Using Excel for generating graphs.

For our example we wish to graph the absorbance measurements of different acetylsalicylic acid concentrations (remember aspirin determination?). In Figure1, found on the next page, there is an example of an Excel spreadsheet that was used to generate a standard curve using acetylsalicylic acid concentrations and measured absorbances.

The acetylsalicylic acid (ASA) concentrations (x-values for our graph) were entered in cells A2 through A6. The measured absorbances (at 526 nm) were entered in cells B2 through B6.

To generate a graph of the data you can either click on the **Chart Wizard** (see Figure1) or highlight **Chart** under **Insert** on the tool bar.
1. Select a type of graph (e.g. XY (scatter)). Click next.
2. Enter the cell range where your data is found (e.g. $A2:$B6) or click the **Data Range** box and select the cells that contain your data. Click next.
3. Type in title and axis labels (remember units where appropriate). You can also edit chart axis, gridlines, legend and data labels at this point. Click next.
4. Place chart as new sheet or object in existing sheet. Click finish.

The chart should then appear on your spreadsheet. To insert a trendline and show an equation:

1. Click on a single data point to highlight all the data points on the graph.
2. Under **Chart** on the menu bar, choose **add trendline**.
3. Select a Trend/Regression type (e.g. linear).
4. Click on the options button and set the y-intercept to zero (if you wish) and choose to display the equation of the line and the R^2-factor (if you wish). Click **Okay**.

A trendline with an equation should appear on your graph. You can move your chart by clicking on the chart area, holding down the left mouse button and dragging. You can make the chart larger or smaller by clicking on your chart area and dragging the corner of the chart while holding down the left mouse button. You can print the chart by clicking on the chart area and choosing **Print** under **File** on the menu bar. This simple example should give all the information you need to produce great graphs in Excel. Good Luck.

Figure 1: Example Excel Spreadsheet and Graph