## Writing papers: N suggestions, fiats, ukases ...

In other words: \section\*{Writing papers: \$N\$ suggestions, fiats, ukases \ldots} Version of April 30, 2014

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1. Learn the basics of 上X. If you find this step difficult, you are going about it the wrong way — possibly trying to make needlessly complex 上X. scripts. The best way to do get started is to use a file that says:

```
\documentclass[11pt,letterpaper]{article}
\usepackage{charter}
\textwidth=6.5in \textheight 9in \oddsidemargin=0in \topmargin=-0.5in
\sloppy
\begin{document}

Type away ! Lorem ipsum \textit{etc.}
\end{document}
```

- 2. Your MEX source file should be simple and pretty let MEX do the formatting, while you think of the content. For example, do not needlessly use line-breaks (\\) in your document, or the \clearpage command. Also, do not use \indent or \noindent. The one exception is to use \noindent when continuing text after an equation.
- 3. Also, as you create your LEX file, please do not define a lot of new custom commands. Publishers do not like this, and others working on the manuscript will find *your* custom commands make life difficult.
- 4. Prepare the figures and collect key references. Ensure that you have read all the papers from the group, and make sure that you have searched the published literature conscientiously. You should have done this concurrently with the research, but do it again.
- 5. Start writing. Do not spend huge amounts of time on the introduction, but instead focus on telling a story about the results. Come back to the introduction later. Do write the abstract and the conclusion section before sharing the manuscript for comments.
- 6. Citing work properly is important. Don't send the reader out on a hunting expedition. References should be associated with the subject, for example:

```
Magnetic frustration has previously been reported in the related spinels MgCr2$0_4\ and ZnCr2$0_4\.\cite{ZnCr204}
```

is preferred, as opposed to:

```
... has previously been reported in related spinels.\cite{MgCr204,ZnCr204}
```

And yes, in most journals, citations appear *after* the punctuation.

7. If you write the second paper on a subject, make sure that the first work on the subject is not reference number 27.

- 8. If you write the second paper on a subject, make sure that your third paper also cites the first work, and not just the second (your own).
- 9. Do not refer, within your manuscript, to "this paper". Instead use one of: "this contribution" or "this communication", or "this letter". Also do not refer to "papers" from other groups.
- 10. The use of \textit{et al.} usually makes the manner in which work is cited more direct and elegant. It is always the last name of the first author before the *et al*. If you wish to refer to the group, try for example, Rao and coworkers\cite{Rao}.
- 11. Write detailed figure captions. Ensure that they are as self-contained as is reasonably possible, and do not require the reader to hunt around in the text for an explanation.
- 12. Figure environments should be inserted in the text just before they are actually referred to.
- 13. Figures should have legends, and the captions should NOT require text like:
  - ... blue circles correspond to data acquired at 400\,K and red squares ...
- 14. **Mathmode:** All symbols (there are a few rare exceptions) should go inside two \$\$ signs: Einstein proposed that  $E = mc^2$ . The Boltzmann constant  $k_B \$  \ldots\ yields: The Boltzmann constant  $k_B \dots$
- 15. Some critical commands:

command	yields	comment
\$\times\$	X	do not use x, as in 10x10
	_	use –, rather than - in most instances
\AA\/	Å	\$\AA\$ is wrong
\$\delta\$, \$\Delta\$	$\delta, \Delta$	all Greek letters follow this pattern
TiO\$_2\$	TiO <sub>2</sub>	if subscripting more than one character,
		braces are required (e.g., \$_{1-x}\$)
		Do not type \$Ti0_2\$
m\$^3\$	m <sup>3</sup>	see comment for subscripting, above
\$-\$	_	minus sign, not "-"
''and ''	" and "	do not use " and "
\textit{et al.}	et al.	do not use \$et al.\$
The \$a\$ cell parameter	The $a$ cell parameter	do not use \textit{a}
\textit{etc.}	etc.	italics for non-English words and
<pre>\textit{et al.}</pre>	et al.	phrases, including when abbreviated
\tetit{per}	per	Read the ACS Style Guide as well

- 16. Unbroken spaces between numbers and units: 275\, K is 275 K and 0.05\,e\,\AA\$^ $\{-3\}$ \$ is 0.05 e Å<sup>-3</sup> etc.
- 17. Ranges should include units: in the temperature range of 300\,K to 2\,K is preferred over in the temperature range 300--2\,K
- 18. Avoid the possessive case: We employ the ability of this technique... rather than We employ this technique's ability ...