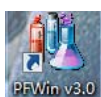
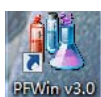


# AF420 Quick operation Guide

## Preparation

1. Start PC
2. Add carrier liquid, reducer and pure water into reagent bottles assembly respectively. Add carrier liquid into auto sampler carrier bottle.
3. Switch on the Argon Cylinder regulator, adjust output pressure to 0.25-0.3MPa.
4. Install element lamp, Power on auto-sampler, and then main unit, double



click AFWin software icon , enter into the Login interface, input “User name” and “Password”, click “OK”, select self-check items, after initialization, enter into main interface automatically.

## Operation


1. **Instrument settings:** Select element lamp, set [negative voltage], [lamp current], [carrier gas] and [sheathing gas].
2. **Atomizer temperature:** Set 200C, Click [Ignite], [Heat on]. Click [Next] or [Sampling and measure settings].

***Note:** When measuring Mercury with cold vapor, do not click ignite. Set temperature between 100C and 200C*

3. **Sampling and measure settings:** Set [Measurement parameters], [Repeat times] and [Furnace Height], click [Next] or [Standard concentration].
4. **Standard concentration:** Select standard sample rack no. and type. Carrier liquid blank position is 0 [Carrier liquid slot], select tube position of standard sample, modify the tube position by right-click, input concentration of each standard sample. If you choose auto-dilution, set stock solution position and concentration, then input dilution concentration of each point. Click [Next] or [Sample settings].
5. **Sample settings:** Click [Sample blank], input sample blank number, select

rack No., type and position, click [Apply]. In the sample rack area, select sample rack, a dialog box will pop up, input sample number, click [More] to set other parameters and click [Apply]. Click [Blank correction] to select sample blank, or select sample blank after measuring to recalculate and correct blank.



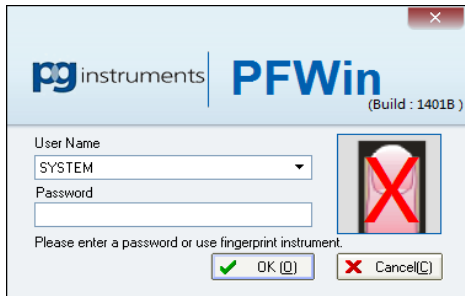
6. Click **Sample measurement** to show measurement interface. Click , after reference optical adjustment, instrument will start measuring carrier liquid blank, standard blank, calibration curve, sample blank, samples in turn. Click [Save] to save data after finishing analysis.
7. **Standard curve:** Check calibration curve. To check result and print data in **Test result** interface.

## Notice

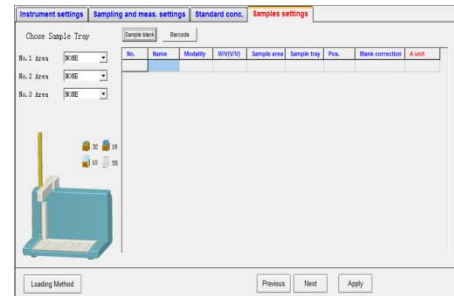
1. **Instrument washing:** when closing the software, a pop up will remind you to wash instrument before power off, please select [Yes] to perform washing.
2. After washing, switch off argon, power off instrument and auto-sampler, then power off computer.
3. This quick operation manual provides simple operations for the user, there are many other functions with the software, please refer to the main operation manual for further information.

# Diagram

## 1. Login



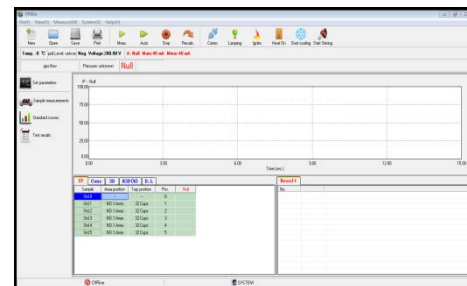
## 5. Sample settings



## 2. Instrument Settings



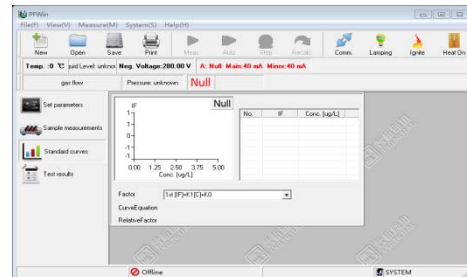
## 6. Sample measurement



## 3. Auto-Sampler and measurement



## 7. Calibration curve interface



## 4. Standard concentration

No.	The sample area	Sample tray	Std position	Multi (µg/L)
0	-	-	0	0.0000
1	10.1 Area	32 Cap	1	1.0000
2	10.1 Area	32 Cap	2	2.0000
3	10.1 Area	32 Cap	3	4.0000
4	10.1 Area	32 Cap	4	8.0000
5	10.1 Area	32 Cap	5	16.0000

## 8. Test result

No.	Name	Conc. (µg/L)
Std 0	Blank	0.0000
Std 1	10.000	1.0000
Std 2	20.000	2.0000
Std 3	40.000	4.0000
Std 4	80.000	8.0000
Std 5	160.000	16.0000