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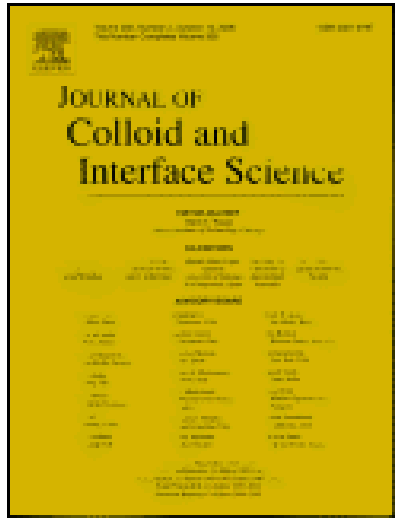
# JOURNAL OF Colloid and Interface Science




# Journal of Colloid and Interface Science Author Workshop

# Preparing a manuscript for JCIS

Presented by: Professor Julian Eastoe – Co-Editor JCIS
Date: Tuesday 16th October 2006

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- Why are papers published in JCIS?
- Planning a manuscript
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# Why are papers published in JCIS?

The *Journal of Colloid and Interface Science* publishes original research on fundamental principles in chemistry, chemical engineering, physics, applied mathematics, materials science, polymer science, electrochemistry, geology, agronomy, biology, medicine, fluid dynamics, and related fields.

# Why are papers published in JCIS?

Manuscripts accepted in JCIS significantly advance knowledge and understanding in the field of colloids and interface science.

Manuscripts rejected by JCIS do not make any new or useful contributions.

- no scientific interest
- reports of results with no scientific conclusions
- incorrect/unacceptable conclusions
- copied or plagiarized work
- repetitious work
- poorly executed work

# Planning a manuscript


- decide on the reason for the paper

  what new colloid and interface science does it communicate?
  what are the conclusions?

- prepare in advance the figures and tables for inclusion into the main manuscript and Supporting Materials

  use them to help you write the manuscript – by your side as you type

# Planning a manuscript

write your manuscript so that it tells a clear story – it must have a purpose

you want people to learn about your work – make it easy for them

make it easy for reviewers and editors

use the spell checker and grammar checker

insert the figures/tables into the document where you would like them to appear in the paper – include the captions

make neat breaks between pages and sections

include page numbers – include line numbers

use 11 pt or 12 pt font size – use double line spacing

give the document a professional look

# Planning a manuscript

When preparing a new article for submission to JCIS, authors are now asked to strongly consider using supporting material. In planning the manuscript, please remember:

*1. Journal space is precious.* Papers must be concise, and interesting to the readership. The article is more likely to have a positive impact on the reader if it focuses on *important new results*.
*2. Be self-critical and selective.* Strive to produce a clear, lucid, efficient manuscript that will attract the reader to your work. Does the scientific importance of the work justify the journal space? Is the work unnecessarily fragmented? Is it repetitious with previous publications in the area?
*3. Use supporting material.* Place figures, tables, and/or text that are of secondary importance in this section and submit it with your manuscript so that is accessible to the editors and reviewers.

The JCIS editorial team will ask for reviewers' advice on whether a manuscript can be more concise. Therefore, appropriate use of supporting material may be a necessary condition before a manuscript can progress to publication.

# Structure of a manuscript


- Each section has a definite purpose

1. Graphical abstract

   an eye-catching, clearly presented picture that conveys the important result or finding

   take time on this
   discuss with your co-authors
   your opportunity to attract readers' attention

# Structure of a manuscript

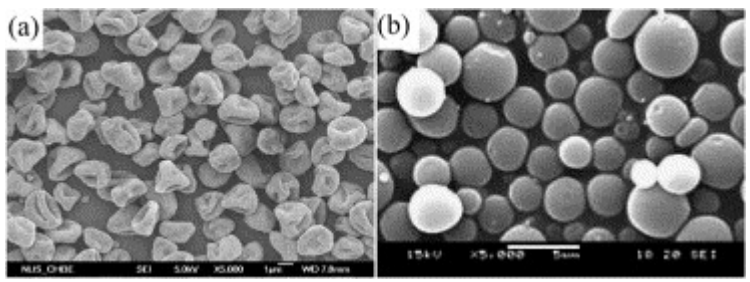
- 1. Graphical abstract – good example

**Electrohydrodynamic atomization for biodegradable polymeric particle production**
Jingwei Xie, Liang Kuang Lim, Yiyong Phua, Jinsong Hua and Chi-Hwa Wang,

Journal of Colloid and Interface Science
Volume 302, Issue 1 , 1 October 2006, Pages 103-112

doi:10.1016/j.jcis.2006.06.037

**Graphical abstract**
Controllable size and morphology of biodegradable polymeric particles were achieved by the electrohydrodynamic atomization technique. Cenosphere and spherical particles were obtained by controlling the solvent evaporation rate under different experimental setups.




