding of spectroscopic techniques.

### **Highlights of the event**

- 7 Days training
- The hands-on training workshop was mainly focused on the theoretical and practical information and applications of HPLC, UV and IR Spectroscopic techniques including instrument operation, sample preparation and data interpretation.
- **Supported by –**  
NewGen: Department of Science and Technology, Government of India  
SSIP: Department of Education, Government of Gujarat
- **Top 3 students of modules are**  
1. THAKOR JAGRUTI BEN VISHNU BHAI  
2. PATEL RUTVIK CHANDRAKANT  
3. SHAH FREYA JIGNESH KUMAR

### **Outcome of the event**

The workshop provided the participants a profound understanding of basics, theory, instrument handling, calibration, troubleshooting, sample preparation and data interpretation of various analytical techniques.

## Photographs

