

GAS CHROMATOGRAPHY - MASS SPECTROMETRY

AGILENT TECHNOLOGIES 7890A – 5975C & 7890B - 7010

System for gas chromatography with mass spectrometry represents hyphenation of particularly efficient separation method with particularly efficient spectral method suitable for sensitive detection and reliable identification of target compounds. Application of gaseous mobile phase reduces usability to volatile and semivolatile compounds and brings an advantage of high separation efficiency and robust connection with mass spectrometer using EI ion source. Additional advantages consist in possibilities of direct comparison of measured mass spectra with standard spectral libraries, fast identification of eluted compounds and low concentration limits for detection and quantification of analytes in complicated mixtures.

ACQUIRED INFORMATION

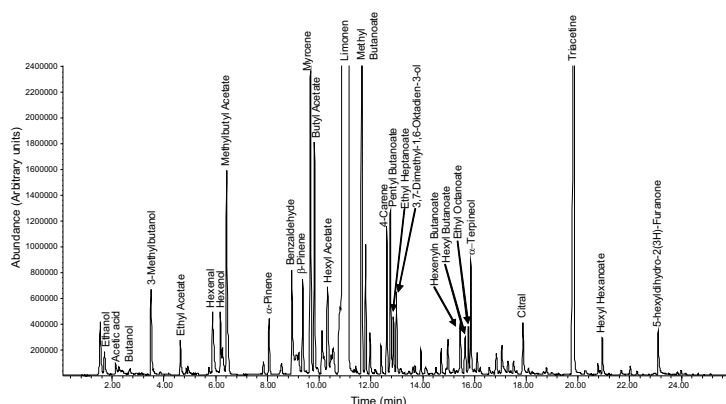
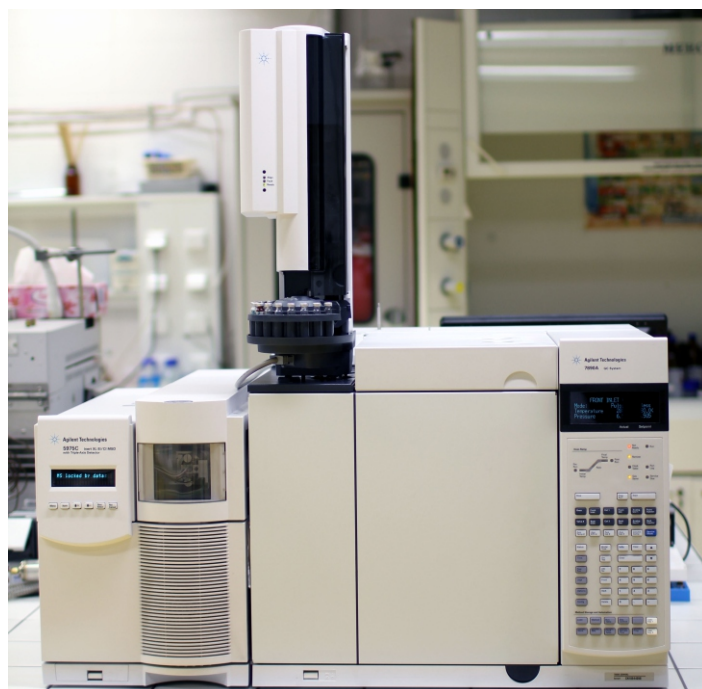
- > Accurate retention characteristics in chromatographic systems gas – liquid and gas – solid
- > Mass spectra of eluted components
- > Possibility of comparison with spectral libraries
- > Fast identification of volatile and semivolatile compounds
- > Sensitive determination of volatile and semivolatile compounds in various matrixes

SAMPLE TYPES

- > Mixtures of volatile and semivolatile compounds
- > Extracts of solid samples
- > Environmental and biological samples
- > Food and technological samples
- > Pharmaceutical analyzes

MODES, CONDITIONS AND PRECISION

- > Full electronic pressure and flow control
- > Programmable column temperature up to 450°C
- > Autosampler for liquid samples
- > Mass spectrometer with single (5975C) and triple (7010) quadrupole analyzer
- > Electron impact ionization
- > Possibility of chemical ionization (5975C)
- > Mass range 10 – 1050 m/z



Analysis of volatile compounds isolated from food sample

DETAILED INFORMATION ON REQUEST



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