

NAME OF TRAINING

One Day Workshop On Hands-on Training on HPTLC instrumentation technique & Data analysis



DATE : 21-MARCH-2025

SEATS AVAILABLE : 20

FEES (RS) : 1000

CO-ORDINATOR : **Dr. Jigna Vadalia**
Associate Professor
School of Pharmacy-GTU
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REGISTRATION LINK

<https://forms.gle/gdACWDmK1vBxhPYd8>

QR CODE



Report on
One day workshop on HPTLC Hands-on Training:
Instrumentation techniques and Data analysis
21st March 2025



SCHOOL OF PHARMACY
GUJARAT TECHNOLOGICAL UNIVERSITY

Coordinator: Dr. Jigna M. Vadalia

SUMMARY

Type of Event	Hands-on Training Session
Expert	Dr. Jigna Vadalia Assistant Professor, School of Pharmacy, GTU
Title of Session	HPTLC Hands-on Training: Instrumentation techniques and Data analysis
Date of Event	21st March 2025
Venue	School of Pharmacy, Gujarat Technological University, Sector 26, Gandhinagar
Number of Participants	09
Coordinator	Dr. Jigna M. Vadalia

Objective of the Workshop:

The primary objective of this one-day workshop was to provide participants with comprehensive knowledge and practical experience in High-Performance Thin-Layer Chromatography (HPTLC) techniques. This included an in-depth understanding of HPTLC instrumentation, data analysis methods, and the application of these techniques in pharmaceutical, herbal, food, cosmetics and forensic research and quality control.

Activity Details:

Participants arrived at the venue, completed the registration process, and enjoyed a brief networking breakfast. Dr. Jigna Vadalia commenced the session with a detailed lecture covering the fundamentals of HPTLC, including: Principles of HPTLC, Components and working of HPTLC instrumentation, Sample preparation and application techniques, development of chromatographic conditions, Data analysis and interpretation techniques and detail applications in different sectors.

This was followed by a hands-on demonstration where participants observed the practical application of theoretical concepts, including instrument setup and operation.

Participants had a short break for lunch and informal discussions.

The second half of the training was dedicated to Practical Hands-on Training Session focused on VISIONCATS software handling, Sample loading techniques on HPTLC plates, Development of chromatographic runs, Visualizing and interpreting chromatograms, Quantitative analysis using densitometry and ends with trouble shooting common issues in HPTLC analysis.

Hands-on Practice and Learning Outcomes:

The workshop was highly successful, providing participants with both theoretical insights and practical expertise in HPTLC. Participants learned how to quantify analytes by generating calibration curves, performing peak integration, and interpreting densitometric data effectively.

The knowledge and skills acquired during this workshop are expected to enhance the participants' research capabilities and contribute to their academic and professional growth in pharmaceutical sciences.



