

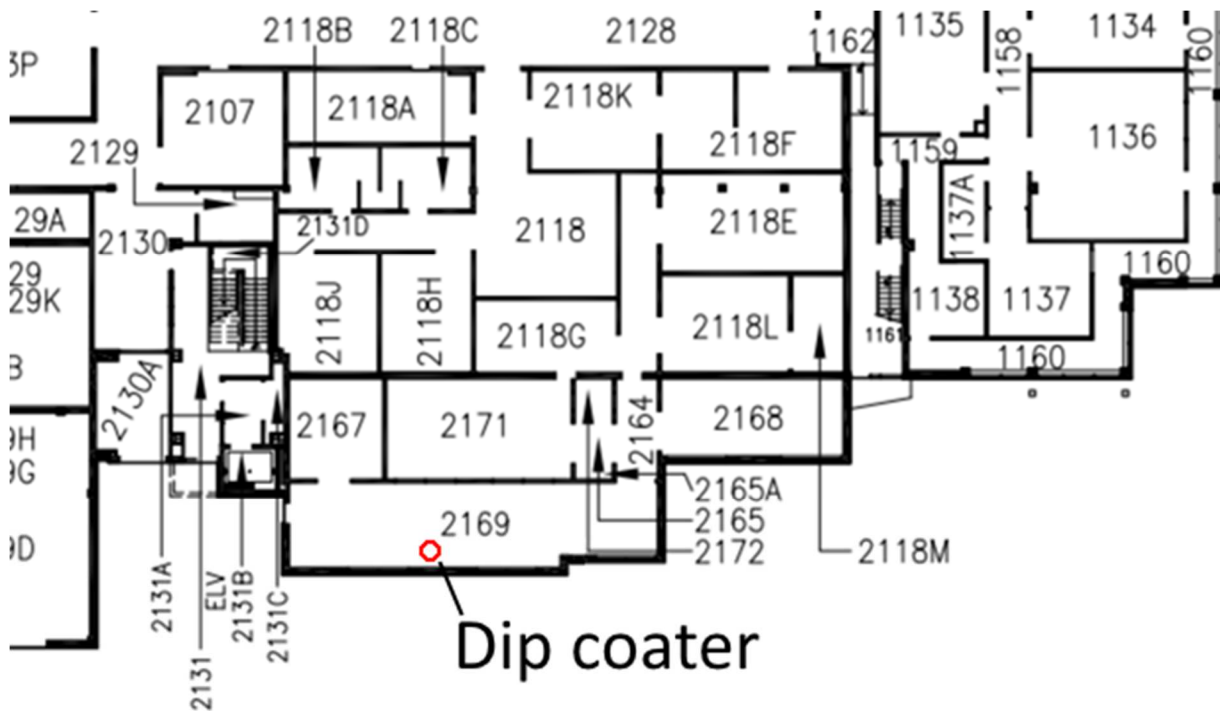
MME Standard Operating Procedure (SOP)

Name	<ul style="list-style-type: none"> • Programmable dip coater with drying oven
Description	<ul style="list-style-type: none"> • PTL-MMB01
Location	<ul style="list-style-type: none"> • E3 -2169
SOP Creation Date	<ul style="list-style-type: none"> • 2016-04-18
SOP Created By	<ul style="list-style-type: none"> • Rui He
SOP Revision Date	<ul style="list-style-type: none"> •
SOP Revised By	<ul style="list-style-type: none"> •
SOP Location	<ul style="list-style-type: none"> • E3 -2169
Manual Location	<ul style="list-style-type: none"> • E3 -2169
Equipment Owner	<ul style="list-style-type: none"> • Dr. Norman Zhou
Authorized Trainers	<ul style="list-style-type: none"> • Rui He, Robert Liang
Support Technicians	<ul style="list-style-type: none"> • N/A



Significant Hazards	<ul style="list-style-type: none"> • No ventilation system in place for volatile solvents • High temperature (up to 200°C) – burn and scalding hazard
Administrative Controls	Instrument can be used independently at any time by a trained and authorized student or an employee
Engineering Controls	<ul style="list-style-type: none"> •
PPE Required	<ul style="list-style-type: none"> • Gloves when handling chemicals
Relevant Standards and Codes	<ul style="list-style-type: none"> • None
Relevant MSDS	<ul style="list-style-type: none"> • None
Accident Procedure	<p>Fire Use type ABC fire extinguishers on liquid chemical fires.</p> <p>Chemical spills Follow the MSDS of the chemical being used.</p> <p>Burns Treat immediately. Soak burn in cool water, apply moisturizing lotion, and protect with gauze. Be aware of any procedures relevant to the chemical you are working with in case of burn.</p> <p>Cuts from glassware Treat immediately. Apart from very minor injuries, call for first aid treatment.</p> <p>In case of emergency Ambulance – 911 Campus police – 519-888-4911 ext:22222 University safety office – ext:33587</p>
Emergency Shutdown Procedure	<ul style="list-style-type: none"> • Turn off the equipment <p>Examples of a causal situation are:</p> <ul style="list-style-type: none"> ○ fire alarm ○ medical emergency ○ building evacuation

Location of Setup



Pre-start Checklist

- Make sure nothing will obstruct the path of the object being lifted/dipped, and that the object will not cause open beakers to spill.
- Be wary of overflow of beakers when dipping large objects.
- Make sure the travel distance does not cause any objects to be pulled through the top opening that do not fit when lifting.
- Have any MSDSs and chemical handling procedures ready when using solvents and chemicals
- If necessary, have a spill kit ready
- Wear appropriate PPE

When using the oven

- Be aware of temperature when using combustible solvents
- Have appropriate PPE

Never use flammable or explosive organic solvents in this instrument.

Start-up Procedure

The dip coater and oven have different control panels. Use the switches at the control panels to turn them on.

Operating Procedure

Dip coater

1. Setup the instrument
 - [Func] adjusts the setting option (travel length or speed)
 - [+], [-], and [Cursor] adjust the value displayed (cannot be modified during operation)
 - [Mode] adjusts moving direction (up or down)

2. Press [Run]
3. [Pause] to pause; resume with [Run]. [Stop] to stop immediately.

Oven

1. The switch under [Heat] adjusts between half power (1) and full power (2) heating. Full power preferred for heating, while half power preferred for maintaining temperature.
2. Press [Set]
3. Press [Up] or [Down] to set target temperature
4. Press [Set] again to confirm setting

Shutdown Procedure

Switch off the relevant components on their respective control panels.

Clean-up

Remove all chemicals and samples from the chamber. Wipe any spills.

Lockout

Unplug, and leave a sign.

Maintenance and Repair

Contact the lab manager.