**Keywords:** Electrohydrodynamic atomization; Biodegradable; Polymeric; Nanoparticles; Microparticles

# Structure of a manuscript

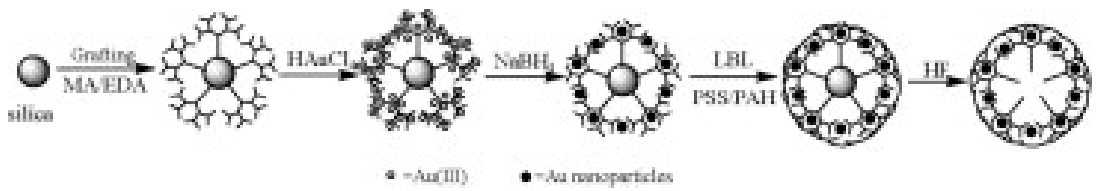
- 1. Graphical abstract – good example

**Preparation of hollow capsule-stabilized gold nanoparticles through the encapsulation of the dendrimer**

Hongying Wu, Zelin Liu, Xudong Wang, Baohui Zhao, Jian Zhang and Chenxi Li

**Journal of Colloid and Interface Science**
Volume 302, Issue 1 , 1 October 2006, Pages 142-148
doi:10.1016/j.jcis.2006.06.019

**Graphical abstract**




**Keywords:** Gold; Dendrimer; Capsule; Polyelectrolyte; PAMAM; Layer-by-layer; Silica; Nanoparticles; Catalysis; Modification

# Structure of a manuscript


## 2. Title

short and concise
avoid chemical technical jargon (chemical names)

what is the paper broadly about?

take time on this
discuss with your co-authors
your opportunity to attract readers' attention

# Structure of a manuscript

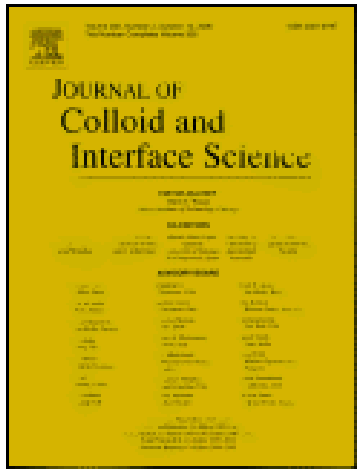

## 2. Title - what is the paper broadly about?

good examples

Dimensionless plot analysis: A new way to analyze functionalized microgels

Generation of metal oxide nanoparticles in optimized microemulsions

# Structure of a manuscript




## 3. Abstract

a brief paragraph summarizing the main findings (not conclusions)

typically 0.5 – 1 side

your opportunity to attract readers' attention

# Structure of a manuscript

## 3. Abstract – good example

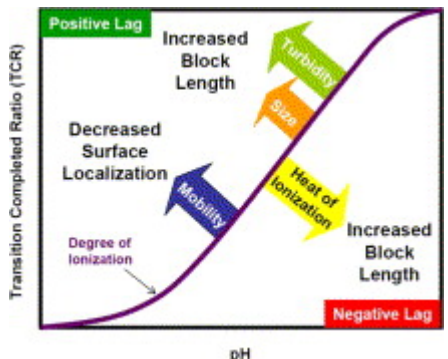
**Dimensionless plot analysis: A new way to analyze functionalized microgels**
**Todd Hoare and Robert Pelton**

Journal of Colloid and Interface Science
Volume 303, Issue 1 , 1 November 2006, Pages 109-116
doi:10.1016/j.jcis.2006.07.047

