

# First-Week Tasks

## Lab bench Check-in

(name tags at your assigned lab bench in 491 Kolthoff)  
(no need to sign-up; just come to one when you are available)

Tuesday, September 3, 1:00–2:00 pm (Katharine)

Wednesday, September 4, 9:30–10:30 am (Katharine)

## Round 1 (Week 1) Instrument/Technique Tutorials (~30 min each)

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

*Rong Tang*

Tu, Sept. 3<sup>rd</sup>, 3:00

Tu, Sept. 3<sup>rd</sup>, 4:00

W, Sept. 4<sup>th</sup>, 12:30

**2. FT-infrared spectroscopy (FTIR)**  
sample preparation and data collection  
laboratory safety features  
Reaxys/SciFinder connect on laptops

*Jingyang Shi*

W, Sept. 4<sup>th</sup>, 4:00

W, Sept. 4<sup>th</sup>, 5:00

Th, Sept. 5<sup>th</sup>, 1:00

**3. Workstations: NMR data retrieval**  
(and NMR sample preparation)

*Katharine Toll*

Tu, Sept. 3<sup>rd</sup>, 2:30

W, Sept. 4<sup>th</sup>, 3:00

Th, Sept. 5<sup>th</sup>, 2:00

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

*Jack Orr*

Th, Sept. 5<sup>th</sup>, 11:00

Th, Sept. 5<sup>th</sup>, 12:30

F, Sept. 6<sup>th</sup>, 5:00

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

*Rong Tang*

W, Sept. 4<sup>th</sup>, 4:30

Th, Sept. 5<sup>th</sup>, 3:00

Th Sept. 5<sup>th</sup>, 4:00

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

*Jingyang Shi*

W, Sept. 4<sup>th</sup>, 1:30

Th, Sept. 5<sup>th</sup>, 5:00

F, Sept. 6<sup>th</sup>, 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 13, 2024)