

Title:

A New LC Approach to Complex Biological Samples by using micro Pillar Array Columns

Description:

In the last decades, several advances have been made in liquid chromatography (LC) column technology. The best known are columns packed with sub-2- μm porous particles or sub-3- μm superficially porous particles, and monolithic columns.

As an alternative to the conventional packed bed nano LC columns, PharmaFluidics offers micromachined nano LC chip columns that are produced by a lithographic etching process to create separation beds on a silicon chip of highly ordered free-standing pillars. This novel and unique development is known as micro Pillar Array Column ($\mu\text{PAC}^{\text{TM}}$) technology. The inherent high permeability and low 'on-column' dispersion obtained by the perfect order of the separation bed makes $\mu\text{PAC}^{\text{TM}}$ based chromatography unique in its kind. The peak dispersion originating from heterogeneous flow paths in the separation bed is eliminated (no A-term contributions) and therefore components remain much more concentrated during separation. The free-standing nature of the pillars also leads to much lower backpressure allowing the use of very long columns with exceptional peak capacities.

The result is a top performing LC column that is very robust and is much less prone to sample related column failure.

In this webinar, Dr. Geert van Raemdonck and Ali Pervez of PharmaFluidics explained the principles of the micro-chip based pillar array columns and presented high resolution data obtained on complex biological samples using micro-chip based pillar array columns.

Link:

<https://www.pharmafluidics.com/webinar-a-new-lc-approach-to-complex-biological-samples-by-using-micro-pillar-array-columns/>