

PYROLYSIS-GAS CHROMATOGRAPHY

I. Instrument Name: JHP-22 Curie Point Pyrolyzer with Hewlett Packard 5890 Series II Gas Chromatograph

II. Suggested Uses:

Pyrolysis-GC is a useful technique for comparing polymers and other organics when the samples are run under the same conditions.

III. Operating Procedures

A. Start-up procedures

1. Open the detector gas valves completely and then close 1/4 turn.
2. Ignite the flame by depressing the ignitor button.
3. Turn on the pyrolyzer and allow to warm up for at least thirty minutes.

B. Collection and storage of data (see attached)

C. Shut-down procedures

1. Allow the oven to cool to approximately 80°C.
2. Completely close the detector gas valves.
3. **DO NOT TURN THE GC OFF.**
4. Turn off the pyrolyzer.

IV. Safety concerns

A. Safety glasses will be worn when flame cleaning the sample tubes and all other safety precautions are to be followed for using an open flame in the laboratory.

B. The transfer tube that connects the pyrolyzer to the GC is hot and should be avoided.

V. Other information

The pyrolyzer may be left on overnight if it is to be used the next day. If the pyrolyzer is turned off, allow at least a 30-minute warm-up before using.