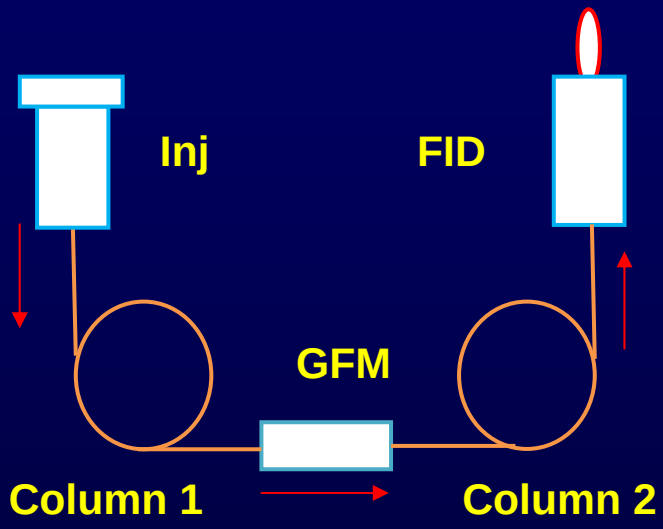
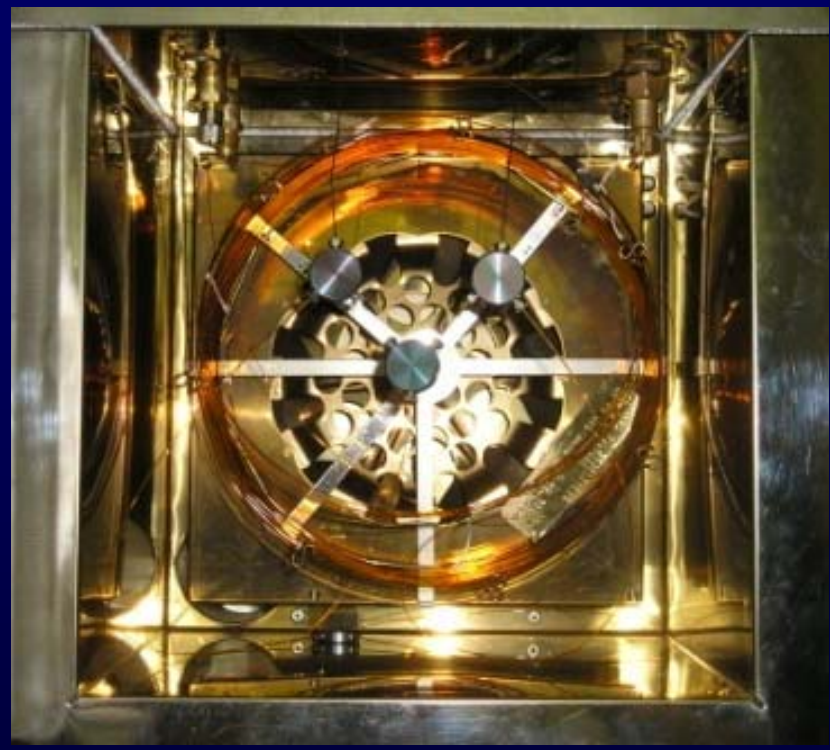
GC x GC REALIZATION
ON THE SERIAL GC DEVICE

Introduction

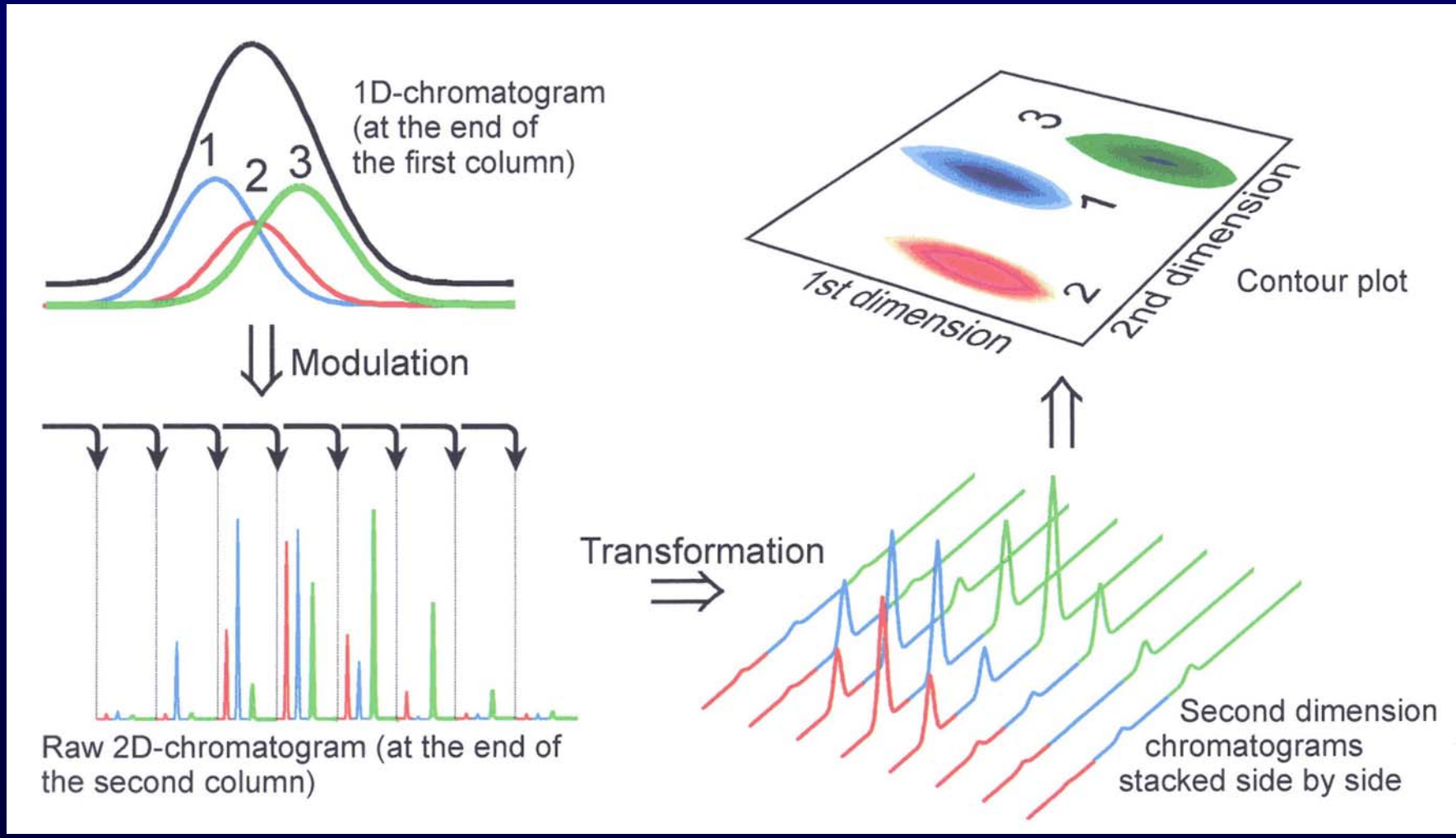
The two dimensional (GC x GC) gas chromatography technique