LC-MS Glycomics — Separation, Ionization & Derivatization — Hands-on

Learn how to design and tune LC MS methods specifically for glycans. This module covers chromatographic modes for glycans, source and ionization settings, adduct control and derivatization strategies, so that your LC MS glycomics runs deliver sensitive, reproducible profiles suitable for quantitation and structural follow up.

LC-MS Glycomics — Separation, Ionization & Derivatization

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Session Index

Session 1

Fee: Rs 8800 Apply Now

LC Modes & Columns for Glycans

Chromatographic options for glycans and glycopeptides

HILIC for released glycans **reversed phase for glycopeptides** **mixed mode and other niche options**

Column chemistries and dimensions

amide HILIC columns **particle size and length trade offs** **nano vs micro vs analytical flow**

Mobile phase design for glycan separations

buffer salts and pH choices | organic composition and gradients | MS compatibility considerations

Session 2

Fee: Rs 11800 Apply Now

Ionization, Source Tuning & Adduct Control

Positive vs negative mode for glycans and glycopeptides

when to use each polarity | signal to noise considerations | compatibility with derivatization

Source tuning for robust glycan signals

spray voltage and temperature | gas flows and nebulization | avoiding in source fragmentation

Managing adducts and charge states in glycomics

sodium and potassium adduct control | ammonium adduct strategies | impact on identification workflows

Session 3

Fee: Rs 14800 Apply Now

Derivatization Impact & Method Optimization

How labeling and derivatization affect LC-MS behavior

common glycan labels overview | effects on retention and peak shape | influence on ionization and fragmentation

Method optimization for resolution and throughput

gradient slope and run time | temperature and column lifetime | carryover and contamination control

System suitability and stability checks

use of glycan standards | retention time monitoring | signal drift and batch QC

Session 4

Fee: Rs 18800 Apply Now

Mini Capstone: LC-MS Glycomics Method Blueprint

Design an LC-MS glycomics method for a chosen use case

antibody glycan profiling or serum glycome mapping

Document full separation and ionization conditions

column and gradient details | source and polarity settings | derivatization and injection protocol

Deliverables: method sheet and QC plan

one page LC MS method card | system suitability checklist | notes for MIRAGE style reporting