Title

John Doe, Jane Doe\*

[Include in the byline all those who have made substantial contributions to the work, even if the paper was actually written by only one person. Use first names, initials, and surnames (e.g., John R. Smith) or first initials, second names, and surnames (e.g., J. Robert Smith). Do not use only initials with surnames (e.g., J. R. Smith) because this causes indexing and retrieval difficulties and interferes with unique identification of an author. Do not include professional or official titles or academic degrees. At least one author must be designated with an asterisk as the author to whom correspondence should be addressed.]

Dept. of Chemistry, College of Science and Mathematics, University of Massachusetts,

100 Morrissey Boulevard, Boston, MA, 02125.

jane.doe@umb.edu

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**Abstract**

All manuscripts must be accompanied by an abstract. *The abstract is typically the final section of a paper to be completed.* The abstract should briefly state the purpose of the research, indicate the theoretical or experimental plan used, summarize the principal findings, and point out only major conclusions. The optimal length is one paragraph (4-5 lines). **Any information presented in the abstract must appear in more detail in the body of the report.**

**Introduction**

*In writing the introduction you should be aware of the central motivation behind the experiment(s) and what hypotheses were tested.* An introduction should state concisely the objective of the work. *A description of the theory and background of the experiment is essential to justify the stated objective and in the process explain any goals laid out.* After reading the introduction one should be aware of (i) the motivation for the work and (ii) the strategy used in the work. Do not simply reproduce the information provided in the experiment write-up or lecture. Be careful with your verb tenses. The underlying theory and intrinsic chemical properties may be included in the introduction/discussion sections, preferably written in the present tense (e.g. “The 530 nm electronic absorption band is very intense with an extinction coefficient of 5,000 M-1 cm-1”).

**Experimental Methods**

Any materials and apparatus used during the experiment should be detailed here (manufacturer, model and role of instrument). A brief section on experimental method *in your own words* (i.e., do not copy the description in the write-up for the experiment) noting any deviations from the prescribed procedure. Summarize the procedure in as concise a manner as possible. Any procedures carried out in the lab should be described in the past tense, preferably in the passive voice (e.g. “The electronic absorption spectra were recorded in spectrophotometric grade acetonitrile solvent.”)

[The following two sections, Results and Discussion, may be merged as a single section if so wished]

**Results**

This section should be a concise summary of (relevant) results obtained or observed during the course of the experiment(s). Tables and graphs are both appropriate formats, and should be given clear titles and column or axis labels as applicable (see below). *All figures, schemes and tables should be organized and presented in a manner which makes them comprehensible without reference to the main text.*

**Scheme X.** ‘Scheme description’

[Chemical reactions and flow diagrams may be called schemes. Schemes may have a brief description of their contents. All schemes must be mentioned in the text consecutively and numbered with Arabic numerals. *Please use ChemDraw to include structures unless too complex. ChemDraw software is available in the chemistry dept.]*

**Figure X.** ‘Figure caption’

[Each figure must have a caption that includes the figure number and a brief description, preferably one or two sentences. All figures must be mentioned in the text consecutively and numbered with Arabic numerals.]

**Chart X.** ‘Chart Title’

[Charts may have brief titles describing their contents. Put details in footnotes, not in the title. Define nonstandard abbreviations in footnotes.]

**Table X.** ‘Table Title’

[Each table must have a brief title that describes its contents. Put details and abbreviations in footnotes, not in the title. *Use tables when the data cannot be presented clearly as narrative, when many precise numbers must be presented, or when more meaningful interrelationships can be conveyed by the tabular format. Tables should supplement, not duplicate, text and figures.* Tables should be simple and concise. It is preferable to use the Table Tool in your word-processing package, placing one entry per cell, to generate tables.]

**Discussion**

The discussion section should provide evidence of command of the theory relevant to the experiment. It is important to note significant departures from the standard procedure that may affect the data and results. In writing this section, consider answering the following questions: What did you learn? Did the system behave as expected? The discussion may be organized according to main topics with appropriate subheadings where applicable, e.g. synthesis, characterization, spectroscopic analysis etc.

**Conclusions**

Not just a summary of the discussion but a statement clearly defining what hypotheses were tested, and if they proven consistent or disproved. The significance of the work and any impact of the work on the field should also be addressed here.

**References**

A list of any referencesused in preparing the report. Negligence to include a citation may be construed as plagiarism. To the best of your ability, always include the original scientific literature reference as opposed to a webpage or database.

**Supporting Information (optional)**

A brief statement in non-sentence format listing the contents of material placed in the Supporting Information may be included at the end of the manuscript. The contents of Supporting Information may include any material deemed excess but still relevant to the main manuscript, e.g. extensive figures, mathematical derivations, and data etc. The Supporting Information (typically an independent document) will be included at the end of the lab report document and is also to include answers to any questions from the experiment write-up if not already addressed in the primary manuscript.