Abstract
A novel dimensionless plot strategy is developed in which multiple, independently measured macroscopic variables characterizing the same microgel phase transition are reduced onto a zero-to-one scale and simultaneously plotted. This strategy allows for direct comparisons to be made between changes in these variables over the phase transition, generating graphical “fingerprints” characteristic of specific radial and chain functional group distributions. This method is applied to study the swollen state properties of pH-induced phase transitions in five poly(*N*-isopropylacrylamide)-based microgels with significantly different but well-understood COOH functional group distributions. Radial functional group distributions identified based on this method match the distributions observed via electron microscopy, while the impact of functional group clustering on the ionization-driven swelling response can be directly identified. Change ratio plots in which the percentage changes of two different variables are plotted as mutual functions are also applied to generate semi-quantitative diagnostic parameters for probing radial functional group distributions and gaining insights into the mechanisms of gel phase transitions.

This paper also has a very nice graphical abstract

**Graphical abstract**
A novel dimensionless plot strategy in which multiple independent measurements of a volume phase transition are plotted on the same graph is used to generate graphical “fingerprints” of functional group distributions in thermosensitive microgels.



# Structure of a manuscript


## 4. Introduction

a. explain the scientific area that relates to the work

b. explain why the work is important and/or interesting
what is the new colloid and interface science ?

c. introduce the main scientific publications on which your work is based

typically 20-50 papers, include review articles for economy

# Structure of a manuscript


## 4. Introduction

d. outline the structure of the paper – what is in it?

typically 2 – 3 sides

long introductions put readers off

out of date references and incomplete lists will be criticized by reviewers

# Structure of a manuscript

## 5. Materials and methods

describe chemicals materials and equipment used
give commercial sources/purities
so that readers could reproduce your experiments

include any NEW synthetic procedures and associated chemical characterization (NMR/IR/Mass Spec etc)

for previously published procedures – use references and Supporting Material

# Structure of a manuscript


## 5. Materials and methods

describe NEW theory or approaches to data analysis

for previously published theory/equations – use references and Supporting Material

reviewers will criticize incomplete/incorrect descriptions

# Structure of a manuscript


## 6. Results and discussion

- decide on a logical order of figures and data that tells a clear and easy to understand story
- describe the figures and tables in turn
- compare and contrast your results with those in related publications which you have referenced – this is very important – if it is not done the paper will be rejected
- insert the figures/tables into the document in the area you would like them to appear in the paper – include the captions

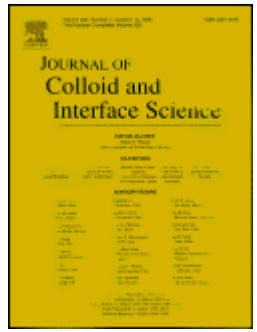
# Structure of a manuscript


## 6. Results and discussion

- use appropriate sub-headings to keep results of the same type together – easier to review and read

- typical length 8-15 sides

# Structure of a manuscript




## 7. Conclusions

- explain how the work advances the field from the present state of knowledge
- include a clear SCIENTIFIC JUSTIFICATION for the work
- make it clear what is new/interesting/significant/notable about the work
- explain how these results contribute towards improved understanding or point to new applications
- explain the wider implications for colloid and interface science?

- without a clear well-structured conclusions section reviewers and readers will find it difficult to judge the work, and whether or not it merits publication in JCIS

# Structure of a manuscript


## 8. References

- Include the main scientific publications on which your work is based

  typically 20-50 papers, include review articles as appropriate

- make sure the list is up to date

# Structure of a manuscript


## 9. Figures
### use Supporting Material for figures of secondary importance

produce clear figures – take time on this
the visual appearance is very important

un-crowded plots – 3 or 4 data sets max
well selected scales – use up the space
tick marks – spacing – axis label sizes
symbols clear to see and data sets easy to discriminate

6-8 is a ideal number of figures in the main paper
include the ESSENTIAL  data only

# Structure of a manuscript

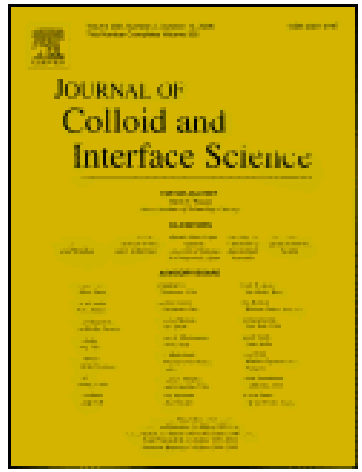

## 10. Tables
### use Supporting Material for tables of secondary importance

produce clear tables – take time on this
the visual appearance is very important

do not include long boring tables in the main manuscript
e.g. chemical compositions of emulsion systems

