

JMS-S3000 SpiralTOF

LC-MALDI applications



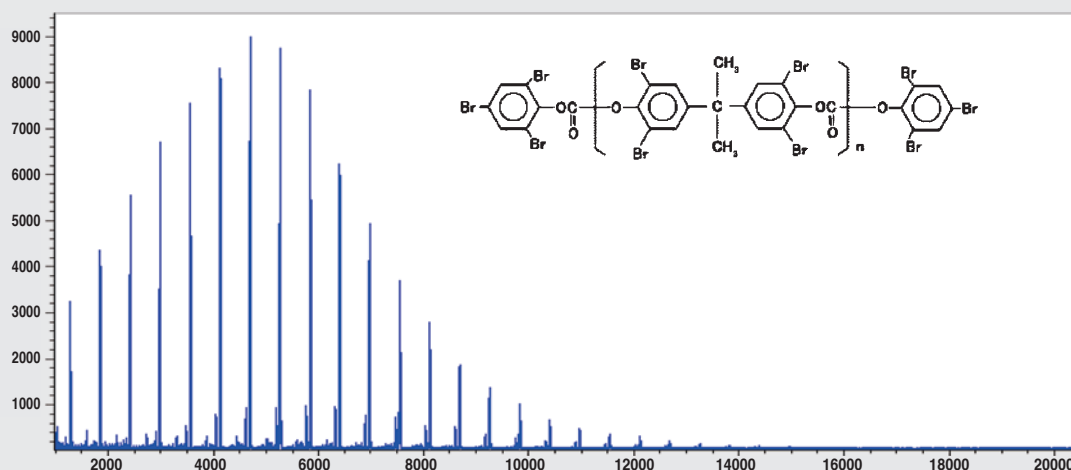
HPLC-MALDI/MS and MS/MS with the SpiralTOF.

The JMS-S3000 SpiralTOF MALDI-TOF/TOF system offers outstanding LC-MALDI capabilities with the highest commercially available mass resolving power. Its standard control software has a number of new features, allowing for 1D visualization and analysis of the mass spectra measured for HPLC and SEC fractions collected for each analyte at equal intervals. The JMS-S3000 is a powerful analytical tool, suitable for rapidly changing research needs in areas such as synthetic polymers, material science, and biological polymers.

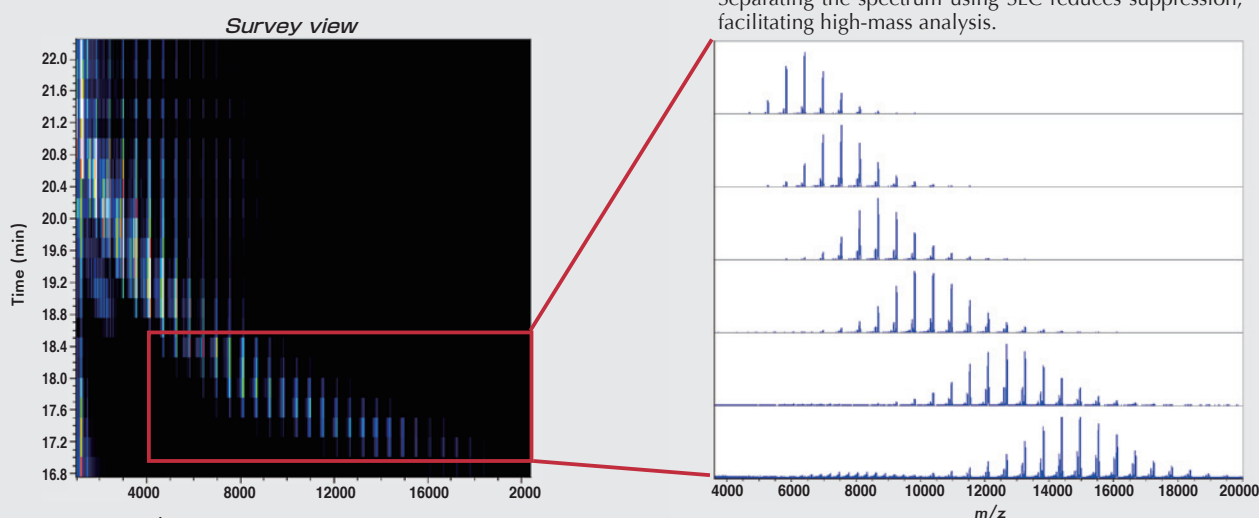


SEC-MALDI analysis of functional polymers

Mass spectrum of Fireguard® 8500 (Teijin Chemicals Ltd.), a flame retardant (before SEC separation)



