General guidelines for Figures, Schemes, Charts, Tables, and Equations.

1. **DEFINITIONS: Tables** and **equations** are self-explanatory. **Schemes** depict a process, reaction, flow chart, and transformation. (Basically anything with arrows connecting one image to the next.) **Charts** are a list of structures. **Figures** are everything else: plots, spectra, crystal structures, lists of chemical structures.

2. **REFERENCES TO:** Figures, Schemes, Tables, equations, and Charts **must be referred to in the text of the manuscript.** "As shown in Scheme 3" or "The ^{1}H NMR spectra of 5 shows that the compounds are in slow exchange at rt (Figure 8)." Note the syntax of the last sentence. "(Figure 8)" comes before the punctuation not after.

3. **INDEPTH ANALYSIS: There must be analysis of the data in the Figures, Schemes, and Tables in the text**, going over the key observations in the data point by point (with numbers taken from the data) **and then** drawing conclusions from them. (Everyone is just skipping to the conclusions and then not explaining how the data supports these conclusions.)

4. **PLACEMENT:** The Figures, Schemes, Tables etc... should be **inserted into the text after the first paragraph that mentions them**. (In the final manuscript format, the inserted Figures and Schemes can get moved around, usually to the top or bottom of a page. But in any draft, they should be placed as noted above.)

5. **EQUATIONS are numbered.** The number is in parentheses on the right hand margin.

6. **TABLES should be in ACS format,** which has a horizontal line before and after the column headings and at the end. Heading titles are **not capitalized** (unless it is a proper noun.) This format can be applied to a table in Word by selecting the table and selecting AUTO FORMAT → simple 1.

heading 1	heading 2	heading 3	heading 4	heading 5
1	6.4 (5 mM)	MAA	21	a
2	7.3 (3 mM)	AA	27	b
3	9.0 (4 mM)	HEMA	39	c

7. **CAPTIONS** should have the general format:

Short descriptive label (not a sentence), which ends with a period.
Additional information can be provided with **full sentences** (with a subject and

verb). (Schemes do not have to have captions but they can have footnotes.)

8. **CAPTION CONTENTS**. **At a minimum, the short descriptive label should describe the type of data and key experimental parameters for how the data was collected.** (Conclusions and analysis can be provided in the additional sentences or in the text of the manuscript. Experimental parameters for Tables are usually provided in the Table footnotes.)

For example:

At a minimum, a **spectra caption** should include:
a) Name of spectroscopy type:
   "^{1}H NMR", "^{13}C NMR", "UV-vis", "Emission spectra", "X-ray diffraction spectra" etc
b) Compound/sample name(s) or number(s)
c) Key experimental parameters. These will depend upon what point you are trying to show with the spectra or the type of spectra. These could include:
   solvent, concentration, temperature, irradiation wavelength (for fluorescence), scan rate, concentration range, frequency (300 MHz).

At a minimum, a **plot/graph caption** should include:
a) Description of the *y-* and *x-*axes!! (The *x-*axis can also be described as a range (i.e. over 24 h; from 300 nm to 500 nm).)
b) Description of the different points/lines in the graph
   (i.e. MIP (squares) and NIP (circles); 10 mM (broken line) and 1 mM (solid line); compound 5 (red line) and compound 7 (blue line)).
c) Key experimental parameters for the experimental data in the plot such as:
   specific peak, nuclei (H_a or C15), or wavelength (350 nm) used in the plot, concentration, solvent, temperature, name of guest or analyte, concentration, frequency, points are average of x measurements, how the points were calculated, .

d) Model that was used for any curvefit or trendlines of the experimental data points.

At a minimum, a **micrograph image** should include:
a) Type of instrument used to acquire image: TEM, AFM, polarized optical image etc.
b) Scale bar.
c) Name or type of sample (and possibly substrate)

d) Brief description of how sample was prepared: evaporated from 1 mM sample in water; stained with OsO4; sputtered with gold etc.