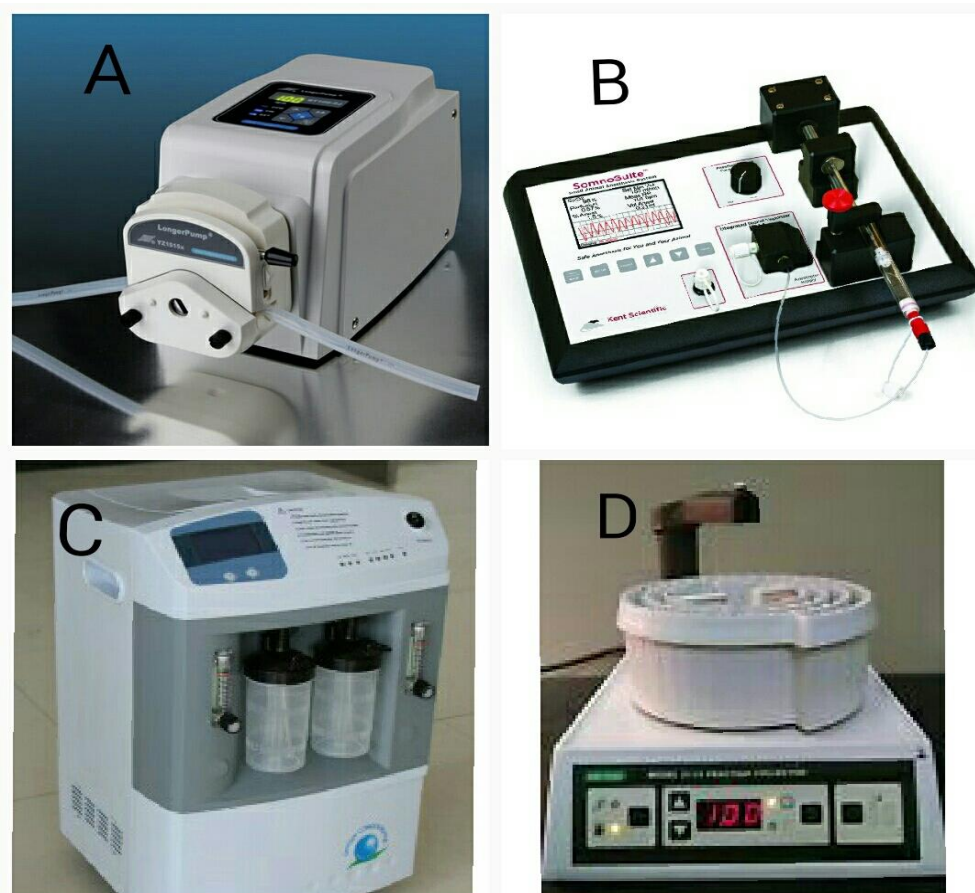


Company, China) was used to oxygenate Krebs buffer with carbogen gas (95% O<sub>2</sub> + 5% CO<sub>2</sub>) and provide compressed gas to anesthesia instrument. Anesthesia process for rats was carried out using a small animal anesthesia system (SomnoSuite, Kent Scientific Corporation, Torrington-CT, USA). The freshly prepared Krebs buffer was perfused into the liver using low flow rate peristaltic pump (Model number BT100-2J, Langer Instruments Corporation, USA). The outflow perfusate was collected by using fraction collector (Model number 2110, Bio Rad-Inc, California, USA). The surgery was performed using mouse surgical kit. Silicon tubes (part number: 2.4\*0.66 and #16, Langer Instruments Corporation, USA) and connectors (Econo pump fitting kit, Bio Rad-Inc, California, USA) were used in connecting the apparatus.



**(Figure 2.1): Some of *in situ* perfusion instruments, (A): Low flow rate peristaltic pump, (B): SomnoSuite™ Small Animal Anesthesia System, (C): Oxy-life oxygen concentrator, (D): Bio Rad 2110 Fraction Collector.**