May 2020

LabChemistry_IS2_20160309_Camera1_Seg02.pdf

Setting: Organic chemistry lab. IS2 walks around and assists students in completing their laboratory assignment.

Participants: IS2 (ITA, male, unseen), S1 (student, female, unseen), S2 (student, male, unseen), S3 (student, male, unseen), U1 (UGTA, female, unseen), S4 (student, male, unseen), S5 (student, male, unseen), S6 (student, male, unseen), S7 (student, male, unseen), S8 (student, female, unseen), S9 (student, female, unseen), S10 (student, female, unseen), S11 (student, female, unseen), S12 (student, female, unseen), S13 (student, female, unseen), S14 (student, female, unseen), S15 (student, male, unseen), U2 (UGTA, male, unseen), S16 (student, female, unseen), S17 (student, male, unseen), S18 (student, female, unseen), S19 (student, female, unseen)

(0:00)
XXX ((pause))
(1:04)
XXX S1: ((inaudible))
XXX IS2: what?
XXX S1: are we doing (money)?
XXX are we doing (cades)?
XXX IS2: yeah sure
XXX S1: (what- what what)?
XXX IS2: (but not)
XXX S2: oh longer than one hour?
XXX lit
XXX IS2: ((giggles))
XXX S2: lit
(1:13)
XXX ((pause))
XXX IS2: ((laughs))
(1:25)
XXX S3: what’s the date?
XXX IS2: oh three,
XXX nine five?
XXX S3: that’s good right?
XXX IS2: [uh:
XXX U1: [uh:
XXX put it like
XXX yeah
XXX IS2: just like a (little slower)
XXX S3: oh
XXX sorry
(1:34)

XXX ((pause))
(1:40)
XXX S4: ((indistinguishable))
XXX in the uh
XXX graduated cylinder, or,
XXX IS2: just a-attach the inside
XXX of your (.) glassware beaker
XXX ((IS2 presumably walks to a different group)
XXX uh you need a watchglass
XXX to cover
XXX because your (.) solvent will e-evaporate
XXX very quickly
(1:58)
XXX ((pause))
XXX IS2: yeah
XXX ((pause))
(2:24)
XXX IS2: ((addressing the whole class))
XXX so guys
XXX uh
XXX when you uh
XXX prepare your (.) developing solvent
XXX so
XXX make sure you use a (.) watchglass
XXX to cover
XXX your (.) beaker
XXX because the solvent will evaporate
XXX very very quickly
(2:37)
XXX ((pause))
(2:50)
XXX IS2: ((presumably addressing one student))
XXX I think uh: (.)
XXX so the- the thing is
XXX you can
XXX uh
XXX prepare your solvent first
XXX and
XXX after that
XXX you
XXX uh (.)
XXX do the TLC plate ok
XXX S5: (ok,)
XXX IS2: so
XXX yeah

XXX do you guys have uh
XXX ((pause))
XXX so for-
XXX for part A we need 10 mil
XXX for each of the solvent
XXX S5: ok
(3:13)
XXX ((pause))
XXX IS2: ((sorry))
XXX ((pause))
XXX no- sorry sorry sorry
XXX ((pause))
XXX (hi professor)
XXX ((pause))
(3:46)
XXX IS2: so
XXX uh
XXX why do you wash this?
XXX S6: uh
XXX just because I wanted to make sure we d-
XXX remembered to wash=
XXX IS2: =uh=
XXX S6: =the instruments,
XXX IS2: uh
XXX S6: so I'll just give it a minute to dry
XXX and I'll be good to go
COM IS2: which solvent do you use to wash it?
COM S6: what?
XXX IS2: which solvent do you use
XXX the acetone?
XXX S6: yeah
XXX the acetone
XXX IS2: you wanna use to (.) uh: (.)
XXX measure this (.) developing solvent right,
XXX S6: mhm
XXX IS2: uh:
XXX my suggestion is
XXX try to not use any solvent
XXX to wash <u>any</u> of your (.) glassware because
XXX uh
XXX I think uh for the part a
XXX probably has some problem
XXX yeah
XXX S6: oh ok=
XXX IS2: =uh yeah=

XXX =so I shouldn’t
XXX IS2: but
XXX yeah
XXX S6: should I rinse it out with water again?
XXX IS2: no no no
XXX don’t use any solvent=
XXX S6: =oh ok=
XXX IS2: =so
XXX the thing is
XXX um
XXX don’t use y- your your owns
XXX you can (.) borrow from others?
XXX S6: mhm
XXX IS2: yeah
XXX because any s (.) tiny
XXX amount of the water
XXX or acetone inside your (.) glassw-
XXX uh
XXX in your- in your beaker,
XXX will [influence][the]
XXX S6: [ok][I have] another beaker
XXX right here
XXX
XXX IS2: ok sure
XXX just use the other one ok,
(4:34)
XXX ((pause))
(4:54)
XXX S7: hi
XXX IS2: uh::
XXX can you just
XXX put these (.) in your hood?
XXX because
XXX this one
XXX yeah yeah yeah (.3)
XXX because it will
XXX evaporate very quickly
XXX and uh
XXX you know
XXX ok the reaction is dangerous enough
XXX S7: uh huh
(5:08)
XXX ((pause))
(5:16)
XXX IS2: hi

