

**DIODE ARRAY DETECTOR ELECTROSPRAY MASS
SPECTROMETRY LIQUID CHROMATOGRAPHY AS APPLIED TO
PARTIALLY OVERLAPPING PEAKS.**

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It is now common to obtain information from two or more detectors in HPLC simultaneously. Conventionally both DAD-HPLC and LC-MS data are obtained independently, often using quite different approaches, but there will be common features in both types of information. However, these will be distorted, for example, Electrospray MS profiles are typically more noisy and tailing compared to those from DAD-HPLC due to the different physical processes of passing from the chromatographic column to the detector. A method for obtaining and processing both types of data simultaneously is described. The analysis of isomers with identical molecular weights and similar elution times is particularly important in the pharmaceutical industry where small impurities can have a major influence on biological activity. The approach is illustrated by application to a mixture of 2- and 3-hydroxypyridine at varying levels of overlap.