1-3 is a ideal number of tables in the main paper
include the ESSENTIAL data only

# Length of a manuscript




## Regular articles

| | |
|---|---|
| abstract | 1 |
| introduction | 2 |
| materials | 2 |
| results and discussion | 10-12 |
| conclusions | 2 |
| figures | 6-8 |
| tables | 2 |

25-30 pages is an ideal length for the submitted manuscript

include the ESSENTIAL  data only

reviewers and editors will ask for overlong manuscripts to be shortened

# Length of a manuscript


## Letters or Notes

Letters to the Editors and Notes are restricted to 2000 words or less and three figures and/or tables or less

# Supporting Material

make use of supporting material, which will be available online to readers if the paper is eventually published. This supporting materials section should be referred to in the main manuscript to direct reader, as appropriate. You will find details about the use of supporting material in the JCIS instructions to authors webpage.
http://www.elsevier.com/wps/find/journaldescription.cws_home/622861/authorinstructions

In this information age, new Internet resources such as journal *supporting material* have prompted a fresh look at the structure, form, and appearance of published scientific papers. The electronically accessible *supporting material* section now presents exciting new opportunities for improving readability and efficiency of scientific journals. Importantly, readers still have access to supporting material accompanying the main pape through the Web; they can choose whether to view or print it as need be.
In particular, figures, tables, passages describing theory, or experimental details, which are only of secondary importance to the main scientific thrust of an article, can now be moved to supporting material. This has begun to open up new possibilities: papers that have in the past been considered as “long” and “heavy going” can be transformed into succinct information-rich articles, which are more interesting to read. Through intelligent and creative use of supporting material, your work can potentially gain a wider readership and have greater scientific impact

# Supporting Material

When preparing a new article for submission to JCIS, authors are now asked to strongly consider using supporting material. In planning the manuscript, please remember:

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# Cover letter and suggested reviewers

write a brief cover letter – 1 side – introducing the manuscript and explaining why you feel it deserves to be published in JCIS

supply the names and e-mail contact details of a minimum of five potential reviewers who are NOT also members of the JCIS board

names of board members can be found at http://www.elsevier.com/wps/find/journaleditorialboard.cws_home/622861/editorialboard

the Editor may request you provide at least five names and e-mails before the manuscript can pass to the review stage

this could hold up your manuscript

# English

readers will find it difficult to learn about the scientific content of the work if the science is not clearly expressed and/or there are grammatical, spelling and typographical errors.

if you need it, advice on English services is given on the JCIS webpage, http://authors.elsevier.com/GuideForAuthors.html?PubID=622861&dc=GFA

do you have a colleague in your department or institute, who has a high level of English, who you might ask to help by proof reading the new version before it is submitted?

# Revising the manuscript


in your letter of reply:-

address the comments for each reviewer and the Editor point by point

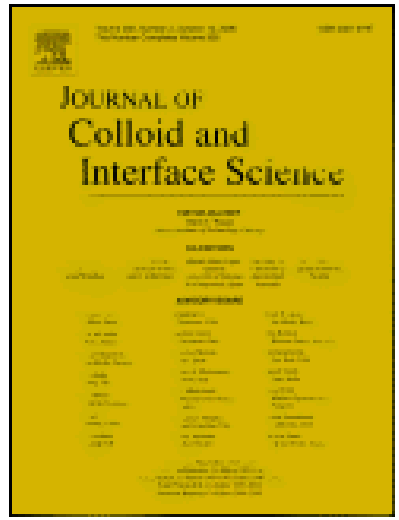
cut and paste each comment/question – then answer it directly below – this helps the Editor and any other reviewers

do not miss out any of the comments

identify where on the manuscript changes have been made (page and line number)

if you think a reviewer is wrong/made a mistake
provide a convincing, solid and polite answer

# Examples of good practice




Pelton paper

Ali paper 1

Wuhan paper

Ali paper 2


# Discussion & Feedback