Agilent 1100 PLC using Chemstation Software

1. Turn on all the modules of the Agilent 1100. Always turn modules on before opening software.

2. Turn on **Computer**. No password is needed

3. Go under **Start, All Programs, Agilent Chemstation, Instrument 1 online**. The following Method and Run Control window should appear.

4. Turn on **Pump** by clicking on Grey square box under instrument icon.
5. A new box will appear asking Turn on all pumps. Click Yes.

![Image](image1.png)

6. Turn on Column Thermostat by clicking on instrument control which is grey square arrow.

![Image](image2.png)

7. A new window will appear asking to Turn on the Thermostat. Click Yes.

![Image](image3.png)

8. If you already have a method, Under Method, choose Load Method to choose your method.

![Image](image4.png)

9. If you need to create a method, Under Method, choose Edit Entire Method to create a new method.
7. Edit Method window appears where you can check off parts of method to be changed. Hit OK.

![Edit Method window](image)

8. Fill in **Method Information** and hit OK.

![Method Information window](image)

9. Set up **Pump Parameters** Window. Fill in **Flow rate, Solvents, Create Gradient or run isocratic**.
   
   You have up to four different solvents to use.

   a. Use Insert or Append line to create gradient. Hit **OK**.
b. Under Display, you can change from Timetable to Solvents to see your gradient.
10. Set up **Injection Parameters**. There is a 100µl sample loop. You can inject from 0.1 to 100µl. There is a needle wash vial in holder 91. Be sure there is organic in the vial. Hit **OK**.

![Set up Injector: HPLC](image)

11. **DAD Signals**: You can choose up to 5 different wavelengths. Hit **OK**. **BW** is for bandwidth.

![DAD Signals: HPLC](image)
12. **Column Thermostat** parameters. Can program from ambient to 80°C or choose Not Controlled. Hit **OK**.

![Column Thermostat Method: HPLC](image1.png)

13. **Signal Details Window**: Add to Method all your different wavelengths. Hit **OK**.

![Signal Details: HPLC](image2.png)
14. **Edit Integration Events.** Hit OK.

![Edit Integration Events](image1.png)

16. **Set Specification for Report.** Hit OK.

![Set Specification for Report](image2.png)
17. The **Instrument Data Curves** can be overlaid with your spectrum, like percent composition. Check off what you want to see in your spectrum. Hit **OK**.
18. Run Time Checklist. Hit OK.

![Run Time Checklist: Instrument 1]

19. Under **Method**, Choose **Save Method As**. Be sure to save under Methods [c:/chem32/1/methods]

![Save Method as: Instrument 1]

20. Under **View**, choose **Online Signals 1**. Click on Change to add or remove Online signals.
21. Under **Sequence**, Choose **Sequence Table**.
a. Under Vial, enter the location of the vial. (You don’t need to type vial)
b. Under Sample, give name and can add description of sample in Sample info just above.
c. Under Method Name, choose name of method.
d. Under Injection/location place a 1 for 1 injection. If you want multiple injections of same sample, you can add 2, 3, 4, etc.
e. Under Sample type, you can choose Sample, calibration or control.
f. Use Insert or Append Line to add more injections.

22. Under Sequence, choose Save Sequence Template as. Save as your name and the date
23. Open sequence table again. Hit Run Sequence when ready.

24. You can always press to STOP button to stop the run at any time.

25. A report will automatically be generated. Hit Print and save report as pdf.

26. Shut down Chemstation, then all the modules.