XXX uh
XXX can you p- put
XXX just put your (.) beaker
XXX inside your hood
XXX don’t do any=
XXX S8: =yeah=
XXX IS2: =things outside your hood
XXX ok
XXX U1: ((addressing class))
XXX keep your TLC chamber in your
XXX hood?
(5:28)
XXX ((pause))
(5:36)
XXX IS2: no
XXX unfortunate
XXX U1: ugh
XXX neither do I
XXX it’s ok
(5:38)
XXX ((pause))
XXX IS2: hi
XXX ((pause))
(6:07)
XXX IS2: uh:
XXX just put your ch-
XXX chamber, in your hood,
XXX and then cover with a glass-
XXX glass uh:
XXX watchglass
(6:14)
XXX ((pause))
(7:00)
XXX IS2: uh
XXX you can (.) cover
XXX your beaker with a glassware
XXX because-
(7:04)
XXX ((pause))
XXX IS2: mhm
XXX ((pause))
(8:45)
XXX S9: so I got my solvent in this
XXX cylinder
XXX and I need to get my info for

XXX ((indistinguishable))
XXX I don’t need to wash this
XXX IS2: no
XXX you don’t need to wash anything
XXX S9: so just put um (dimethyl) fumerate
XXX in the cylinder that I just used?
XXX IS2: uh::
XXX yeah=
XXX S9: =I used it for=
XXX IS2: =so do y-
XXX uh
XXX you use this for the:
XXX evaporating solvent (.) only=
XXX S9: =ethyl=
XXX IS2: =right?
XXX S9: [acetate
XXX IS2: [ethyl acetate
XXX pure ethyl acetate
XXX yes
XXX th- yes
XXX is- is fine
XXX so
XXX yeah you can use this to (.) measure
XXX a little bit
XXX because we don’t need too much
XXX uh:
XXX fumerate right,
XXX so:
XXX yeah
XXX you can use this (.) glass cylinder
XXX to measure
XXX yeah
(9:22)
XXX ((pause))
(9:28)
XXX S10: what spot
XXX ((indistinguishable))
XXX on the bench?
XXX IS2: oh it’s fine
XXX here is fine
XXX just make sure you use pencil
XXX S10: yeah=
XXX IS2: =don’t- not use uh pen
(9:34)
XXX ((pause))

(9:45)

XXX IS2: any problems?
XXX S11: no
XXX so I'm just doing a centimeter=
XXX IS2: =centimeter=
XXX S11: =uh=
XXX centimeter yes—
XXX S11: ((inaudible))
XXX IS2: uh
XXX very tightly
XXX because
XXX if you use
XXX ((presumably bumps into S12))
XXX ((to S12)) uh sorry
XXX S12: that's alright
XXX IS2: ((to S11)) uh
XXX because you use
XXX if you uh if
XXX uh (.2)
XXX if you uh if you use your pen to draw a line
XXX very you know heavily,
XXX so that's the beaker on this plate
XXX will destroyed
XXX so which means
XXX uh
XXX you need to
XXX draw a line very lightly,
XXX just make sure you can see
XXX where (.) your spot is
XXX S11: ok=
XXX IS2: =yeah=
XXX S11: =just so I don't get it
XXX (upturned)=
XXX IS2: =yes=
XXX S11: =ok
XXX ok sure
XXX thank you
XXX S13: hi
XXX IS2: hi
XXX S13: do I put this in like this?
XXX IS2: yes
XXX just uh
XXX attach the inside of your (.) beaker
XXX yeah it's fine
XXX good

XXX good job
XXX S13: ((indistinguishable))
XXX IS2: hm?
XXX S13: how do you turn on the l=
XXX IS2: =oh your light
XXX yeah yeah
(10:37)
XXX IS2: hi
XXX S14: we write on this side right?
XXX IS2: yes
XXX so:
XXX yes
XXX so this is a (silicon) s-support
XXX S14: mhm
XXX IS2: yes
XXX one centimeter
XXX uh:
XXX use your pencil
XXX not pen
(10:53)
XXX ((pause))
(11:07)
XXX IS2: I uh
XXX oh
XXX this is your
XXX (piece of) paper
XXX S15: [yeah
XXX IS2: [yeah just put in the
XXX attach the inside of your glassw-
XXX your beaker
(11:15)
XXX ((pause))
(11:41)
XXX IS2: ((addressing the whole class))
XXX uh
XXX so guys
XXX uh
XXX so uh
XXX before-
XXX before you add your TLC plates on the chamber
XXX so you can check the-
XXX check your TLC with a UV light
XXX uh before you put in the chamber
XXX make sure you
XXX y- you actu- uh you m-

