

MALDI-TOF and LC-ESI for Oligosaccharide Analysis — Hands-on

Build hands-on skills in MALDI-TOF and LC-ESI based analysis of oligosaccharides from glycoproteins and complex samples. This module covers matrix and solvent choices, spotting and infusion techniques, acquisition and calibration routines, and interpretation of isotope patterns and adducts for confident structural assignments.

MALDI-TOF and LC-ESI for Oligosaccharide Analysis

[Help Desk · WhatsApp](#)

Session Index

[Session 1 — MALDI-TOF Fundamentals for Oligosaccharides](#) [Session 2 — LC-ESI Workflows for Oligosaccharide Analysis](#) [Session 3 — Acquisition, Calibration and Peak Assignment](#) [Session 4 — Mini Capstone: Comparative MALDI vs LC-ESI Profiling](#)

Session 1

Fee: Rs 8800 [Apply Now](#)

MALDI-TOF Fundamentals for Oligosaccharides

MALDI-TOF hardware and ion formation basics

[laser, target plate and flight tube](#) [time of flight principles](#) [reflectron vs linear modes](#)

Matrix selection for oligosaccharide analysis

[DHB and CHCA options](#) [matrix solubility and purity additives and salt effects](#)

Sample spotting and co crystallization strategies

dried droplet vs thin layer **homogeneity and hot spot control** **basic troubleshooting tips**

Session 2

Fee: Rs 11800 Apply Now

LC-ESI Workflows for Oligosaccharide Analysis

ESI source setup and tuning for glycans and oligosaccharides

nebulizer and gas settings **capillary voltage and temperature** **minimizing in source fragmentation**

LC configurations for LC-ESI oligosaccharide runs

isocratic vs gradient approaches **HILIC and RP options** **injection solvent considerations**

Direct infusion and LC-ESI comparison

sensitivity and throughput **matrix and salt tolerance** **when to choose which workflow**

Session 3

Fee: Rs 14800 Apply Now

Acquisition, Calibration and Peak Assignment

Acquisition parameters and method templates

mass range and resolution settings **laser power and shot count in MALDI** **scan speed in LC-ESI MS**

Calibration routines and quality checks

external and internal calibrants **calibration frequency** **mass accuracy assessment**

Peak picking, deisotoping and adduct recognition

isotope patterns for oligosaccharides **Na and K**

adduct series **linking m/z to compositions**

Session 4

Fee: Rs 18800 Apply Now

Mini Capstone: Comparative MALDI vs LC–ESI Profiling

Designing a small comparative experiment

Theory plus Practical

Acquiring MALDI–TOF and LC–ESI data for the same sample

instrument specific run plans **QC and replicate strategy** **data export and backup**

Deliverables: comparison summary and method notes

PDF or DOC comparison report **checklist of key parameters** **recommendations for routine use**