

***To H-Cube Users:***

- 1) If you are a new user, please contact Zhiyong at (412)383-5917 or zhw19@pitt.edu to schedule a short presentation on how to use the system.
- 2) If you are an experienced user, please sign up in the log book and note down any problems after usage.
- 3) The most frequent problem people have encountered so far is the incorporation of air bubbles in the inlet line, which could halt the solvent flow. This normally can be solved by detaching the line from the outlet joint of the HPLC pump and sucking out the bubbles with a disposable syringe. (See P<sub>65</sub> of the user manual.) Ask Zhiyong if you are not sure how to do it.
- 4) To avoid air bubbles, fill the solvent reservoir with plenty of solvent before your run. When switching the inlet filter from your reactant-containing vial to the solvent reservoir, you can temporarily stop the HPLC pump for a short period of time (<20 seconds).
- 5) The system is pretty effective, and over-reduction of sensitive substrates have been observed in the past. For simple reactions, I would recommend starting with the following conditions: 0 bar (full H<sub>2</sub> mode), 30 °C and 1 mL/min flow rate.
- 6) One Pd/C CatCart is always kept with the H-Cube, and we'll keep using it until it's no longer active. If you believe the catalyst is dead, or you really need to use a new catalyst, please talk with Zhiyong.
- 7) Remember to flush the system with plenty of solvent (~20 mL) of solvent after you are done with your reaction.
- 8) For all other problems or comments, please contact Zhiyong or Dr Wipf.