Dissertation/Thesis Workshop

Fall 2019 and Winter 2020

Note: Please refer to the Graduate Division website for the full formatting manual and other details. The following slides only provide a summary and contain information specific to fall 2019 and winter 2020.
Progressive Agenda

- Graduate Advisers
- Writing Hub
- Degree Filing Process
- Formatting Guidelines
- Permission Letters
- ProQuest
- Q&A
Graduate Advisers

Jessica Whittier, Master’s Adviser (A-L)

Kim McCusker, Master’s Adviser (M-Z)

Sara Miceli, Professional Degree & Joint Doctoral Program Adviser

Van Lee-Yamamoto, Ph.D Adviser
Get Writing Help from the Writing Hub!

- Open to enrolled graduate students
- **Free** one-on-one appointments with a graduate student writing consultant
  - 30-60 minute appointments, up to 2 appointments/week
  - Can work with any project, at any stage
  - Supportive, in-depth conversations about your writing
    - Actionable feedback on clarity, organization, coherence, etc.
    - Not available for format-checking, will focus on the writing
- **Plus:** Daily Grad Writing Room, Writing Retreats, and more!

Learn more: [WritingHub.ucsd.edu](http://WritingHub.ucsd.edu)
Setting up your Defense

- Work with your advisor, committee members, and graduate coordinator to set up your defense date
  - The preferred means to conduct the defense is when all committee members are physically present
  - A committee member can participate in three ways: physically present, telepresent, or in advance of the exam date
  - More than half of your committee must be physically present
  - The committee chair/co-chairs must always be physically present at a final examination/defense*
  - A tenured outside member must always be physically present or telepresent at a final examination/defense* (doctoral committees)
  - Detailed information can be found on the Degree Completion page on our website
Setting up your Defense

- Always schedule your defense date around your chair/co-chairs and the outside tenured faculty member.

- Work with your graduate coordinator well in advance of your defense date to make sure the committee members listed on your student record are correct and reconstitute your committee if needed.

- Work with your advisor and graduate coordinator to ensure everything is in order for your defense.
Making Appointments

https://gradforms.ucsd.edu/calendar

- Schedule appointments once your defense has been scheduled (preliminary and final)
- Preliminary appointments should be scheduled up to one month prior to your defense and final appointments should be scheduled for after your defense (by the degree filing deadline)
- If cancellations need to be made, do so 24hrs in advance
- Contact us if you’re unable to log on so we can get you on our calendar
- Last 2 weeks – reserved for final appointments
- Consider filing deadlines…
  - Please don’t wait until the end of the quarter to try to schedule!
- Our calendar is only open 60 days in advance
Important Deadlines

Fall 2019 Degree
- Friday, December 13, 2019

Winter 2020 Degree
- Friday, March 20, 2020

Note: The degree filing deadline is always the 11th Friday of each quarter.
Preliminary Appointment

- Upload your fully formatted draft to ProQuest prior to your appointment
  - In ProQuest, you don’t have to fill out all information to upload the draft for the preliminary appointment; create a submission, add your contact information, and upload your PDF. Other details can be filled out when you complete the submission process for the final appointment
- We review for edits (**Edits are common!**)
- We review academic history
- We will go through the check list of what paperwork is needed to file for graduation
Final Checklist

- Signature Page (page iii from your dissertation or thesis)
- Final Report Form
  - Master’s students must pay a $25 thesis submission fee at the Cashier’s Office prior to submitting this form. This fee is not required for PhD students since it was paid during Advancement to Candidacy
  - For Joint Doctoral students, this is the JDP #5 Form
- First page of Abstract
- Dissertation/Thesis Release Form (upload to ProQuest submission)
- Permission letters (if applicable)
- General petition form to pay filing fee, readmission fee, or to waive residency requirement (if applicable)
- Re-advancement form (if more than 5 years has passed since Advancement to Candidacy, usually only applies to PhD students)
In Between Appointments

- Defend

- Complete any new edits requested by the committee. Keep in mind that minor formatting edits may still be necessary

- Prepare documents: obtain all signatures, required forms, and permission letters if applicable

- Pay any applicable fees at the Cashier’s Office (filing fee, re-admit fee, re-advancement fee, Master’s thesis submission fee)
Final Appointment

- A day prior to final appointment – submit final version of your dissertation/thesis for review
- Submit all forms and other paperwork to file for graduation
- Final formatting edits can still be made after the final appointment but must be submitted and approved by the filing deadline (not recommended)
- We’ll file your paperwork with the Registrar’s Office after the end of the quarter
The **BLUE** Book

**THE GUIDE**

[http://grad.ucsd.edu/academics/preparing-to-graduate](http://grad.ucsd.edu/academics/preparing-to-graduate)
General Specifications

