Name: Section #:

Date(s) experiment carried out:

**Experiment E6 & Tutorial T6: Copper Carboxylates**

**Abstract** *(2 marks)*

The abstract should be a very brief statement about what the experiment was intending to show. Obvious limitations should be mentioned and what broad conclusions can be drawn. Specific data can come later in the report.

**Balanced equations and structure of products** (3 *marks)*

**Reagent and product tables** *(4 marks)*

**Group’s data for synthesis of products** *(3 marks)*

**Table 6: IR data between 1800 and 1000 cm-1.** *(4 marks for spectra; 4 marks for tabulation)*

Attach the data table that was started in class, and both of the spectra that you personally recorded.

**Procedure**

The procedure was followed as given. 1 (1 *mark for additional comments)*

**Discussion** *1200 words max* *(8 marks)*

Comment on the two synthetic routes employed for ease of use and efficiency. Is there evidence of free carboxylic acid present? What specific evidence are you using?

Was one method consistently better for all ligands and how did the yields compare?

What did the IR data tell you about complexing the carboxylate and whether the same product was created for both routes of synthesis?

**Conclusion** *(1 mark)*

The conclusion must be a logical consequence from the data*.*

**References** *1 mark*

Appropriate editing and formatting of report (*2 marks*)