Feasibility of a comprehensive on-line two-dimensional chromatography method using Supercritical Fluid Chromatography
C.K. Lukken

Abstract

Although off-line two-dimensional supercritical fluid chromatography (SFC) methods have been found effective for separation, an on-line two-dimensional SFC method has not been explored greatly. The aim of this study was to provide insight on the potential of an on-line 2D SFC method, with emphasis on SFCxHPLC. Results showed that, although SFC may not elute all highly polar analytes, many of the analytes can be eluted, either with an organic modifier, or with an additive added to an organic modifier. Furthermore, the combination of SFC with HPLC provided a separation of all analytes with a non-linear correlation and shows great potential of a possible on-line SFCxHPLC method.