- **Minimum Margins**
  - 1” on all sides, but can be set slightly larger

- **Font and Font Sizes**
  - Standard fonts are Arial, Times New Roman, Helvetica, etc.
  - May use 10pt, 11pt, or 12pt

- **Pagination**
  - All page numbers are centered at the bottom, 0.5” from the bottom edge
  - Roman numerals begin on signature page through preliminary pages, Arabic numerals begin in main body of text

- **Paragraphs**
  - All material in main body of text should be double spaced
  - All new paragraphs must be indented 0.5”
Preliminary Pages

- Title Page
- Copyright or Blank Page
- Signature Page
- Dedication/Epigraph
- Table of Contents
- List of Abbreviations (Symbols)
- List of Figures (Tables, Spectra, etc.)
- Acknowledgements (only if no co-authors and not published)
- Vita – optional for Masters students
- Abstract of the Dissertation/Thesis
UNIVERSITY OF CALIFORNIA SAN DIEGO

This is the Title of My Dissertation

A dissertation submitted in partial satisfaction of the requirements for the degree Doctor of Philosophy/Doctor of Musical Arts/Doctor of Education

in

My Degree Title

by

My Name as it is listed on UC San Diego Academic Records

Committee in charge:

Professor Eta Theta, Chair
Professor Gamma Delta, Co-Chair (if applicable)
Professor Lambda Kappa
Professor Iota Mu
Professor Epsilon Zeta

2018
SIGNATURE PAGE

Roman numeral page numbers begin on page iii

0.5” from bottom of the page

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Right align page numbers and use ellipses

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LIST OF FIGURES/TABLES/SCHEMES, ETC.

Max 4 lines in list(s), and numbering should be denoted by chapter or continuous.
ACKNOWLEDGEMENTS

I would like to acknowledge Professor Eta Theta for his support as the chair of my committee. Through multiple drafts and many long nights, his guidance has proved to be invaluable.

I would also like to acknowledge the “Smith Clan” of lab 28, without whom my research would have no doubt taken five times as long. It is their support that helped me in an immeasurable way.

Chapter 2, in full, is a reprint of the material as it appears in Numerical Grid Generational in Computational Fluid Mechanics 2017. Smith, Laura; Smith, Jane D., Pineridge Press, 2016. The dissertation/thesis author was the primary investigator and author of this paper.

Chapter 3, in part, has been submitted for publication of the material as it may appear in Education Mechanics, 2017, Smith, Laura; Smith, Jane D., Trailing Press, 2017. The dissertation/thesis author was the primary investigator and author of this paper.

Chapter 5, in part is currently being prepared for submission for publication of the material. Smith, Laura; Smith, Jane D. The dissertation/thesis author was the primary investigator and author of this material.

Chapter 6 is coauthored with Smith, Jane D. and White, Sigmund. The dissertation/thesis author was the primary author of this chapter.
VITA

The minimum requirement is educational information

VITA

2006  Bachelor of Arts, University of California, Berkeley
2006-2011  U.S. Marines
2011-2012  Teaching Assistant, University of California San Diego
2013  Master of Science, University of California San Diego
2013-2017  Research Assistant, University of California San Diego
2018  Doctor of Philosophy, University of California San Diego

PUBLICATIONS

“Distribution of Control Points in a System for Analysis of Stress Distribution”

FIELDS OF STUDY

Major Field: Engineering

Studies in Applied Mathematics
Professors Alpha Beta and Gamma Delta
ABSTRACT OF THE DISSERTATION/THESIS

First page of the abstract only, special top margin of at least 2.5"

ABSTRACT OF THE DISSERTATION

Place Full Title of
Doctoral Dissertation Here

by

Your Name as it is listed on UC San Diego Academic Records

Doctor of Philosophy/Doctor of Musical Arts/Doctor of Education in Degree Title

University of California San Diego, 2018

Professor Eta Theta, Chair
Professor Alpha Beta, Co-Chair

The Abstract begins here. The abstract is limited to 350 words for a doctoral dissertation. It should consist of a short statement of the problem, a brief explanation of the methods and procedures employed in generating the data, and a condensed summary of the findings of the study. The abstract may continue onto a second page if necessary. The text of the abstract must be double spaced.
Introduction and Beyond

CONSISTENCY

....is the key!
Chapter 1. Introduction

It is estimated that lighting accounts for 22% of the total US electrical energy use and 7% of the global primary energy expenditures. From the latest available data from the U.S. Department of Energy (DOE), it showed that more than 70% of electricity used for total lighting is for commercial and residential lighting with 85% of residential lighting using incandescent lights and fluorescent lamps, as shown in Figure 1.1 [1]. Since most of the energy used for the incandescent lamp is wasted as infrared radiation and mercury in the fluorescent lamps can cause environmental problems, there have been long efforts to improve the efficacy of the technology, as well as developing a more energy efficient light and environmental source to replace incandescent and fluorescent lighting [2].

