

# First-Week Tasks

## Lab bench Check-in

(name tags at your assigned lab bench in 491 Kolthoff)

Tuesday, September 5, 1:00–2:00 pm (Katharine)

Wednesday, September 6, 9:00–10:00 am (Jingyang)

## Round 1 (Week 1) Instrument/Technique Tutorials

**1. liquid/liquid extraction**  
pouring of solvents  
syringe handling, rotary evaporators

*Rong Tang*

Tu, Sept. 5, 3:00

Tu, Sept. 5, 4:00

W, Sept. 6, 12:30

**2. FT-infrared spectroscopy (FTIR)**  
sample preparation and data collection  
laboratory safety features

*Jingyang Shi*

W, Sept. 6, 4:00

W, Sept. 6, 5:00

Th, Sept. 7, 1:00

**3. PC workstations: NMR data retrieval**  
(and NMR sample preparation)  
Reaxys/SciFinder connect

*Katharine Toll*

Tu, Sept. 5, 2:00

W, Sept. 6, 3:00

Th, Sept. 7, 2:00

**4. gas chromatography-mass**  
**spectrometry (GC/MS):**  
sample preparation and queue submission

*Katharine Toll*

Th, Sept. 7, 11:00

Th, Sept. 7, 12:30

F, Sept. 8, 5:00

**5. hazardous waste handling;**  
reagent weighing/dispensing (solids vs. liquids),  
closed reagent bottles, glass vs. paper waste

*Rong Tang*

W, Sept. 6, 4:30

Th, Sept. 7, 3:00

Th Sept. 7, 4:00

**6. thin-layer chromatography (tlc)**  
flash chromatography  
tlc staining/visualization

*Jingyang Shi*

W, Sept. 6, 1:30

Th, Sept. 7, 5:00

F, Sept. 8, 6:00

## Round 2 (Week 3) Instrument/Technique Tutorials

7. medium pressure liquid chromatography (MPLC)

8. ozonolysis apparatus and vacuum distillation equipment

9. molecular modeling software (MacroModel via Maestro)

(times to be announced, starting on ca. Friday, September 15, 2023)

## Round One Tutorial Sign-Up:

### 1. Liquid/liquid extraction, pouring of solvents, syringe handling, and rotary evaporator use

*Rong Tang*

Tuesday, Sept. 5, 3:00 – ca. 3:30    a.  
b.  
c.  
d.  
e.

Tuesday, Sept. 5, 4:00 – ca. 4:30    a.  
b.  
c.  
d.  
e.

Wed., Sept. 6, 12:30 – ca. 1:00    a.  
b.  
c.  
d.  
e.

## Round One Tutorial Sign-Up:

### 2. FT-infrared spectroscopy (FTIR) sample preparation and data collection; laboratory safety features

*Jingyang Shi*

Wed., Sept. 6, 4:00 – ca. 4:30

- a.
- b.
- c.
- d.
- e.

Wed., Sept. 6, 5:00 – ca. 5:30

- a.
- b.
- c.
- d.
- e.

Thursday, Sept. 7, 1:00 – ca. 1:30

- a.
- b.
- c.
- d.
- e.

## Round One Tutorial Sign-Up:

### 3. PC workstation: NMR data retrieval (and sample preparation); Reaxys/SciFinder connect

*Katharine Toll*

Tuesday, Sept. 5, 2:00 – ca. 2:30    a.  
b.  
c.  
d.  
e.

Wednesday, Sept. 6, 3:00 – ca. 3:30    a.  
b.  
c.  
d.  
e.

Thursday, Sept. 7, 2:00 – ca. 2:30    a.  
b.  
c.  
d.  
e.

## Round One Tutorial Sign-Up:

### 4. gas chromatography-mass-spectrometry (GC/MS); sample preparation and queue submission

*Katharine Toll*

Thursday, Sept. 7, 11:00 – ca. 11:30

- a.
- b.
- c.
- d.
- e.

Thursday, Sept. 7, 12:30 – ca. 1:00

- a.
- b.
- c.
- d.
- e.

Friday, Sept. 8, 5:00 – ca. 5:30

- a.
- b.
- c.
- d.
- e.

## Round One Tutorial Sign-Up:

**5. hazardous waste handling;  
reagent weighing/dispensing (solids vs. liquids);  
closed reagent bottles; glass vs. paper waste**

*Rong Tang*

Wed., Sept. 6, 4:30 – ca. 5:00

- a.
- b.
- c.
- d.
- e.

Thursday, Sept. 7, 3:00 – ca. 3:30

- a.
- b.
- c.
- d.
- e.

Thursday, Sept. 7, 4:00 – ca. 4:30

- a.
- b.
- c.
- d.
- e.

## Round One Tutorial Sign-Up:

### 6. thin-layer chromatography (tlc) flash chromatography, tlc staining/visualization

*Jingyang Shi*

Wednesday, Sept. 6, 1:30 – ca. 2:00

- a.
- b.
- c.
- d.
- e.

Thursday, Sept. 7, 5:00 – ca. 5:30

- a.
- b.
- c.
- d.
- e.

Friday, Sept. 8, 6:00 – ca. 6:30

- a.
- b.
- c.
- d.
- e.