



S. A. S. NAGAR

TWO-DAYS WORKSHOP AND HANDS-ON TRAINING ON BIostatISTICS AND EXPERIMENTAL DISCOVERY USING DESIGN OF EXPERIMENTS (DOE) AND QUALITY BY DESIGN (QBD)

Mode: Offline

Organized by
Department of Pharmacoinformatics

NIPER S. A. S. Nagar

Engaging Hands-On practical Sessions
1-year free JMP license

Registration Details:
INR 300 (Non-Refundable)

Payment Gateway

Go To

www.onlinesbi.sbi/ State Bank Collect

→ Select “Educational Institute” →

Select Institute “NIPER FEE

A/C” and State “Punjab” →

Select Payment Category

“Short Term Course Fee” → Fill
detail and make Payment.

SPEAKER



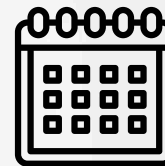
Dr. Muralidhara A.

Lead, JMP Academic, India
B.Tech, MBA, Ph.D

REGISTER HERE



<https://forms.gle/KN4CQhhrvdyZz3YY6>



**27-28 MARCH
2025**

For further queries, please, contact:

Dr. Pooja Arora

Email: poojaarora@niper.ac.in

Contact No.: 9803301000



About the Workshop !

This will be an interactive, hands-on workshop on Statistical Discovery in Pharmaceutical Sciences, led by industry experts. This session will cover essential concepts, including Biostatistics, Data Visualization, Design of Experiments (DoE), Quality by Design (QbD), and Dissolution Studies. Participants will gain practical experience using JMP software to design, analyze, and optimize pharmaceutical products and processes. Through real-world case studies and live demonstrations, attendees will explore how statistical methods drive advancements in R&D, quality control, and manufacturing across leading pharmaceutical companies. Additionally, insights from industry leaders will highlight the transformative role of DoE and related tools in pharmaceutical innovation.



Who Should Attend ?

Students, scholars, and faculty members from all pharmaceutical science.



Objectives

- **Statistical Concepts:** Understand key principles and their practical applications in the pharmaceutical industry.
- **Real-World Applications:** Explore case studies showcasing how statistical methods are implemented in pharmaceutical research and operations.
- **JMP Software:** Conduct statistical analyses and confidently interpret results using JMP.



Instructions

- **Download JMP Software:** All participants must download JMP from www.jmp.com/student using their NIPER email (FREE for NIPER).
- **Installation Deadline:** Install and authenticate the software at least one week before the workshop. (Refer to the attached PDF for steps.)
- **License:** Annual, renewable at zero cost for students, researchers, and faculty.
- **Laptop Requirement:** Bring a laptop with JMP installed and a mouse for the hands-on session.
- **Power Supply:** Ensure enough power connections in the venue. Arrange extension cords/junction boxes if needed.

Workshop Schedule

Date	Session	Topics Covered	Time
Day-1 (27/03/2025)	Inauguration	Inaugural Speech By Director	9:30 AM -10:00 AM
	Session-1	Statistical Thinking in Industrial Problem Solving, Data and Modelling Types, Descriptive and Inferential Statistics, Distributions, Test of Normality (Hands-on Exercises)	10:00 AM -11:00 AM
	Session-2	Bivariate Analysis, T-Test, ANOVA, Chi-square Test, Non-Parametric Tests (Hands-on Exercises)	11:15 AM -12:15 PM
	Session-3	Correlation, Simple Linear, and Multiple Linear Regression (Hands-on Exercises)	2:30 PM -3:30 PM
	Session-4	Data Visualization: Plots, Graphs, Maps, Interactive Visualizations (Hands-on Exercises)	3:45 PM -4:45 PM
Day-2 (28/03/2025)	Session-1	Introduction to DoE: Strategy of Experimentation, Terminology, Screening Designs Factorial & Fractional Factorial Experiments (Hands-on Exercises)	10:00 AM -11:00 AM
	Session-2	Optimization Designs: Response Surface Methodology (RSM), Central Composite(CCD) and Box-Behnken Designs (BBD), Prediction and Optimization (Hands-on Exercises)	11:15 AM -12:15 PM
	Session-3	Formulation/Mixture Designs, Introduction to QbD, and Risk Assessment (Hands-on Exercises)	2:30 PM -3:30 PM
	Session-4	Modern & Computer-Generated Designs: Custom Design, Prediction, Simulation, and Optimization (Hands-on Exercises)	3:45 PM -4:45 PM