

## SOP of ICPOES for daily use

### How to start the instrument

- Open Ar cylinder gas line (check the Ar cylinder pressure, if the cylinder pressure below 10 kg/cm<sup>2</sup>, change the cylinder).
- Open the Ar gas line for ICPOES, the pressure will be around 7-8 kg/cm<sup>2</sup> (after the moisture trapper).
- Switch ON the exhaust hood.
- Switch ON MCB power for ICPOES, followed by Switch ON the instrument.
- Put ON the computer, followed by open the software (ICP ANALYZER PRO).
- Make all connections ready (sample inlet, drain outlet, nebulizer, spray chamber etc).
- Click ON "instrument access and information" within software.
- Click ON "system information" (all the system information must be OK)
- Click ON "solid state generator" within software.
- Click ON "flush ON" and wait for 300 second.
- Click ON "start plasma" and wait for 10-15 min to stabilize the plasma.
- Click ON "Start pump".
- Put the sample inlet line to the DI water.
- After plasma stabilization start the analysis.

### **How to OFF the instrument**

First clean the nebulizer and spray chamber (run, 10% HNO<sub>3</sub> solution for 15min, followed by run DI water for 15min).

Drain out all the solutions from the spray chamber.

Stop the pump.

Stop the plasma.

Plug out the peristaltic tubing.

Close the software along with computer.

Wait for 5 min before switch-off the exhaust hood.

Switch OFF the instrument (ICPOES).

Switch OFF MCB power for ICPOES.

Close the Ar gas line for ICPOES(after the moisture trapper).

Close the Ar cylinder.