



Food & Chemical Analysis Virtual Reality Lab

EXPERIENCE FOOD & CHEMICAL ANALYSIS LIKE NEVER



Why Choose the HPLC VR Experience for Food and Chemical Analysis?

Interactive Training

Learn every stage of an HPLC run in a fully interactive environment — from sample injection to data analysis.

Safe & Risk-Free

No exposure to hazardous chemicals or risk of lab accidents. Perfect for early learners and large-scale training.

Cost-Efficient

Eliminate the need for expensive lab equipment, chemical consumables, and dedicated space.

• Realistic Practice

Simulate real tasks like inserting columns, handling mobile/stationary phases, and interpreting results—just like in a real lab.

Step Inside the Virtual Reality (VR) HPLC Lab:

Discover the future of Food and chemical Analysis training through our Virtual Reality HPLC Lab Experience. Whether you're a student, educator. researcher. industry professional, this immersive simulation offers a hands-on journey into the complex process of High Performance the Liquid Chromatography — with physical lab needed. Put on your VR headset and prepare, operate, and analyze the food and chemicals as if you're in a real lab— learning the full process step- by-step.



INTERACTIVE. IMMERSIVE. RISK-FREE.



Short simulations, so you can see what happening inside the HPLC during VR analysis of the food



Every step done in real world, needs to be done in VR also.



Work on PC software (in VR mode) and get full analysis results for food under test , same as done in real labs



Experience working on VR HPLC to test food like real, Step by Step

PERFECT FOR:

- Food, Chemistry and pharmaceutical students
- Laboratory instructors and trainers
- Industry professionals seeking refresher training
- Organizations seeking scalable and safe lab alternatives



The simulation is based on the Shimadzu HPLC system

WHAT IS HPLC

High-Performance Liquid Chromatography (HPLC) is a powerful lab technique used to separate, identify, and quantify components in a mixture. It plays a vital role in fields such as food composition, quality & safety, Chemical and pharmaceutical analysis.

Our VR simulation provides realistic interaction with the HPLC system, offering practical training in how the process works—from injection to interpretation.

WHAT YOU WILL LEARN

1. Mobile Phase Setup

Mix and insert the mobile phase solvent essential for compound separation.

2. Stationary Phase & Column Insertion

Install the column and understand its role in retention and separation.

3. Sample Injection

Introduce real-like samples to observe retention behavior and peak generation.

4. Chromatographic Separation

Visualize how compounds move through the system under high pressure.

5. Data Analysis using Lab Solutions

Interpret chromatograms, identify compounds, and calculate purity levels.





DON'T JUST READ ABOUT HPLC — EXPERIENCE IT