Figure (3.39): IR-Spectra for para-Benzoquinone ($6x10^{-5}M$) at 25C°. using CH_2Cl_2 as a solvent.

Figure (3.40): IR-Spectra for the organic products extracted by CH_2Cl_2, which were resulted from the reaction of para-Benzoquinone ($6x10^{-5}$M) with H_2O_2 (0.35M) at 25C°. (Reaction's time = 24 hrs.)

Figure (3.41): IR-Spectra for the organic products extracted by CH_2CL_2 which were resulted from the reaction of para-Benzoquinone ($6x10^{-5}M$) with HWPA($1.25X10^{-3}M$) to activate H_2O_2(0.35M) at25C°. (Reaction's time = 24 hrs).

Figure (3.42): IR-Spectra for the organic products extracted by CH_2Cl_2, which were resulted from the reaction of phenol ($6x10^{-3}M$) with HWPA($1.25X10^{-3}M$) to activate H_2O_2(0.35M) at 25C°. (Reaction's time =7 days).

Figure (3.43): (a) GC-Mass, spectra for phenol ($6x10^{-3}M$). using CH_2CL_2 as a solvent.
(b) GC-Mass spectra for para-Benzoquinone($6x10^{-5}M$). Using CH_2Cl_2 as a solvent.

(c) GC-Mass spectra for the orgamic products extracted by CH_2Cl_2, which were resulted from the reaction of HWPA ($1.25x10^{-3}$M) with phenol ($6x10^{-3}$M) to activate H_2O_2 (0.35M).

Figure (3.44): GC-Mass spectra for a true sample of wastewater (10 ml extracted by CH_2CL_2)

Figure (3.45): GC-Mass spectra for the organic products extracted by CH_2Cl_2, which were resulted the reaction of HWPA ($1.25x10^{-3}$M) with true sample of wastewater (6ml) to activate H_2O_2 (0.5M) (Reaction's time = 7 days).

Figure (3.46): GC-Mass spectra for the organic products extracted by CH_2Cl_2, which were esulted from the reaction of HWPA ($1.25x10^{-3}$M) with true sample of wastewater (6ml) to activate H_2O_2 (0.5M) (Reaction's time = 14 days).