proposes powerful for analysis of complex mixtures. The methodology involves two capillary columns of usually very different polarities installed in series. Between two columns a device known as a flow modulator is installed to collect analyte bands from the first column in a fixed volume and then to launch very quickly into the short second column in a very narrow bands. The separation that occurs on the first column is preserved during transfer to the second column.



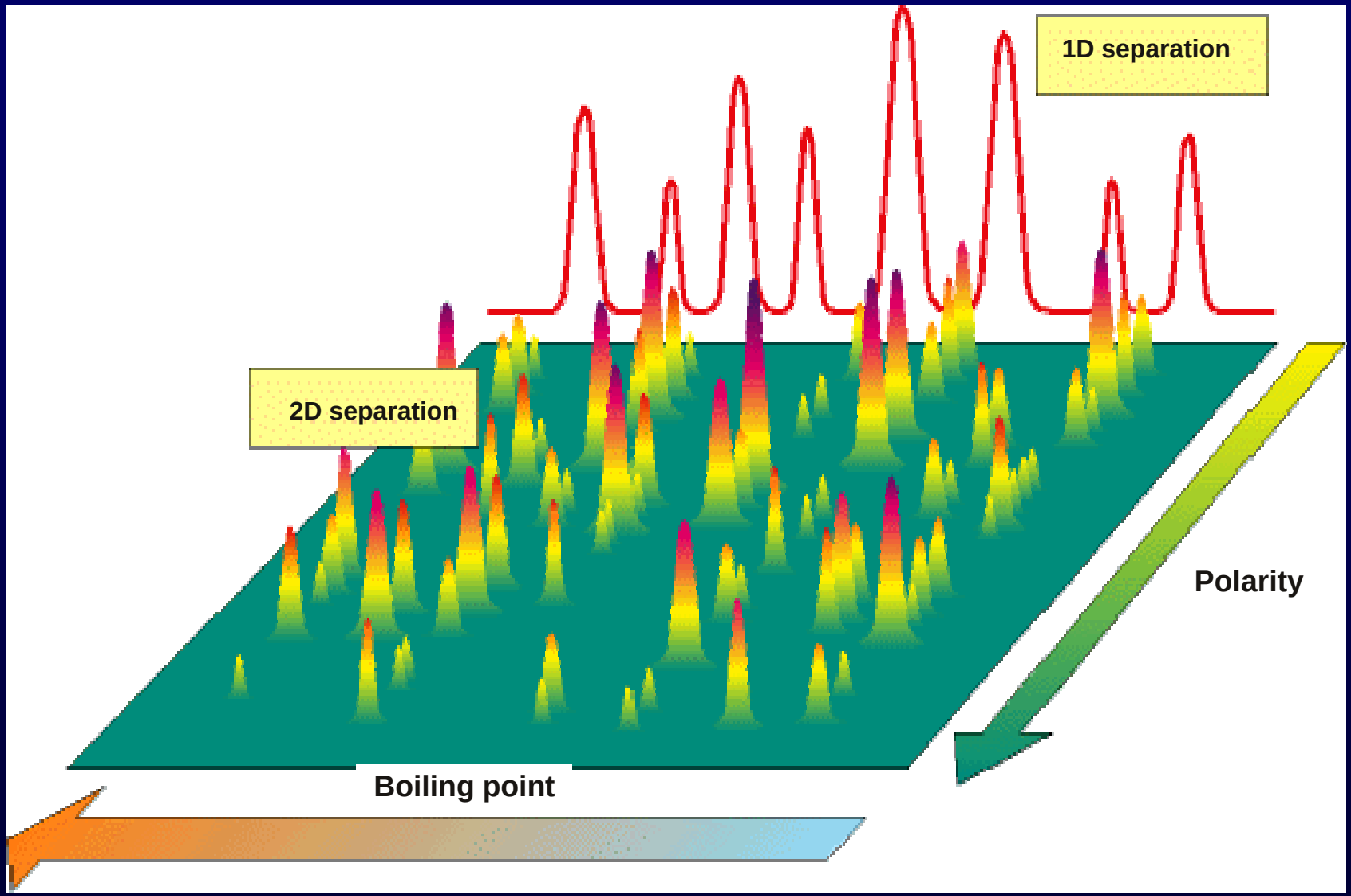
Sketch of GC x GC device.



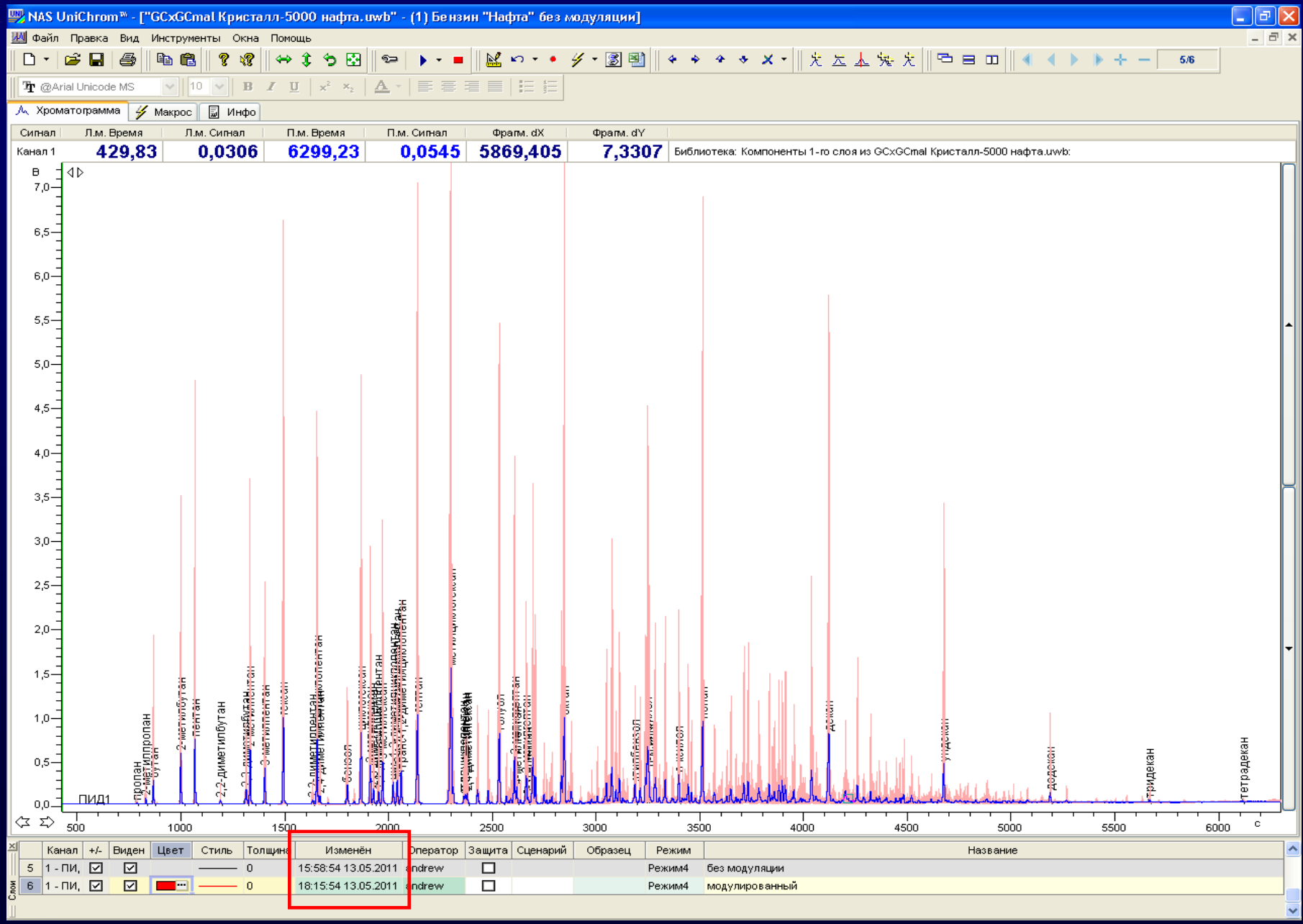
GC x GC realization in the oven of a serial GC.



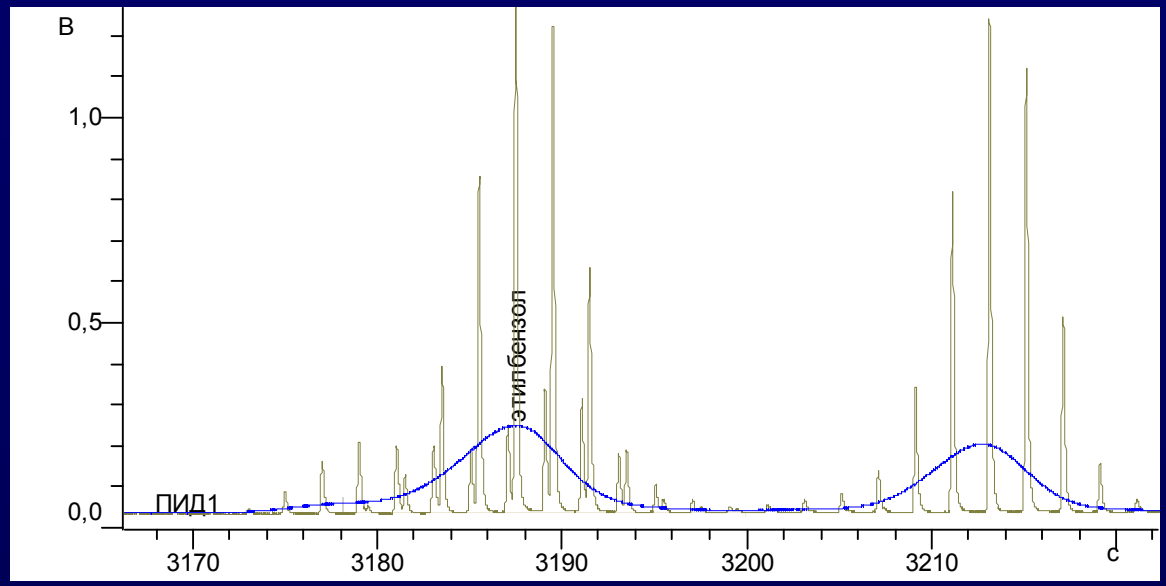
GC x GC schematic presentation.



