

# Supercritical Fluid Chromatography

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**Abstract:** *History of Supercritical Fluid Chromatography In 1822, the French physicist Charles Cannard de La Tour placed a liquid and a flint ball in a Papin rifle pressure vessel and heated the liquid with a sealed cannon. 1) When the container was shaken, the bullet broke through the air-liquid interface, and the sound of the bullet scattering was heard. But when I heated the container to a temperature well above the boiling point of the liquid, the noise disappeared. He hypothesized that this was because the liquid and gas densities in the vessel became equal, effectively forming a single phase. This represents the first discovery of what is now called supercritical states and critical points. After this discovery, supercritical fluids became the subject of fundamental physicochemical studies to determine the state change of matter and its properties under supercritical conditions. However, practical applications were not immediately born. Then, in 1879, Hannay and Hogarth reported that supercritical fluids had excellent solvent properties2), and the second wave of research began.*

**Keywords:** Fluid Chromatography

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