Title (en)

METHOD FOR REAL-TIME SAMPLE PREPARATION IN THE HPLC HIGH-PRESSURE AREA WITH THE AID OF ULTRASOUND

Title (de)

VERFAHREN ZUR ONLINE-PROBENAUFBEREITUNG IM HPLC-HOCHDRUCKBEREICH MIT HILFE VON ULTRASCHALL

Title (fr)

PROCÉDÉ DE PRÉPARATION D'ÉCHANTILLONS EN LIGNE DANS LA ZONE DE HAUTE PRESSION DE HPLC À L'AIDE D'ULTRASONS

Publication

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Application

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Abstract (en)

[origin: WO2011085791A1] The invention relates to a high-performance liquid chromatography (HPLC) system, comprising a sample receptacle, an HPLC column (31, 45) in the form of a separating column (45), upstream of which at least one precolumn (31) is arranged, at least one capillary connecting line, and a detector. An ultrasound device (21) is arranged between the sample receptacle and the at least one precolumn (31) and is brought in contact with the or at least one of the capillary connecting line(s). The invention further relates to a method for preparing samples in an HPLC system, wherein the fractions of the sample are finely distributed and homogenized by the ultrasound device (21) or cells in the sample are sufficiently destroyed or the sample is broken down before the sample reaches the at least one precolumn (31). The invention further relates to the use of the HPLC system and method to examine biological, biochemical, pharmaceutical, medical, or environmental samples, in particular for break-down in the protein and molecular range, for protein systems or cell cultures, and for pharmacokinetics or pharmacodynamics.

IPC 8 full level

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