**Equipment Information Sheet** 

## **Carbon Nanotube/Graphene Furnace**

Manager: Phil Infante 607-254-4926 Backup: Aaron Windsor 607-254-4831

Calls to staff phones will be automatically forwarded to their cell phones during accessible hours. At other times leave a message or send them an email.

#### SAFETY

• System uses flammable gases for cvd growth of carbon nanotubes and grapheme films. Gases will shut off automatically in event of loss of exhaust or gas detection. No action needed by users.

### **USAGE RESTRICTIONS**

- Users may change time and gas flows.
- Recipe structure and temperature changes with staff assistance only.

#### SCHEDULING/SIGN-UP RESTRICTIONS

Minimum Tool Time: 90 minutes

• 8 hour max reservation.

### MATERIALS COMPATIBILITY CATEGORY

#### **Tool Category 5: Class A and B Metals and Compounds**

Allowed	Not Allowed
Tool category 1/1E, 2, 3, and 4 materials	
Silicon Based Substrates and Films	
III/V compound Semiconductors	
Glass Substrates	
PECVD and ALD Films	
Cured organics and baked Photoresist	
CNF Class A, B, and Refractory metals	
Exposed Gold, Silver, Copper	
Alkali and Alkaline Compounds	
Organic/Biology Molecules prepared- w/salt buffers	
High Vapor Pressure Materials (Mg, Ca, Zn)*	* Some tool restrictions on high vapor pressure materials may apply
Soft organic materials	

# High Vapor Pressure Metals and Compounds are materials that have a vapor pressure above 1e-6 Torr at 400 C.

### **Additional Material Restrictions and Exceptions**

Last Updated: 08/06/2019