XXX make sure you
XXX uh spot your
XXX uh (.2) starting material
XXX on the plate
XXX ok?
XXX so
XXX so here- UV light is at (the) corner
XXX uh of this room
XXX U2: ((addressing the whole class))
XXX ((indistinguishable))
XXX hear that?
XXX go over to the UV light
XXX and just check to make sure that
XXX you actually did it correctly
XXX ok,
XXX IS2: yeah
XXX U2: that's it (.3)
XXX IS2: ((to U2)) thank you for explanation
XXX ((laughing))
XXX U2: ((to IS2)) oh no problem
XXX oh cause like one side can hear
XXX but then the other side can't hear
XXX IS2: ((to U2)) good good good
XXX ((pause))
XXX ((to S16)) yeah
XXX S16: I'm just confused by the (.2)
XXX plate
XXX IS2: oh
XXX S16: this is one?
XXX IS2: so:: for the part A
XXX S16: yeah=
XXX IS2: =using smaller one
XXX not use las- [larger one
XXX S16: [oh
XXX ((indistinguishable))
XXX ok
XXX IS2: ok?
XXX so yeah
XXX because we only (two) spot here=
XXX S16: =[yeah
XXX IS2: [so this is=
XXX S16: =that's=
XXX IS2: =in a large
XXX S16: ok that's (where I) ((indistinguishable))
XXX IS2: right?

XXX S16: so we’re just (gonna make the) one centimeter (much)
XXX IS2: centimeter
XXX very tightly
CLF don’t use too much
CLF uh:
CLF ((pause, grasping for word))
CLF S16: too much uh pressure?
XXX IS2: too much pressure
XXX too much
XXX yes
XXX uh
XXX yeah
XXX and uh
XXX one centimeter is
XXX fine,
XXX and
XXX uh before you put (.) this
XXX plate
XXX in your
XXX uh
XXX chamber
XXX so you can check
XXX whether you- you actually
XXX put your sample
XXX on the plate
XXX you can use U-UV light
XXX to check=
XXX S16: =ok=
XXX IS2: =before you put in your chamber
XXX S16: [ok
XXX IS2: [ok,
XXX yeah
XXX S16: and um
XXX I draw it exactly like this?
XXX IS2: uh one centimeter (is fine)
XXX one centimeter,
XXX S16: yes
XXX IS2: yeah
XXX maybe right here
XXX right,
XXX S16: like right here
XXX IS2: yeah
XXX a little bit
XXX yeah
XXX S16: ok

XXX IS2: and you make a marker
XXX it be
XXX one two
XXX so it not necessary
XXX it is uh equi-
XXX uh
XXX >how do you say<
XXX equidistant
XXX between here here and here
XXX just
XXX make sure y- you know where
XXX our two spot is
XXX and uh make sure you spot
XXX where you have here
XXX S16: ok
XXX IS2: ok
(13:50)
XXX ((pause))
(14:53)
XXX IS2: did you spot already?
XXX S17: no not yet
XXX IS2: ok
XXX so
XXX so as I mentioned before
XXX before you put in your chamber
XXX can check with your (.) UV light
XXX S17: ok so
XXX after I spot it
XXX check with it with the UV light
XXX IS2: then put in the chamber
XXX if you don’t have a
XXX a spot on your plate
XXX so
XXX do again
XXX and check with the UV light
XXX S17: ok
XXX IS2: and put in the chamber
XXX S17: ok
XXX thank you
XXX IS2: yeah
(15:16)
XXX S18: were we supposed to outline the circles?
XXX IS2: no no no
XXX S18: no right=
XXX IS2: =so (.) this is fine

XXX S18: uh huh
XXX IS2: yeah
XXX and uh:
XXX so
XXX you made a marker here
XXX yeah it’s fine
XXX [so:
XXX S18: [(so) you do this one time here and then ten times here,
XXX IS2: yes one time here
XXX and uh-
XXX so for the ten times,
XXX so if you spot one time right
XXX make sure it is dry
XXX then do the second time
XXX (it is) dry=
XXX S18: =oh:=
XXX IS2: =do the third time
XXX (if it is dry) do it (next) time
XXX S18: where was the UV light again?
XXX IS2: ((undecipherable)) i can show you right
XXX ((pause))
XXX you check (on your) already
XXX S19: uh:
XXX IS2: i mean you spot already
XXX S19: (yeah yep)
XXX IS2: one time right
XXX S19: one time ((undecipherable))
XXX IS2: yeah