

SOP of ICPAES 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/cm², change the cylinder).
- Open the Ar gas line for ICPAES, the pressure will be around 7-8 kg/cm² (after the moisture trapper).
- Switch ON the exhaust hood.
- Switch ON MCB power for ICPAES, followed by Switch ON the instrument.
- Put ON the computer, followed by open the software (Spectro Smart View).
- 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% HNO₃ 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 (ICPAES).

Switch OFF MCB power for ICPAES.

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

Close the Ar cylinder.