

# Strategies for Publishing

- Visualize content for papers early in the project
- Generate research outlines that predict paper activity
- **Engage your students and postdocs** in paper writing and planning.
- Prioritize experiments to expedite paper completion over extension of unrelated data.
- Generate paper outlines early!

# Basic Strategies Continued

- Avoid Conference Proceedings (unless you are in an EE/CS related field) that preclude publication elsewhere
- Shoot for the highest impact reasonable for the topic/accomplishment in your paper.
- Be strategic about communications versus full papers
- Recognize opportunity for papers in unexpected but important findings
- Tell students that **a paper = a thesis chapter** - then **encourage the papers to come first!**  
(Avoid post-graduation writing as much as possible)

# *Aspects of Writing*

- Look at the journal's papers that you are aiming for, recognize style and subject matter that “fit”.
- The **introduction** and **the cover letter** are key to persuading others the work is important
- Avoid dry or esoteric language in titles
- Choose the right title to ensure citation in the future.
- Big name journals require a significant accomplishment - and data presented in a convincing and often striking manner (plan experiments accordingly).

EMPHASIZE SIGNIFICANCE, IMPACT, SIGNIFICANCE!!!

# Keep track of impact factors in your field(s)

2006 Impact Factors (most rounded to one significant digit):

From ACS:

(see also weblink <http://pubs.acs.org/4librarians/isi.html>)

JACS: 7.7

Langmuir: 3.9

Bioconjugate Chemistry: 3.8

Journal of Physical Chemistry B: 4.1

Nano Letters: 10.0 (9.96)

Chemistry of Materials: 5.1

Macromolecules: 4.3

Biomacromolecules: 3.7

From Wiley-VCH:

Angewandte Chemie: 10.2

Advanced Materials: 7.9

Advanced Functional Materials: 6.8

Macromolecular Rapid Communications: 3.2

Journal of Polymer Science, Polymer Chemistry: 3.4

Journal of Polymer Science, Polymer Physics: 1.6

From the RSC:

Soft Matter: 4.4

Journal of Materials Chemistry: 4.3

From Elsevier:

Biomaterials: 5.196

Journal of Controlled Release: 4.0

Polymer: 2.8

From Nature:

Nature: 26.7

Nature Materials: 19.2

Nature Methods: 15.0

For Science: 30.0

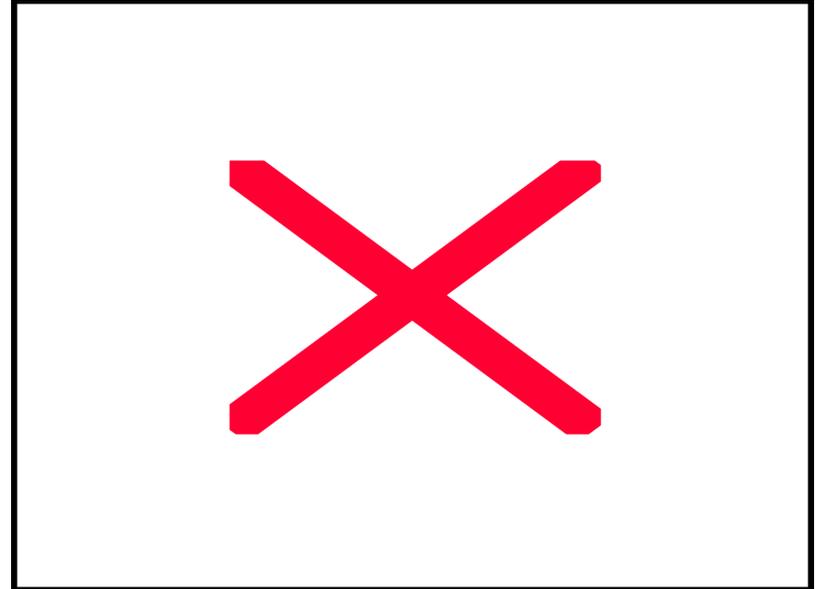
**Be aware of the core journals in your field.**

**Where do your most highly respected peers publish?**

# Writing (and Presenting) in the Hammond Group

or:

How to put  
together your  
thoughts and your  
data beforehand!



# How do I get started?

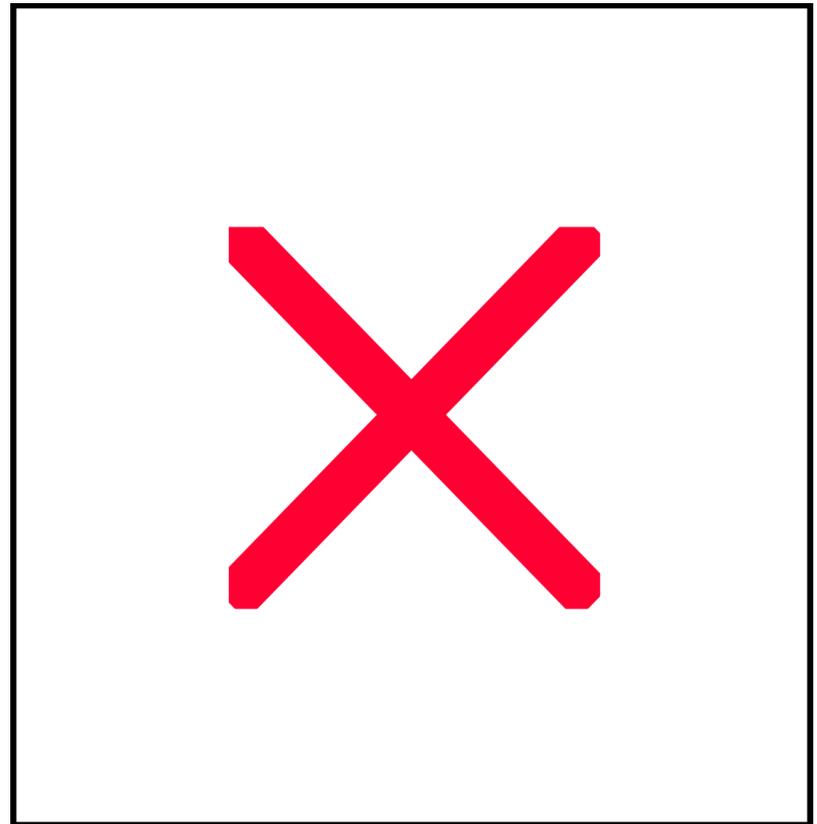
Brainstorm:

