

Figure 10. Experimental instrument for the MW/UV catalytic oxidation of the wastewater mixture. Four microwave electrodeless lamps, which are fixed in the middle of the microwave chamber, produce UV light under microwave radiation. In the upper right corner of the instrument, there is an auto digital display power-controlling unit, which is used to automatically control power, time and temperature of the reaction.



Figure 11. The four microwave electrode-less lamps used in the experiments. The lamps were made of quartz and filled with different content of mercury and argon.