

MASS SPECTROMETER

ABSTRACT

An output voltage of a high-voltage power source (20) for applying a high voltage to
5 the nozzle of an ESI probe (5) requires a long settling time when the voltage is changed in
the direction in which the voltage decreases without changing its polarity. To address this
problem, in a mass spectrometer according to the present invention, when MRM
measurements for a plurality of MRM transitions need to be performed within one cycle, a
measurement order rearranger (34) determines an analysis sequence by sorting the
10 measurement in ascending order of the absolute value of an optimum application voltage (an
application voltage which gives the highest ionization efficiency) to the nozzle of the ESI
probe (5). An analysis controller (31) performs the analysis by controlling the high-voltage
power source (20) and other relevant units according to the determined analysis sequence.
Since the voltage applied to the nozzle within one cycle has no period in which the voltage is
15 changed in the decreasing direction with the same polarity, the cycle time becomes shorter
than in a conventional device. Therefore, the number of data points per unit time can be
increased to improve the accuracy of the peak shape on a mass chromatogram.

FIGURE 4