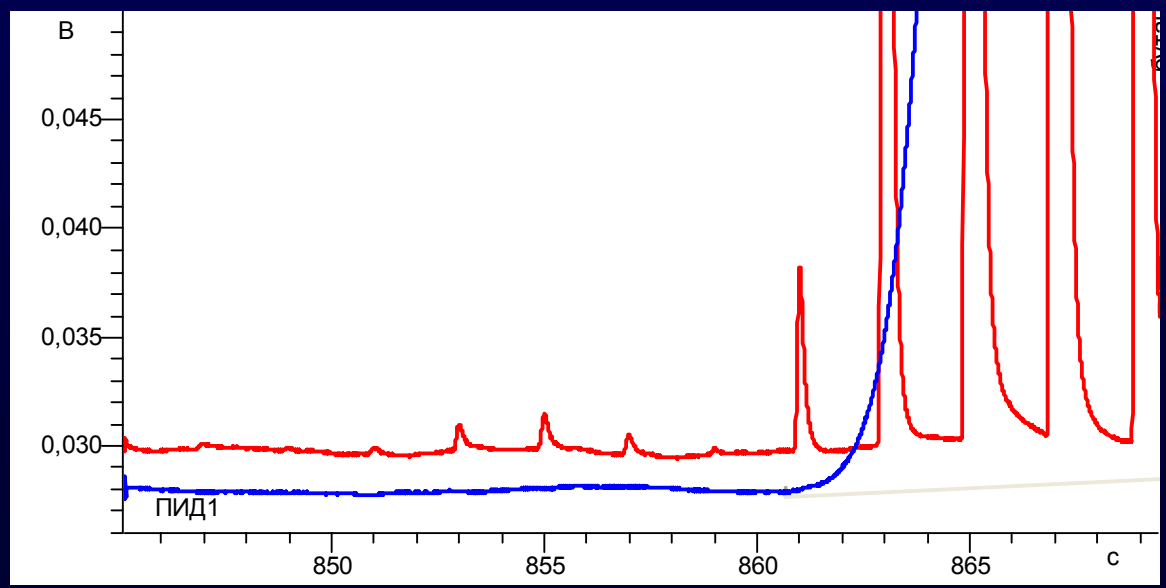
3D presentation.



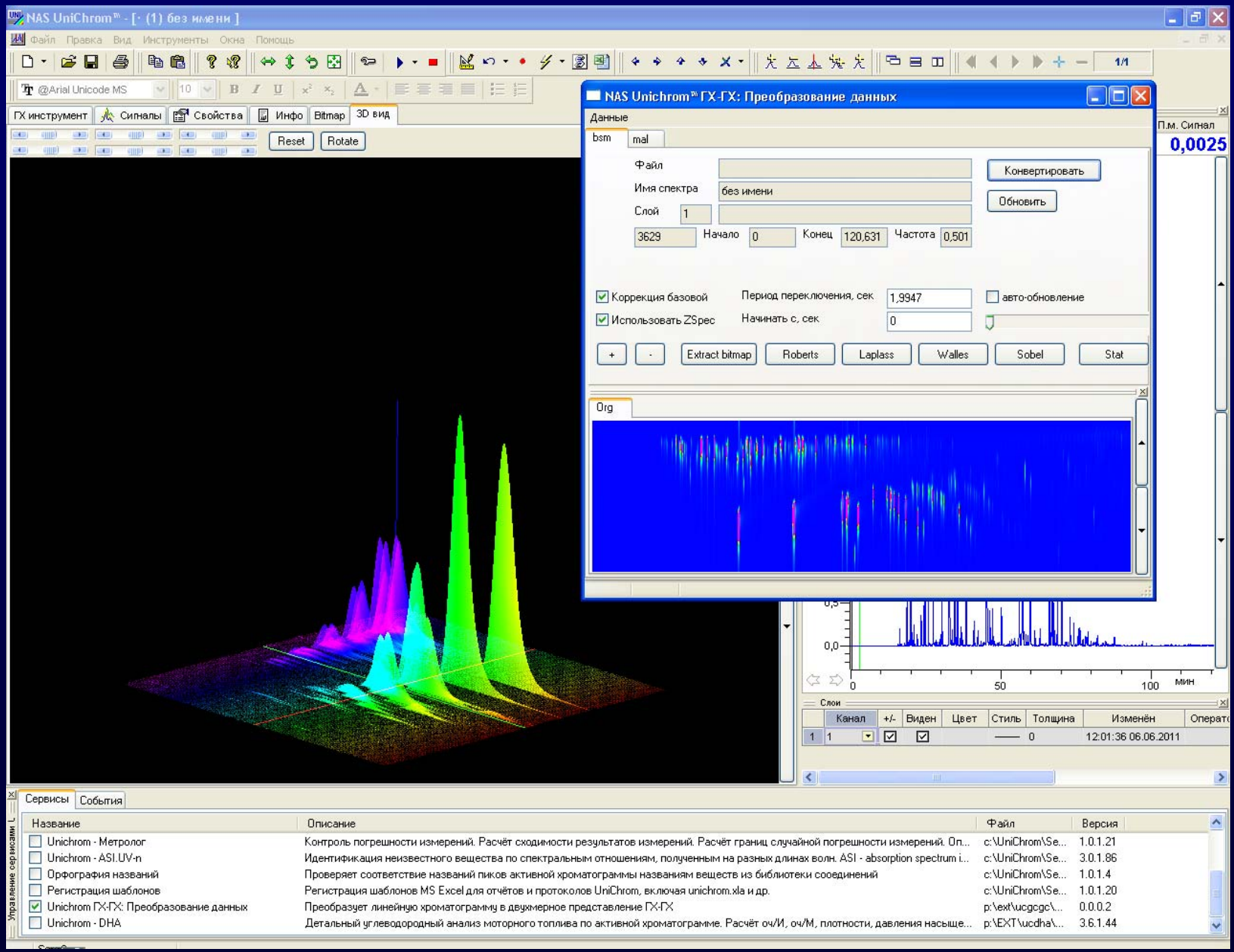
The usual chromatogram of gasoline fraction is presented in blue color. The chromatogram measured in GC x GC mode is red.



