

Instructions for FluoroMax-2

- Sign in on user log (taped to the instrument).
- **Warning!** Do not turn on lamp unless all electronics are powered off first!

To turn on the instrument:

1. Turn on lamp.
2. Turn on power.
3. Turn on the power to the temperature bath (side switch). Press the on button on the front panel (the bath should come to life after a few seconds). Make sure the RS232 light is on. (If not, press RS232 button (light blinks) and quickly press enter.)
4. Turn on computer. Log in. Create your “folder of the day”, where data will be saved.
5. Wait until instrument has initialized. (~ 3 min., the floppy drive light on the instrument will go out.)
6. Double click on the Fluoromax-2 icon on the desktop (“Isamain”). Choose the correct instrument layout (in most cases Fluoromax with T-bath).
7. Wait for the computer to connect with the instrument and bath.
8. When asked “Bring hardware to last position?” click “no”.
9. To open Datamax, click on the very left button on the instrument control center (Run Experiment).
Now you should be ready to go and select your experiment type, etc.

Parameters for a Typical 2-Aminopurine Experiment:

sample concentration:	100nM
sample volume:	150 - 200µl in 3mm square cuvette
experiment type:	emission aquisition
experiment file:	c:\data\manuela\experiment\2apem.exp
excitation wavelength:	310nm ($\lambda_{\max}=303\text{nm}$)
emission wavelength scan:	330 – 450nm (em. max. $\approx 371\text{nm}$)
increment:	1nm
integration time:	0.1sec
slits (bandpass):	5nm

Experiment:

1. Take cuvette out of nitric acid bath with little glass rod and drop it into ddH₂O beaker.
2. Rinse cuvette about 10 times with ddH₂O, and about 3 times with MeOH or EtOH. Dry outside carefully with paper towel and inside with filtered air. Make sure surfaces are clean.
3. Choose experiment file (or enter parameters into fields), and name the data file.
4. Take buffer blank scan (Signal "S", no Blank).
5. Change Signal to "Sc", and enter buffer blank file into Blank. Take another scan of buffer, signal should be zero (± 1000 or so).
6. Add sample, mix with plastic transfer pipets or glass rod, take scan. Experiments will be saved automatically.
7. When done, rinse cuvette several times with ddH₂O, and put it back into nitric acid bath.

To **turn off** the instrument:

1. Close all programs.
2. Shut down the computer (turns itself off automatically).
3. Turn off the water bath (side switch).
4. Turn off power.
5. Turn off lamp.