## **SOP:** distillation of dichloromethane (room Ø336)

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## 1. Write your name on the list to the right when using the still.

- 2. Make sure the water to the condensers is on (feel the condensers, they should be cold to the touch). Never turn off the water to the condenser.
- 3. Make sure the power to the heating mantle is turned off (3 on picture below).
- 4. Do a visual inspection of the set-up to make sure there are no cracks or other irregularities on the still. **If anything is broken or out of order, please contact the responsible person** (see above).
- 5. Remove the clamps of one of the stoppers and the stopper and fill the round bottom flask with dichloromethane using a funnel. Never fill above the green mark on the flask. Bring your own solvents. Put the stopper back on the flask and make sure the clamps are secure.
- 6. Turn the power on the heating mantle, **it should be on 3**. Turn the stopcock on the collection flask (1 on the picture below) to a position where all the outlets are closed
- 7. For emptying the collection flask, put a bottle on the jack next to the still, so that when the dichloromethane run out the bended glass tube (2 in the picture below) they will be collected in the bottle. Turn off the power to the heating mantle. Open the stopcock on the collection flask so that the dichloromethane collected run out of the collection flask and into the bottle. When the collection flask is empty, turn the stopcock back to the previous position, and continue distilling and collecting dichloromethane.
- Make sure there is always enough undistilled dichloromethane in the round bottom flask.
  NEVER dry boil the flask.
- 9. When you want to refill the round bottom flask with more dichloromethane, turn off the power on the heating mantle until the dichloromethane has stopped boiling. Remove the clamps of one of the stoppers and the stopper on the flask, add more dichloromethane, put the stopper and the clamps back in place, and turn the heating mantle back on.
- 10. When you are finished distilling, turn the stopcock on the collection flask so that any distilled dichloromethane will run back down the column and into the round bottom flask and turn off the power to the heating mantle. Never leave the collection flask full after use.

## HSE Rules and Regulations – Organic Chemistry Research Group, last updated March 18, 2014; L.-L. Gundersen