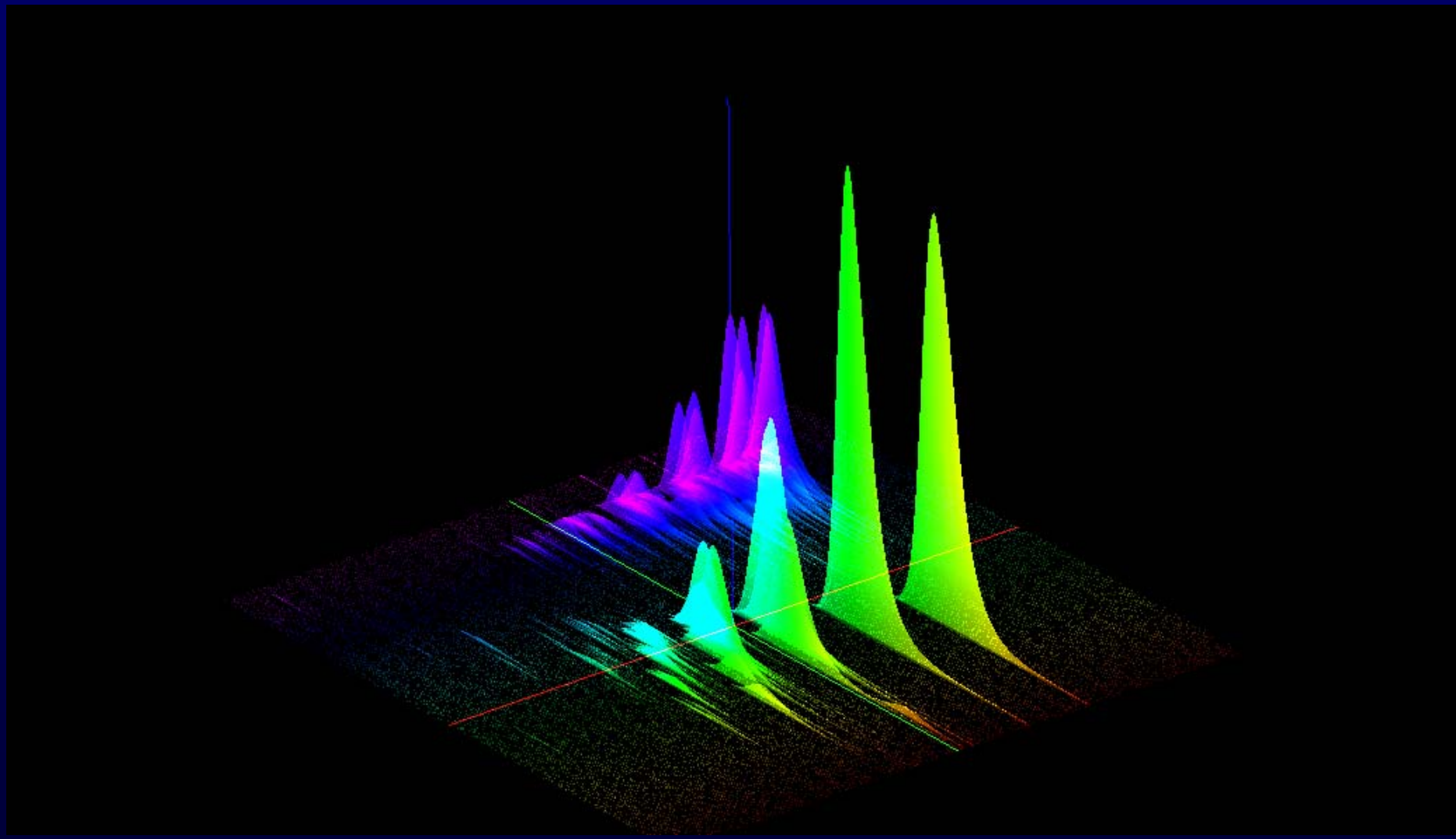
GC x GC improves peak resolution.



