TF-1400 FURNACE ACCESS POLICY

ACCESS TO THIS FURNACE BY AUTHORIZED USERS ONLY
DO NOT SHARE YOUR LOGIN CREDENTIALS



OPERATE THIS FURNACE ONLY <u>AFTER</u> YOU HAVE MADE A RESERVATION ON THE SCHEDULING CALENDAR

IF YOU DO NOT HAVE A LOGIN ID OR ACCESS TO THE RESERVATION CALENDAR, PLEASE CONTACT DR. YUNG C. SHIN FOR ACCESS TO THIS EQUIPMENT

WHILE USING THE EQUIPMENT, DO NOT LOG OUT OF YOUR ACCOUNT

MONITOR THE OPERATION OF THE FURNACE PERIODICALLY WHILE YOU ARE USING IT (IF FURNACE CYCLE > 6HRS, CHECK ATLEAST 2 TIMES / DAY)

ONCE YOUR USE IS COMPLETE, RESTORE FURNACE TO ITS ORIGINAL STATE

NON-COMPLIANCE WITH THIS ACCESS POLICY WILL RESULT IN YOUR ACCESS PRIVILEGE BEING SUSPENDED OR REVOKED

STANDARD OPERATING PROCEDURE

TF-1400 VACUUM FURNACE

- 1. Turn on the furnace mains switch
- 2. Turn the vacuum valve to open position.
- 3. From the open pipe end, insert your sample carefully (must be placed in a crucible), to approximately the center of the furnace tube. If you have a large/heavy sample, be very careful not to hit the furnace tube wall with your sample. Use the long metal rod to gently slide the crucible into the furnace tube.
- 4. Once the sample is in place, insert the two ceramic blocks and then close the furnace flange securely.
- 5. To create vacuum, first close the gas inlet valve, and then turn on the vacuum pump. Monitor the vacuum being generated on the gauge, and turn off the pump once sufficient vacuum (per your requirement) is generated.
- 6. Close the vacuum valve.
- 7. Log in to the Furnace control computer using your login ID and password.
- 8. Program the heating and cooling cycle on Shimaden Lite Software.
- 9. Confirm your programed cycle, and then initiate the furnace.
- 10. Keep the computer locked with your credentials while your heat treatment is going on.
- 11. Once the cycle is complete, allow the furnace to cool down to room temperature. Confirm this temperature on the computer. Turn off the cycle, and log out of the computer.
- 12. Remove your sample by first releasing the vacuum at a very slow rate (open the gas inlet valve very slowly) and then opening the flange after pressure inside the tube is at atmospheric pressure.