**Astra V Template Quick Start Guide**

**Astra V Startup**

* Open Astra V (5.3 and greater), navigate to the **System** menu and select **Instruments**
* Select **Add** (to add your computer)
* If the Bonjour option is running, select **SEARCH** and a list of instrument will be generated
* If Bonjour is not running, add the computer name (same as domain), **DO NOT CHANGE THE DOMAIN**. Then select **Add** for each instrument, add the instrument IP address and chose the **Workgroup** domain (for instruments only)
* To eliminate any instruments, highlight the selection and navigate to **Remove**
* Close Astra V and close the Wyatt Communications Server (located in the lower right hand tool bar)
* Restart Astra V and check that the instruments are now listed (Navigate to **System** menu and select **Instruments**)

**Establishing a New Template**

* Navigate to **File** - **New** - **Experiment From Template** (Ctrl+Alt+T)
* Select the files, **System Template** - **Light Scattering** - (select **QELS** if applicable) - **Online**. Then click **Create**
* Expand the “Configuration” section by clicking on the +, and examine the instrument list

**Changing Instrument Configuration** (if necessary, e.g. to add QELS or rEX detector, etc.)

* Highlight **Configuration**, right click and select **Replace Configuration**.
* Select **Example Configurations** file, **Light Scattering** file, select applicable instrument and select additional detectors
* The configuration file should now contain the appropriate instrument listing

**Additional Template Settings** (these need to be set in order to run a template)

* Expand **Configuration** section by clicking the +
* Double Click on each instrument name to open the **Profile.** Expand by clicking + and set the appropriate parameters.
* After setting the parameters, select OK or APPLY:

Generic Pump - set flow rate (for peak alignment) …open **Solvent** settings by clicking the + next to Generic Pump

Solvent- set appropriate parameters or import system solvent by clicking on (…)

Injector - set correct injection volume (mL)…open **Sample** settings by clicking the + next to Injector

Sample- Set parameters for sample (DNDC for protein is 0.185)

UV Detector - If applicable, set proper **Wavelength**, **Pathlength**, **AU/V** (most UV detectors are 1)

DAWN - Select **Physical Instrument**, and set proper **Calibration Constant** (located in Wyatt COP)

QELS - Select **Physical Instrument** (√ solvent parameters to set appropriate solvent viscosity)

RI detector - Select **Physical Instrument** (for rEX) and set **Wavelength** for a Generic RI

* Expand **Procedures** section by clicking the +
* Double Click **Basic Collection** and set the appropriate parameters:

Trigger on Auto Inject - Make sure that this box is checked when using an Autosampler with switch closure

Duration - Chose the appropriate run time. (Be sure to match each run time if using an HPLC Sample Set)

Collection Interval - For most MALS runs, select a 1 second interval

QELS Interval - If applicable, select a 2 second collection interval for most HPLC-MALS runs

* To save the Template settings, navigate to **Experiment**, right click and select **Save as Template  
  (**Be sure to name Template accordingly ie. “Protein Run, UV-LS-RI, 0.5 mlmin, 100ul inj”)
* It is possible to overwrite existing custom templates in Astra V (version 5.3 and up)
* When saving, you can also use the check box to save the template as a default template (version 5.3.4.10 and up)
* To delete templates, navigate to **System** pull down menu, **Database Administration** - **Delete** and navigate to template

**Running a Template**

* Navigate to **File** - **New** - **Experiment From Template** (Ctrl+Alt+T)
* Select appropriate template and double click to open
* Be sure to check all parameters in the **Configuration** section and the **Basic Collection** values in **Procedures**
* Navigate to the **Experiment** pull down menu, and select **Run** (Ctrl+Shift+R) and follow prompts
  + When manually injecting samples, inject the sample and click OK
  + When using the “Trigger on Autoinject” feature, click OK when prompted to inject sample, Astra V will start automatically when prompted by the instrument switch closure