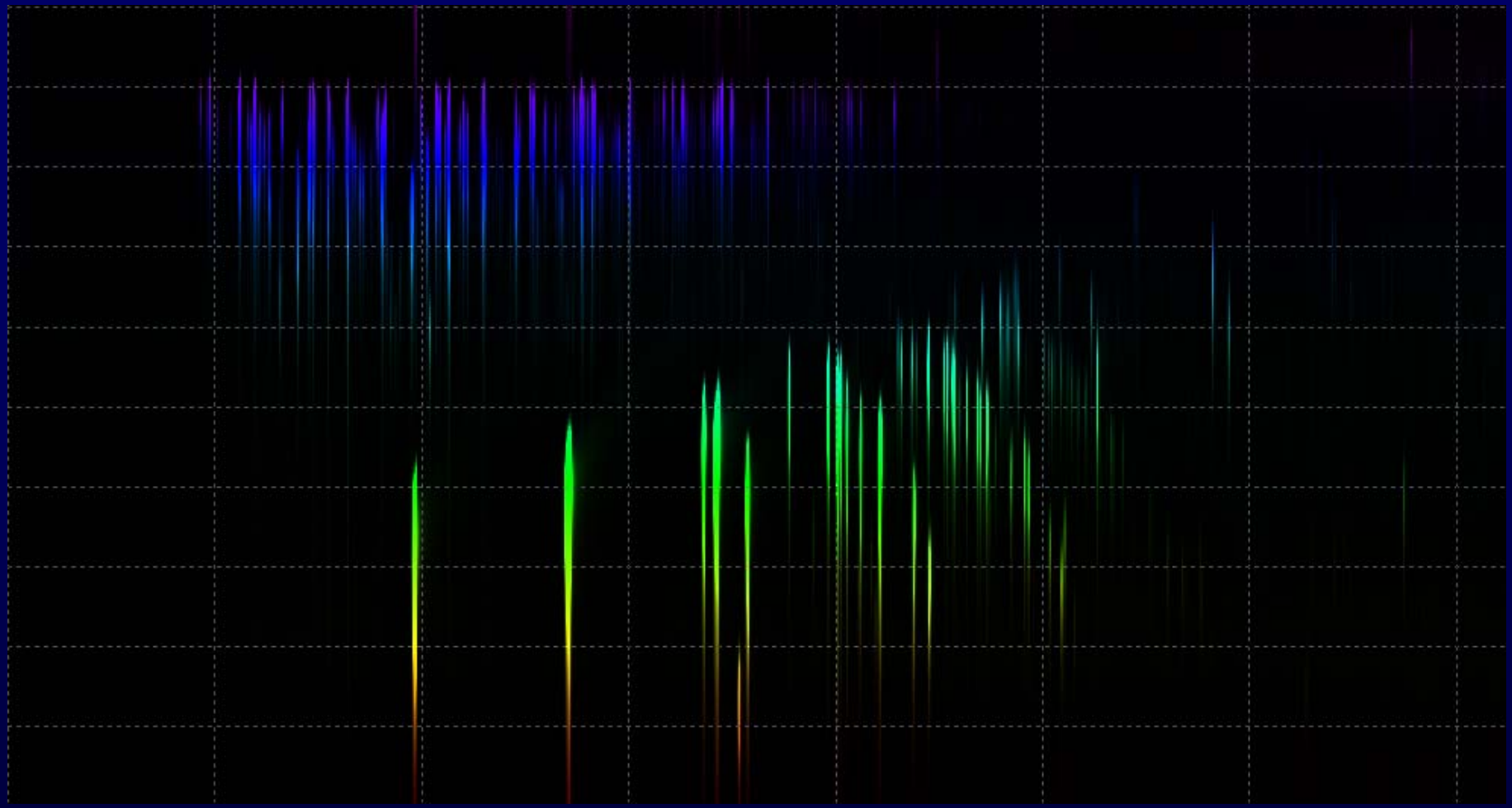
GC x GC increases sensitivity of peak detection.



