## Agilent 7890A Gas Chromatograph

Manufacturer: Agilent Model: Agilent 7890A

## **Description:**

A gas chromatograph (GC) is an analytical instrument that measures the content of various components in a sample. The analysis performed by a gas chromatograph is called gas chromatography. Principle of gas chromatography: The sample solution injected into the instrument enters a gas stream which transports the sample into a separation tube known as the "column." (Helium or nitrogen is used as the so-called carrier gas.) The various components are separated inside the column. The detector measures the quantity of the components that exit the column. To measure a sample with an unknown concentration, a standard sample with known concentration is injected into the instrument. The standard sample peak retention time (appearance time) and area are compared to the test sample to calculate the concentration.

Agilent's 7890A GC gives you everything you need to take your lab to the next level of GC and GC/MS performance, including advanced separation capabilities, powerful new productivity enhancements and real-time self-monitoring instrument intelligence. Faster oven cool-down and backflushing let you get more done in less time, at a lower cost per sample. 5th-generation Electronic Pneumatics Control (EPC) and digital electronics set a new benchmark for pressure setpoint and retention time locking precision (0.001 psi) and help make the 7890A our most dependable GC ever.

## **Features**

- Multimode inlet (MMI) includes spit/splitless, temperature ramping and large volume injection capabilities.
- Convenient new Turn-Top design is built into each split/splitless (SSL) and Multimode inlet, allowing you to change liners in less than 30 seconds—without special tools or training
- Breakthrough Capillary Flow Technology enables leak-free in-oven connections, enhances productivity and data integrity via backflushing and offers versatile, robust solutions for complex GC analyses.
- Low Thermal Mass (LTM) technology provides direct rapid heating and cooling of capillary columns for extremely fast analytical cycle times and higher productivity
- Blos NPD available for more stable operation and longer lifetime

- Agilent 7693 Series Automatic Liquid Sampler offers for the fastest injection times of any GC autosampler, plus dual simultaneous injection, 150-vial capacity and enhanced sample preparation capabilities
- Powerful, chromatographer-friendly GC software simplifies methods setup and system operation, and minimizes training time. Other GC software packages including Retention Time Locking (RTL) and Lab Advisor can further boost chromatographic capabilities.
- Built upon proven 6890 inlets, detectors and GC oven, you can transfer methods to the 7890A GC with complete confidence
- Agilent offers a complete selection of gas chromatography accessories that let you configure the exact system to meet your lab's needs

Operation procedures and instruction manual can be obtained from person in charge.

