

## Operating Instructions JetFirst RTA

Turn on the required gases

Push the *green* button at the RTA to power the system

Click on *JetFirst* icon in the computer to open the software

Click on *Parameters* at the top left of the window to display various parameters

Click on *PID Temperature Controller* at the top left of the window

Click on *Browse* button and select *Susceptor 4in\_TC\_300-900* file

Click on *Apply all "yellow" setpoints* button

Click *Exit* on top of the window to return to the main screen

Click *Recipes* button if you want to edit or make a new recipe

- To create new recipe, click on *New* button and enter recipe file information and parameters such as filename, pyrometer calibration table (Suscep4inS), operator name and comment if any.
- Click on *Edit* to add steps to new recipe or to modify an existing recipe
- At the last step of a new recipe, click on *Save recipe*
- **Use either thermocouple or pyrometer in the recipe – don't use both**
- To copy a recipe, open a recipe and in the Recipe Heading dialog, change the recipe filename and click *Edit*. In the editing interface, click *Save recipe* to create a new file

Click *Processing* button to run a recipe

- Select the recipe that you want to run and click *Download*
- If you want to use the same recipe in the next run without modifying it, you don't need to *Download* again
- Select the correct susceptor (metal or III-V) and place it in the middle of the three pins in the chamber. Make sure the thermocouple is touching the back of the susceptor for running a process using thermocouple. Load the sample in the susceptor and close the chamber
- Click *Start processing* to run the process
- A new process monitoring window will open and you can see the parameter values
- At the end of the process, the system will be cooled down for 4 minutes and you will see process saving window
- Save the process historical by entering filename, operator and comments if any
- You can see the temperature of the sample in the Process parameters window in the main screen. Unload when safe

To shutdown the system, exit the software, push the red button at the RTA and close the opened gases

**Don't use the thermocouple more than 900°C – lower it down for use with high temperature**

**Pyrometer can only be used above 400°C**