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Modeling of IMS Spectra in Medical Diagnostic Purposes

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This paper is about embedding of the mathematical methods and development of the software for automatic modeling of IMS spectra. This goal is urgent for IMS analysis of marker substances in human breath for disease diagnosis. The presented method based on the well-known physical model of IMS spectra that is well described IMS spectra using a set of Gauss functions. This paper present next points : 1) Development of the methods for automatic search and identification of Gauss peaks in IMS spectrum. 2) Development of the methods for determining of parameters for Gauss peaks model.