May 2020

LabChemistry_IS2_20160330_Camera1_Seg09.pdf

Setting: Ta is walking around in chemistry lab room looking for kids to help
Participants: S1 (female, not visible), IS2 (Asian male, short hair), S2 (male, not visible, deep voice), S2 (male, short hair, high voice, slightly taller than IS2), S4 (female long ponytail), S9 (male, slightly taller than S2, in black)

1:57
Xxx ((girl looks around))
Xxx IS2: ((notices girl))
Xxx oh u:h
Xxx <talk to her> ((points))
Xxx >and they're gonna teach you for you<.
Xxx ((girl goes to find black shirt girl))
Xxx ((S2 walks away))
Xxx are you still waiting?
Xxx S1: no (it's cooling).
Xxx IS2: (it's cooling?)
Xxx if you want the (cooling) faster
Xxx you need to uh-
Xxx take the- take the metal out.
Xxx ok?
Xxx (.) so make sure the:-
Xxx the condition stable ok,
xxx because-
Xxx S1: I don't know if I can take the metal out.
Xxx IS2: what?
Xxx S1: I don't know if I can take it out.
Xxx because it's lying on-
3:00
Xxx IS2: (.) ok le- let me do it
Xxx ((silence for about ten seconds))
Xxx is it good?
Xxx ((silence))
Xxx ok you got it.
Xxx ((girl laughter))
Xxx ((IS2 starts laughing))
Xxx <ok ok>

Xxx that’s
Xxx ok
Xxx le-le-let me do
Xxx S1: here you can just move this one.
Xxx IS2: ok
Xxx so:
Xxx ok
Xxx so next time you do the (reflux),
Xxx make sure you can use (alarm)
Xxx to fix the (condenser).=
Xxx S1: =ok
Xxx IS2: should be very stable.=
Xxx S1: =ok
Xxx ((silence, he probably moved to somewhere else))
Xxx S2: ((unclear))
Xxx IS2: transfer to the funnel?=
Xxx S2: =yea ((unclear))
Xxx ((we see IS2 walking towards someone))
Xxx S3: is this cool enough?
Xxx IS2: ok.
Xxx S3: ca- can you feel it to see if it’s cold enough?
Xxx IS2: ((touches))
Xxx ow!
Xxx it’s hot!
Xxx (.) ((S3 stares at IS2))
Xxx no just kidding.
Xxx yeah you can you can use.
Xxx just make sure-
Xxx don’t let the: (boiling stone)
Xxx into the: funnel,
Xxx S3: ((nods and takes something out))
TRP IS2: ((watchines S3))
TRP are you chemistry major=
Xxx S3: =no
Xxx IS2: biology=
Xxx S3: =biology
Xxx IS2: ((laughs)) let of students are (.) biology (.2) major.
Xxx S3: ((puts something down))
Xxx ((some other people come near))
Xxx IS2: ((IS2 leaves))
Xxx ((moves to long hair girl))

Xxx take that stuff out.
Xxx S4: ((unclear))
Xxx IS2: ((looks around in through the window))
Xxx yes.
Xxx S4: ((unclear))—
Xxx IS2: how do you know that one is organic.
Xxx that one?
Xxx S4: ((unclear))
Xxx IS2: >yea yea yea< ok
Xxx S4: ((unclear))
Xxx ((both bends down to look through window))
Xxx IS2: yes
Xxx S4: (unclear))-
Xxx IS2: yea it-
Xxx S4: ((unclear something about layer))
6:00
Xxx (.)
Xxx IS2: so: u-
Xxx S4: ((unclear))
Xxx (the top one you want continuent
Xxx and bottom one you want continent)
Xxx IS2: (.) yes
Xxx S4: ok
Xxx ((continues doing something))
Xxx IS2: ((IS2 just watches for a while then leaves))
Xxx S5: ((unclear))
Xxx IS2: (really)
Xxx S5: ((unclear))
Xxx IS2: it’s ok
Xxx ((walks back towards S4))
Xxx so: even though if you have some ((unclear))
Xxx organically right,
Xxx so because this is organically,
Xxx this is ((unclear)) right,
Xxx S4: yea
Xxx IS2: so just make sure the ((unclear)) goes here,
Xxx and the: (.) ((unclear)) goes to another flask.
Xxx ((walks away))
Xxx yup
Xxx S6: ((unclear))
Xxx so for the third one when it’s asking-

