

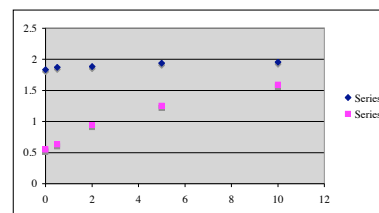
How to make publication quality graphs

Ken Shimizu

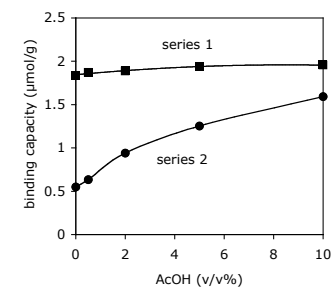
1/25/2010

I. The defaults on Microsoft Excel are awful.

Excel Defaults

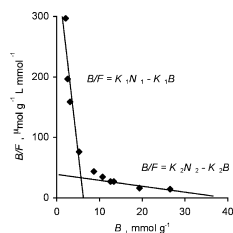
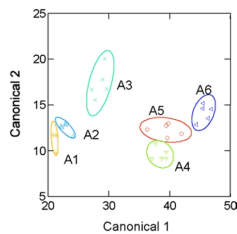
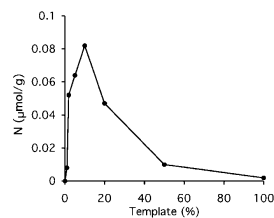
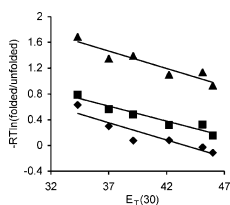


Publication/Presentation Quality



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Good examples from our previous papers



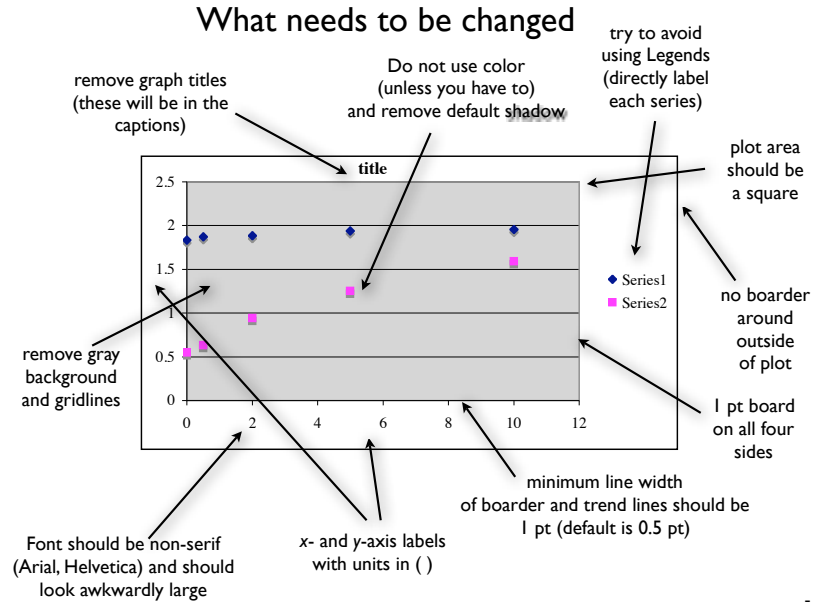
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General reasons behind formatting choices

1. Remove all formatting that is not necessary like color, shadows, legends, and grays (which don't print well).
2. Graphs will be very small in the publication (usually one column which is 3.2 inches). Therefore, everything should be very large and readable like font sizes, font types, and line widths.
3. Ideally, there is enough information on the graph to understand it without looking at the caption. So there should be axes units and series labels directly on the plot.

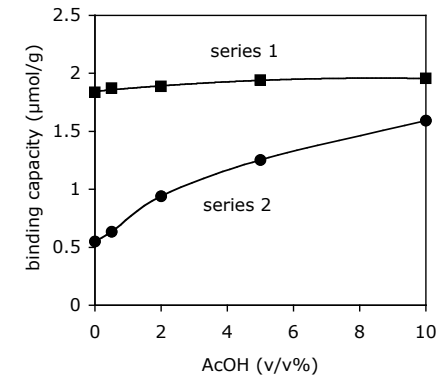
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What needs to be changed



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Results of changes

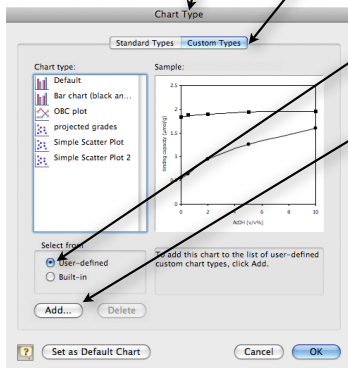


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Saving and reapplying formatting changes

- Once you have made all these **formatting changes** you can **save** them under:

Chart/ Chart Type/Custom Types/User Defined/Add



Saved formatting preferences can be **reapplied** to other graphs simply by changing the Chart Type to you User Defined types.

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Incorporation of Graphs into Word

- Try not to resize graphs in Word or PowerPoint.**

This can alter all the formatting changes that you have made. Reopen the graph in Excel and resize it there. (Note: this means that you typically would like the graphs to be 3.1 inches in width in Excel.)

- Paste the Excel graph into the Word document using:**

Paste Special/Microsoft Excel Chart Object.

This will ensure that I can edit the Excel file on my Mac. Alternatively, you can send me the graph as an .XLS Excel file. (Please do not use the new .XLSX format.)

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