

Event Report: Two-Day Hands-on Training Program on GC/MS-MS Instrumentation & Data Analysis

GUJARAT TECHNOLOGICAL UNIVERSITY School of Pharmacy

Date : 2nd–3rd May 2025

Venue: School of Pharmacy, Gujarat Technological University

Overview

The School of Pharmacy, Gujarat Technological University (GTU), successfully organized a two-day hands-on training program on GC/MS-MS Instrumentation & Data Analysis on 2nd and 3rd May 2025. The program was meticulously crafted and coordinated by Mr. Ravisinh V. Solanki, Assistant Professor, School of Pharmacy, GTU, with active participation from industry experts and academic professionals.

Day 1: 2nd May 2025 (Friday)

- 10:30 AM – 11:00 AM – Registration and breakfast session initiated the day.
- 11:00 AM – 11:15 AM – Introduction by Mr. Ravisinh V. Solanki, highlighting the objectives and relevance of the training.
- 11:15 AM – 01:00 PM – Session 1 – Introduction to GC-MS/MS & Instrumentation by Mr. Rohit Oza, Product Specialist, Gas Phase Division, Agilent Technologies. Topics included principles of GC-MS, instrument components, EI/CI ionization, tandem MS principles, and sample types.
- 01:00 PM – 02:00 PM – Lunch Break
- 02:00 PM – 03:30 PM – Session 2 – ICH Q3C Guidelines for Residual Solvents by Mr. Ravi Patel, Assistant Professor, GSP-GTU. Covered classifications, PDE limits, detection methods, sample prep, and validation parameters.
- 03:30 PM – 03:45 PM – Tea Break
- 03:45 PM – 05:00 PM – Session 3 – Live Instrument Demonstration by Ms. Khushboo Bhadoriya, Field Application Engineer, Agilent Technologies. Included system tuning, injection techniques, maintenance, and software overview.

Day 2: 3rd May 2025 (Saturday)

- 10:30 AM – 11:00 AM – Breakfast
- 11:00 AM – 01:00 PM – Session 4 – Calibration, Method Setup & Sample Preparation coordinated by Mr. Gaurav, Agilent Technologies. Covered standard prep, calibration curves, method setup, and MRM parameters.
- 01:00 PM – 02:00 PM – Lunch Break
- 02:00 PM – 03:30 PM – Session 5 – Real Sample Analysis & Data Interpretation by Mr. Dhaval, Agilent Technologies. Topics included pharmaceutical sample analysis, MRM interpretation, LOD/LOQ calculations.
- 03:30 PM – 03:45 PM – Tea Break
- 03:45 PM – 05:00 PM – Session 6 – Advanced Data Interpretation and Wrap-Up by Mr. Ravisinh V. Solanki. Focused on troubleshooting and regulatory insights.
- 05:00 PM – 05:10 PM – Vote of Thanks by Mr. Ravisinh V. Solanki.

Conclusion

The training program provided a comprehensive blend of theory and practical experience in GC-MS/MS, significantly enriching the participants' understanding of advanced analytical instrumentation and regulatory expectations. The active engagement from Agilent Technologies and academic partners ensured high-quality knowledge dissemination. The event concluded successfully, reflecting the strong collaborative effort between academia and industry, with Mr. Ravisinh V. Solanki playing a pivotal role in its seamless execution.

Coordinator :

Mr. Ravisinh Solanki
Assistant Professor,
GTU School of Pharmacy.

Photographs