Xxx IS2: it's different one?
Xxx S6: >yea it's different one I finished that up.<
Xxx IS2: you need (to hand up) two reports today?
Xxx S6: >no no no< not today not today.
Xxx it's for- it's for next weeks.
Xxx IS2: ok
Xxx S6: I just want to ask you=
Xxx IS2: =ok
Xxx s6: before they're due.
Xxx so if you- if you
Xxx (learn) it with a like a ↑big volume of the- of the
Xxx ↑pigment solution when you're separating it,
Xxx does it- it shouldn't affect the separation right?
Xxx you [just have to
Xxx IS2: [(load) the ((unclear)) with the (peachy solution)
Xxx peachy solution is a mixture right?
Xxx S6: yeah the mixture.
Xxx with the (beta kerotine and the clorophyls) and
xxx everything.
Xxx IS2: how do you s- uh-
Xxx what's the solvent in the-
xxx in the peachy solution?
Xxx do you not remember?
Xxx S6: solvent I think it was uh-
Xxx think it was ((hexaine something))?
Xxx IS2: ((unclear))
Xxx S6: >I might be thinking of the wrong one wrong<
Xxx ((pause))
Xxx yea its was u:m ((unclear))
Xxx yea
Xxx <yea the peachy solution was ((unclear))>.
Xxx ((sound of pages flipping))
9:05
Xxx IS2: so:
Xxx what's your opinion about this?
Xxx S6: (I guess) it wouldn't,
xxx it was still separating right?
xxx ((incomprehensible))
Xxx IS2: so as I- far as I know so:=
Xxx S6: =yea=
Xxx IS2: =because we have the (.) (acetate) [in- in it right?

Xxx S6: [right
Xxx IS2: it- it- it will (influence) because,
Xxx you know=
Xxx S6: =yea
Xxx IS2: it's one to one ratio.
Xxx and uh it- so (.)
Xxx if you have two (large) one to one ratio solvent,
Xxx and you (aploud) to the (column),=
Xxx S6: =yea
TTF IS2: and uh
TTF you ((unclear)) will flow w- w- ith uh
TTF one to one one ratio (this thing).
TTF even not in you know uh: (.)
TTF (packed to uh it's not)
TTF uh the- the- the principle behind the separation is-
TTF the- the thing-
TTF the mixture you will have some interaction with
TTF ((unclear)).
TTF but- but if the solvent is (too polar),
TTF which is one to one ratio=
Xxx S6: =mhm
Xxx IS2: so- your- your thing does not have ((unclear))
Xxx it will (.) flow out very quickly.
Xxx and you got very bad separation.
Xxx S6: oh ok ok=
TTF IS2: =so: (.) so: one strategy is that
TTF just make
TTF uh don't let your solution is-
TTF uh you know like- too many solvents.=
xxx S6: =ok
Xxx IS2: as much as-
Xxx as little as possible.=
xxx S6: =ok
INR IS2: and if you can dissolve with a mi- solvent,
INR uh not solvent.
INR your: um you uh: reaction (crue)
INR which is (crue) right?=
Xxx S6: =mhm (crue)=
Xxx IS2: =so before your separation
Xxx this is (crue) right?=
Xxx S6: =yea its (crue)=

