

Publication

A review of the recent achievements in capacitively coupled contactless conductivity detection

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Capacitively coupled contactless conductivity detection (CID) in the axial electrode configuration was introduced in 1998 as a quantification method for capillary electrophoresis. Its universality allows the detection of small inorganic ions as well as organic and biochemical species. Due to its robustness, minimal maintenance demands and low cost the popularity of this detector has been steadily growing. Applications have recently also been extended to other analytical methods such as ion chromatography, high-performance liquid chromatography and flow-injection analysis. (CD)-D-4 has also found use for detection on electrophoresis based lab-on-chip devices. Theoretical aspects of (CD)-D-4 in both the capillary and microchip electrophoresis format have been comprehensively investigated. Commercial devices are now available and the method can be considered a mature detection technique. In this article, the achievements in CID for the time period between September 2004 and August 2007 are reviewed.

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