



REPORT

Two Days Workshop on “Designing Excellence: Hands-on Thin Layer Chromatographic Method Development with QbD Approach”

Organized by

Shri B. V. Patel Education Trust, Ahmedabad

&

Indrakala Ipcowala College of Pharmacy (The CVM University)

Day One: 28th & 29th November 2025



Indrakala Ipcowala College of Pharmacy (The Charutar Vidya Mandal University, Vallabh Vidyanagar) and B. V. Patel Education Trust, Ahmedabad jointly organized Two days Workshop on “**Designing Excellence: Hands-on Thin Layer Chromatographic Method Development with QbD Approach**” on 28th and 29th November 2025. Total 20 Participants from industry and academia participated in the workshop.

Inaugural session:

The Workshop was inaugurated by **Dr. Manish Nivsarkar**, Director, BVPET and **Prof. (Dr.) Shri Inrajit Patel**, Provost, The Charutar Vidya Mandal University. **Dr. Dimal A. Shah**, Principal, IICP welcomed all the Guest, Resource persons and Participants. **Dr. Usmangani K Chhalotiya**, Co-ordinator of the Event, gave brief over view of the workshop. Dr. Manish Nivsarkar gave brief overview of working of BVPET and purpose of this workshop. Prof. (Dr.) Shri Inrajit Patel Congratulated organizing committee members of BVPET and IICP for organizing workshop. He also asked all the participants to take maximum benefit of the workshop. Mr. Krunal H. Solanki, Co Co-ordinator of the workshop proposed vote of thanks.

Lecture 1: First talk was delivered by **Dr. Usmangani K Chhalotiya**. He delivered a talk on ‘HPTLC Principle, Instrumentation, Workflow and Applications’. He gave idea about Basic of HPTLC, latest advancement in HPTLC Instruments, and Applications and their uses. He also discussed about the importance of chromatographic techniques and discussed theories of chromatography.



Lecture 2: Dr. Kalpana J Patel, Professor, Anand Pharmacy College delivered a talk on ‘Identification of Critical performance Characteristics and Process Parameters in Chromatographic Techniques (HPLC and HPTLC)’. This topic focuses on determining the crucial method attributes (CQA/CMA) and process parameters (CPP) that impact chromatographic performance. Participants learn how factors such as mobile phase composition, chamber saturation, plate activation, and detection wavelength influence separation efficiency and robustness. The session emphasizes QbD thinking by teaching systematic identification and control of parameters for reliable method development.

Post Lunch session

Ms. Hetaben M. Kachhiya conducted a full practical demonstration of the HPTLC process—from sample spotting to plate development and scanning. Participants observe step-by-step execution of mobile phase preparation, chamber equilibration, plate handling, and image documentation. This provides a hands-on understanding of how theoretical concepts are applied in real laboratory conditions.

Mr. Krunal Solanki was present in his session trains participants directly in essential laboratory techniques required for precise HPTLC work. It includes accurate sample dilution, proper pipetting, plate spotting using applicators, and reproducible mobile phase formulation. Participants gain practical skills that directly affect chromatographic resolution and repeatability.

Ms. Jinal Tandel, Assist. Prof, IICP was delivered practical session on learn how to design experiments scientifically using Quality by Design tools. The session covers risk assessment, defining method objectives, selecting critical factors, and planning DoE-based studies. It teaches how structured data planning leads to more efficient method optimization and regulatory-compliant documentation.

29th November 2025

Lecture 1: First talk was delivered by **Dr. Pintu Prajapati**, Assoc. Professor, Malibe College of Pharmacy, UKA Tarsadia University on ‘Method Optimization & DoE Application in HPTLC’. He This session introduces Design of Experiments (DoE) and its role in systematic method





optimization. Participants understand how statistical designs (factorial, Box–Behnken, etc.) help evaluate the effects of plate conditions, mobile phase ratios, and development parameters. The session shows how modeling response variables leads to robust, scientifically optimized HPTLC methods.

Lecture 2: Second talk was delivered by **Dr. Dimal A Shah**, Professor & Principal, IICP on ‘HPTLC Method Validation as per ICH Q2 (R2)’. This topic explains the updated ICH Q2(R2) guidelines for analytical method validation. Participants learn about key validation parameters—specificity, linearity, precision, accuracy, range, robustness, and detection limits. Practical examples demonstrate how to evaluate and document validation data to meet regulatory standards for pharmaceutical analytical methods.