Xxx IS2: =so: use as li- as solvent to dissolve your (crue)=
xxx S6: =ok
Xxx IS2: and you upload to the (column).=
xxx S6: =oh ok=
Xxx IS2: =so which will give you best solution.
Xxx S6: ah
Xxx IS2: so so anyways so this for this (direction)
Xxx it will influence.
Xxx ok?
Xxx S6: thank you.
Xxx IS2: yep
Xxx ((walks around))
11:38
Xxx ((stares at S3 for a bit))
Xxx S3: (just hold it like this)
Xxx IS2: yes.
Xxx ok you can
Xxx do this for:-
Xxx several times.
Xxx 4 times is ok.
12:20
Xxx IS2: yep
Xxx so:
Xxx after you finish this,
Xxx you just wait,
xxx until you got two layers
Xxx set by-
Xxx make sure you- uh
Xxx take the (stop) out.
Xxx S3: ((nods))
Xxx IS2: you put,
Xxx ok.
Xxx ((moves away))
Xxx S7: this one- this one is (closing or)
Xxx IS2: I'm not sure (just check).
Xxx if it is very tight it should be closed,
Xxx let me check.
xxx yea it's good.
Xxx so-
Xxx not- uh
Xxx the right way

Xxx you want to dissemble this,
Xxx you just take the: (condenser) out first.=
Xxx S7: =uhuh
Xxx IS2: ok
Xxx and u:h you can let this.
Xxx oh sorry
Xxx you can take- take that out.
Xxx ((walks away walks back))
Xxx yes
Xxx ((like a bit of a pause))
Xxx ok
Xxx S8: ((unclear))
Xxx IS2: mhm
Xxx it is cold?
Xxx S8: ((unclear))
Xxx IS2: I think so.
xxx ok.
Xxx just (prepare) the funnel,
Xxx and transfer into the funnel,
Xxx and (rinse) with either,
Xxx and uh,
Xxx transfer into the funnel again,
Xxx and add the (.) water in the funnel.
Xxx and shake ((unclear)).
Xxx and got two layers,
Xxx and make sure
Xxx you- after you got two layers
Xxx you uh-
Xxx when you waiting-
Xxx when you are waiting for two layers
Xxx get the uh stopper out.
Xxx ok
Xxx and two layers
Xxx one goes to the:-
Xxx the- the- the top layer is (organic layer)
Xxx ((unclear))
Xxx one is to one flask and one is to another flask.
xxx ok?
Xxx S8: do I need to put it in a flask,
Xxx or can I put it in a beaker?
Xxx IS2: beaker is fine too.

Xxx but for the uh organic layer I- I just- just say to use
Xxx use flask.
Xxx for the other is fine.
Xxx S8: ok
Xxx IS2: because the uh-
Xxx S8: do I need to rinse this?
Xxx IS2: no I don’t need to.
Xxx S8: just put it in
Xxx IS2: yes.
Xxx S9: (I think this is) ((unclear))
Xxx IS2: I think so.
Xxx ok just do.
Xxx S8: ((nods))
15:00
Xxx IS2: ((walks away))
Xxx yep
Xxx S10: (what does it mean like gas evolution?)
Xxx like I added a certain carbon,
Xxx but like ((unclear)).
Xxx IS2: this is the organic layer right?
Xxx but you still have some ((unclear))?
Xxx S10: oh yea
Xxx IS2: so:
Xxx S10: (so stop) ((unclear))-
Xxx IS2: yea just transfer into the-
Xxx it’s not bubble
Xxx it’s a lot of (.) ((unclear)).
Xxx S10: oh ok
TTF IS2: so right now you can transfer into the funnel again,
TTF and u:h
TTF get like two separation,
TTF get the uh-
TTF th- the rest of the uh: ((unclear)) out,
Xxx and then transfer into here again.
Xxx S10: do I: need to: put ether and water again?
Xxx IS2: uh:
Xxx you can add a little bit of water.
Xxx because if you cannot see the two layer separately
Xxx you can add a little bit of water,
Xxx because

Xxx which makes you very clear which is which.
xxx ok?
Xxx S10: ok!
Xxx S11: so I added the 10 percent sodium carbonate,
Xxx IS2: so you need to fix- mix them.
Xxx S11: yep
Xxx IS2: ok
Xxx S11: ok and then I:-
Xxx IS2: d-do it in our hood because you know-
Xxx S11: oh [ok:
Xxx IS2: [the strong smell.
Xxx ok
Xxx S11: you said to add a little bit of water,