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ONE MINUTE-LIQUID CHROMATOGRAPHY OF INTACT PROTEINS Xindu Geng¹, Xiaohui Ning^{1, 2}, Mingtao Geng² and Weiye Geng²

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The purpose of the presentation is to develop a new and universe technology for protein analysis in one minute by HPLC, called as one minute-liquid chromatography (OMLC). OMLC includes: (1) the theoretical basis of two variables of substance retention under gradient elution in liquid chromatography; (2) methodology of integrating all assisted operations for substance separation together by online manner in liquid chromatography (LC); (3) a kind of special column whose length is smaller than its inner diameter, called as chromatographic cake (CCK), to be employed for separation unit; (4) several examples for ultra-separation of proteins, peptides , and common small solutes to be tested by reversed phase liquid chromatography, hydrophobic interaction chromatography, ion-exchange chromatography, resulting in successfully complete five separation less in 10 min.

Biography

Xindu Geng graduated from Northwest University (NWU, Xi'an) and became a Faculty Member of Department of Chemistry of NWU, and then a Faculty Member of University of Minnesota in 1982~1983; Visiting Professor of Purdue University separately at Department of Biochemistry in 1982~1984 and at Department of Chemistry in 1995~1996, as well a Visiting Professor of Chemistry Department of Creighton University in 2001. He is the Director of Institute of Modern Separation Science of Northwest University. He has published more than 300 papers in reputed journals, four books, and thus won 2 awards in National Scientific and Technology Rank of China; 5 awards in first rank of Provincial and States in China.

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