Post Lunch session

Ms. Mital Parmar Asst. Professor, IICP conducted practical hands-on training on HPTLC and This practical session reinforces operational skills while adding data interpretation. Participants perform sample preparation and plate development followed by chromatogram analysis using software. The session focuses on peak integration, R_f value evaluation, system suitability checks, and result interpretation. **Ms. Jinal Tandel**, Asst. Professor, IICP conducted practical session on learn how to design experiments scientifically using Quality by Design tools. The session covers risk assessment, defining method objectives, selecting critical factors, and planning DoE-based studies. It teaches how structured data planning leads to more efficient method optimization and regulatory-compliant documentation.

Group Presentation: Each participant group summarizes their method design, experimental work, DoE outcomes, and validation considerations. This promotes scientific communication skills and allows participants to understand diverse approaches to HPTLC method development.

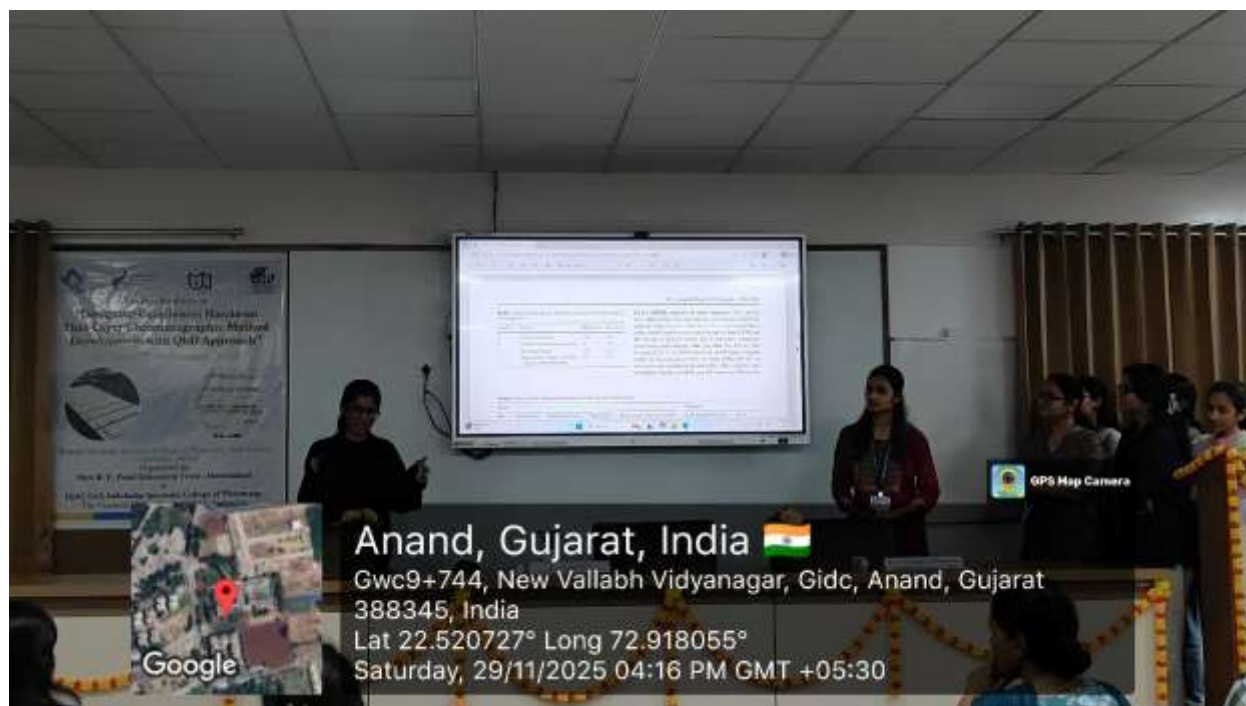
Valedictory Function:

Valedictory function was conducted in august presence of **Dr. Neeta Shrivastava**, Deputy Director, BVPET. She gave brief overview of the two days session and appreciated all participants for their active participation. All participants were given certificate. Session was ended with vote of thanks proposed by Mr. Krunal H. Solanki, Co Co-ordinator of the workshop.











Chhalotiya

Dr. Usmangani K. Chhalotiya
Co-ordinator



Shah

Dr. Dimal A. Shah
Convener