## Naproxen – Workshop 2

Project planning and choosing optimal routes



Nimesh Mistry, Sarah Naramore and George Burslem University of Leeds

#### Part 1 – Minimisation of hazards

- Read through the protocol. It was taken from a second year lab manual.
- If you were a process chemist tasked with developing this reaction to use in a pilot plant why would you investigate alternatives to DMF, DCM and sodium hydride?
- What aspects of the reaction would you need to understand in more detail if you wanted to run it safely on a large scale?

## Part 2 – Project planning

• Video on time management

## Part 2 – Project planning

- In your groups discuss which reactions you will carry out and which variables you would like to investigate for each step.
- You should write down.
  - Who will focus on each step
  - Which reactions depend on having some material from other reactions
  - How to ensure that people investigating reaction conditions have enough of their starting materials
  - How will you divide up tasks like analysis and planning
  - How often will you share results and discuss progress

#### Before you start in the lab

- Do some research into the reaction conditions that might work best for each step. This can be divided between you.
- Look up the hazards of all the chemicals you will be using.

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