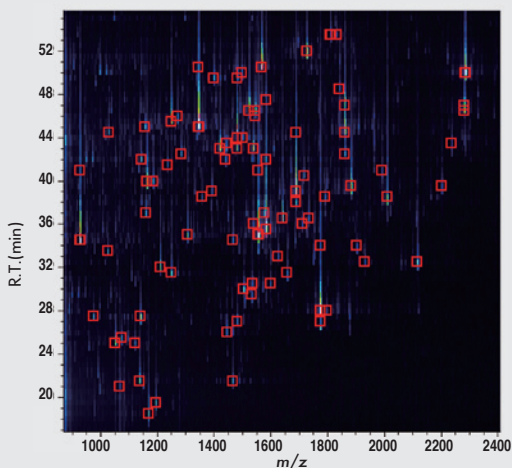
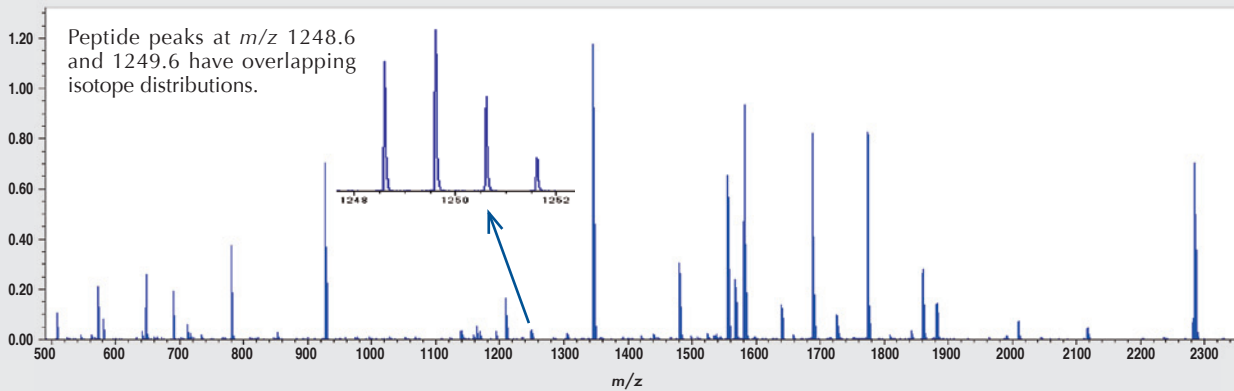
SEC-MALDI analysis of Fireguard® 8500, a flame retardant



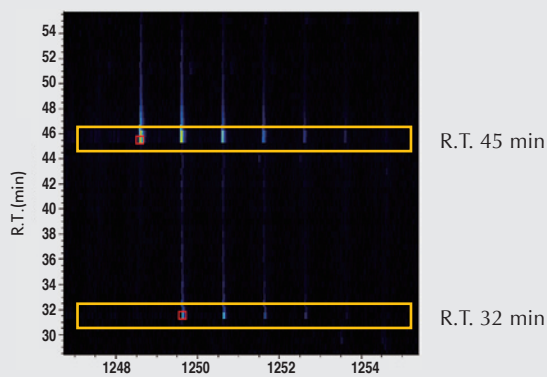
SEC conditions
Column : TSKgel SuperAW3000 4.6 mm x 150 mm x 2
Mobile phase : Tetrahydrofuran (THF)
Fractionation : 15 sec intervals

Analysis of a protein digest

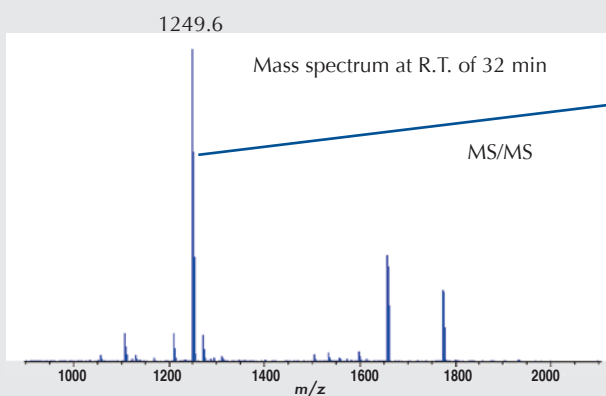
A tryptic digest of bovine serum albumin (KYA TECH Corporation) was mixed with a tryptic digest of ovalbumin (KYA TECH Corporation). The mass spectrum below was acquired for the unseparated mixture deposited onto a single spot.



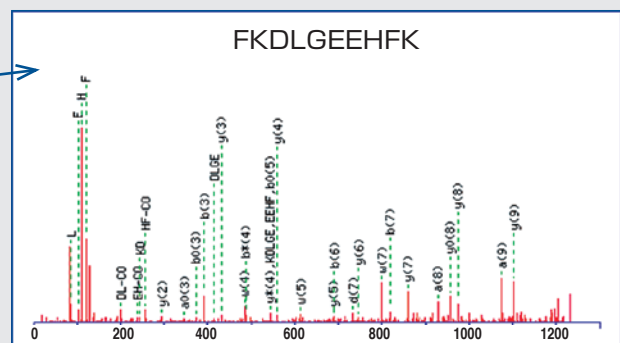
□ : Precursor ions selected for MS/MS measurement



Separating the peptides corresponding to the peaks at m/z 1248.6 and 1249.6 by HPLC eliminated the isotope overlap, providing “clean” MS/MS spectra for each peptide.



MASCOT MS/MS Ion Search



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