

# How to do the unknowns exercise at home.

To do this follow these steps:

1. On KirsopLabs you will find folders with all the unknown information, including the material on the cards in the back room of the lab.
2. The folders contain all the info, with compound CHON percentages, Mass spec, DEPT NMR, IR, <sup>13</sup>C and <sup>1</sup>H NMR data in FID format.
3. To work up the FIDs you need MNova processor. This is free for academic use, get it from:

<http://www.info.chem.ed.ac.uk/it-services/using-our-computers/software>

You will need to register and set it up on your PC.

4. Details of how to use MNova and calculate DBEs etc., are in the lab manual.
5. The report is written on a pre-printed form. It is available on LEARN.

For this exercise you need to justify how you identify the unknown. Just giving a structure will not earn many marks without reasoning. We will be happy to give advice but we will not give as much help as we gave you last year in the C2O lab.

You can, of course, do the exercise using the lab PCs.