- Why am I doing this?
- What do I hope to show or prove?
- What findings do I anticipate?
- What should important data look like?



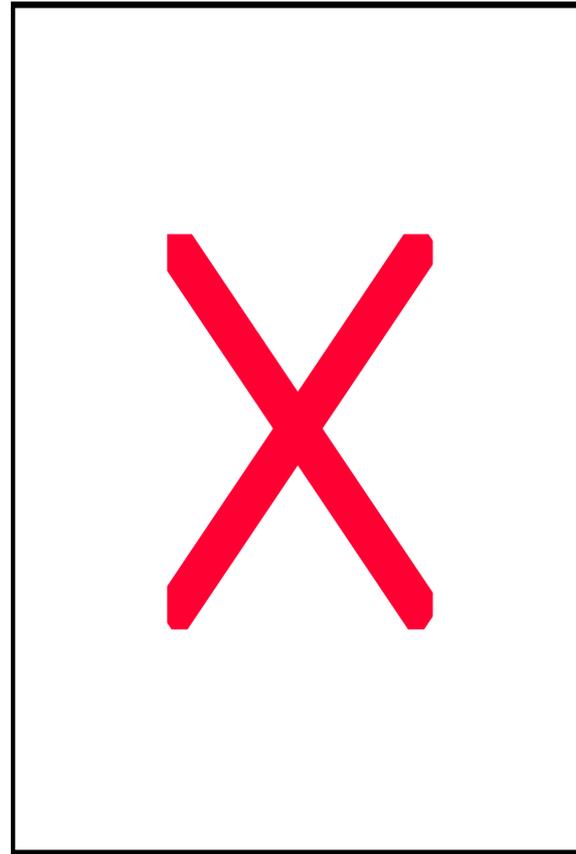
# Basis for a full paper

- New material or technique
- Report material properties
- Describe new phenomena
- Present illuminating model



# What makes a good full paper:

- State the motivation clearly
- Get straight to the good stuff - describe the relevant information
- Conclusions should state the cornerstone findings, analysis



# What is a Communication?

- Very **novel, impactful** and/or **unique** material or method that must be reported in a rapid fashion
- Must be short - often does not have separate intro and experimental sections.
- Generally of higher impact than full paper, which can go into more detail

Examples of communication journals:

Advanced Materials

Chemical Communications

NanoLetters

Many major journals have full papers + communications

## When do I have enough for a paper?

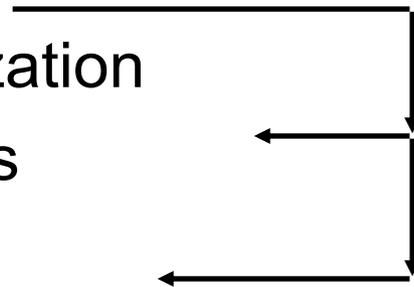
- Outline helps you determine when you have a **complete story** to tell or what data is needed to complete it.
- Need to be able to support conclusions with data.
- All issues need not be resolved, but should be addressed.

**Avoid the super colossal paper.**

# What is an Outline?

Written plan of the paper, including the data.

- Data
- Organization
- Analysis



Iterate

The Outline eventually becomes the Paper.

Your papers can be viewed as segments of a larger research plan.

# When do I prepare an outline?

- At start of the project
- When you are developing a new idea
- When consolidating data
- When observe a new, unexpected result

DO NOT WAIT:

- until the project is “finished”
- thesis time

# Paper Writing Guidelines

## Philosophy:

- Collaborative process involving authors
- Iterative Process
- Papers are the most critical media for reporting results

## Approach:

Think of what the papers will look like as you formulate the research experiments

Base papers (posters, talks etc.) on Outlines.

It is never too early to consider which journals you consider the work would fit into. Be aware of **citation/impact factor**, but also aware of **desired audience and general fit**.

# For Every Paper Submission

The primary author(s) will be the one(s) responsible for:

- Prepping and formatting the final document (we will go over it one last time together before it goes out.
- Ensuring all other co-authors are forwarded versions for input/revision.
- Submission by web or mail: use Hammond log-in, password
- Distribute a final **Word file** and pdf copy to each author.
- Paper reprints: Electronic pdf version is easier to distribute to others, hard reprints ordered for very significant journals