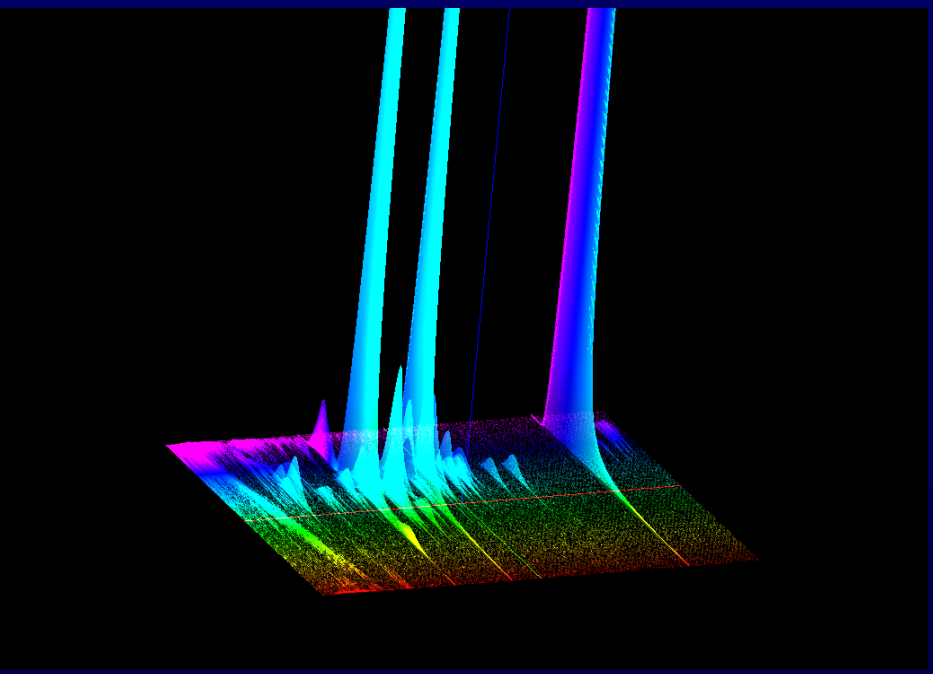
GC x GC chromatogram of automobile gasoline. 3D presentation.



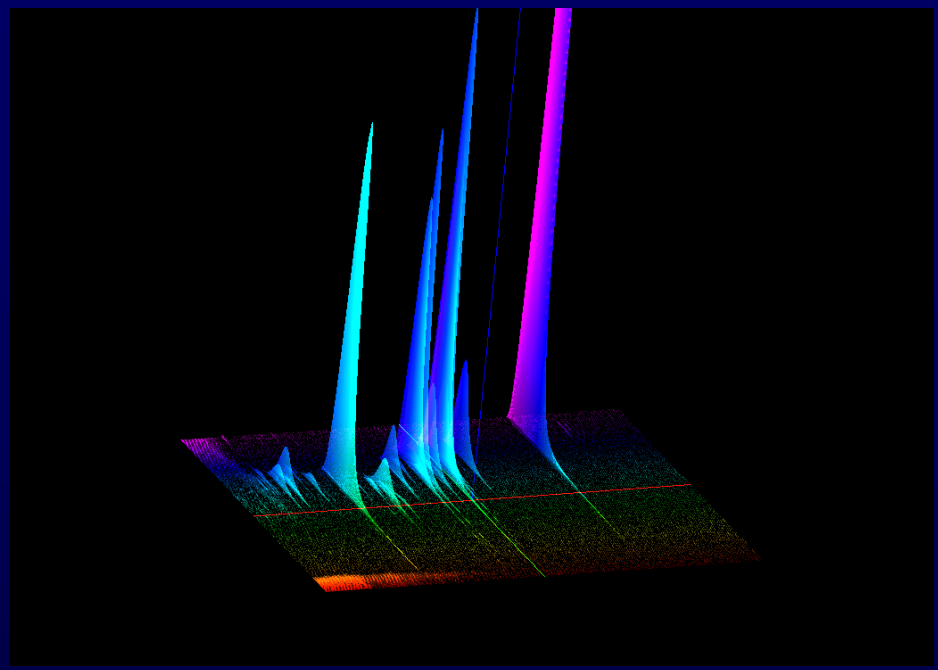
GC x GC chromatogram of automobile gasoline. 3D presentation.



GC x GC chromatogram of automobile gasoline. Plan form view.



Lavender extract



Balsam fir