The beginning of modern lighting technology is generally attributed to the invention of the incandescent lamp by Sir Thomas Edison in 1879 [3]. The color of light produced by a heated metal filament in an incandescent lamp appears close to that of the sun, to which the human eye has been adapted [4]. Objects illuminated under an incandescent light would appear to have a natural color. To determine the “quality” of a light source, one parameter called the color rendering index (CRI) is often used. This index, with a scale of 0 to 100, measures the ability of the light source to accurately display the color of an object compared to a standard illuminant [4].

The incandescent light has a high CRI of about 100, while low pressure sodium lamps have CRI of about 18 [4]. However, about 95% of the electricity used by a typical incandescent light bulb is wasted as heat and infrared radiation, which results in a low luminous efficiency of ~12 lumens per watt (lm/W) [4]. With a tungsten-halogen cycle, halogen incandescent lamps have longer filament lifetimes as the filament evaporation rate is reduced. This also allows the halogen lamps to be at full brightness for longer times and have a comparable CRI relative to the traditional incandescent lamps, resulting in more than twice the efficiency (~30 lm/W) [4]. Unlike
Figure 2.3. Color ranges of LEDs depending on the semiconductor composition [10].

Table 2.1. Comparison of energy efficiency, luminous efficacy (lumen/watt), lifetime, heat and presence of mercury of common lighting light sources [5]:

<table>
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<th>Incandescent</th>
<th>Halogen</th>
<th>Compact Fluorescent</th>
<th>High Intensity Discharge</th>
<th>LED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy efficiency</td>
<td>Very low</td>
<td>Low</td>
<td>High</td>
<td>High</td>
<td>Very High</td>
</tr>
<tr>
<td>Luminous efficacy (lumen/Watt)</td>
<td>14 24</td>
<td>60-100  65-110</td>
<td>80-140</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lifetime (hours)</td>
<td>1000</td>
<td>2000-5000</td>
<td>6000-10000</td>
<td>30000</td>
<td>50000</td>
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<tr>
<td>Heat</td>
<td>Yes+++</td>
<td>Yes+++</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Mercury</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
</tbody>
</table>
Acknowledgements

This is the first study comparing the crystallite and particle sizes and morphology with the respective photoluminescence emission intensity of two phosphor compositions prepared by five methods. $Y_2O_3$, $Y_2O_3:Eu^{3+}$, and $LaPO_4:Ce^{3+}$, $Tb^{3+}$ powders were prepared by combustion reaction, co-precipitation, hydrothermal, sol-gel, and spray pyrolysis synthesis methods. For $Y_2O_3:Eu^{3+}$, the sol-gel method showed the highest PL emission intensity compared to other methods having a crystallite size of 28 nm and an average particle size of 2.19 nm. The spray-pyrolyzed powders have the lowest intensity with a 13 nm crystallite size and an average particle size of 0.56 μm. For $LaPO_4:Ce^{3+}$, $Tb^{3+}$, the co-precipitation method has the highest PL emission intensity with 35 nm crystallite size and an agglomerated morphology. The spray-pyrolysis method produces the lowest intensity with a crystallite size of 14 nm and a spherical and un-agglomerated morphology.

This study shows that a large crystallite size along with nearly-spherical and agglomerated particles tend to emit the highest PL intensity. The results show in general increasing intensity as a function of increasing crystallite size, with the exception of combustion-synthesized $Y_2O_3:Eu^{3+}$ particles and co-precipitated $LaPO_4:Ce^{3+},Tb^{3+}$ particles, which show high intensity with a relatively small crystallite size. The characteristic of producing high intensity with small crystallite size needs to be investigated further in detail. These was a slight increase in photoluminescence emission intensity with increase in particle size.

Acknowledgements

This work was supported by the U.S. Department of Energy Grant, DE-EE0002003. Chapter 5, in full, is a reprint of the material as it will appear in Materials Characterization, Seung-yoo Lee, Joe Li Choi, Inkyun Han, Youngmin Kim, Jon B. Talbert, and Joanna McKittrick. The dissertation author contributed the synthesis of the phosphors and characterization.

References

Permission Letters

- Permission letters (cover letter from advisor/co-author letters) are required if you are using any of your own work in your dissertation or thesis that contains the following:
  - Published material
  - Material that has been submitted for publication
  - Material that is currently being prepared for submission for publication
  - Unpublished material that contains co-authors, even if there are no future plans to submit for publication
- This work must be acknowledged in your Acknowledgements section and at the end of each respective chapter
Dear Dean Antony:

We request permission for Laura Smith to use the following material in her doctoral dissertation/master’s thesis. Ms. Smith was the principal researcher/author on this paper.


OR

We request permission for Laura Smith to use material that has been submitted for publication. Ms. Smith was the principal researcher/author on this paper.

Smith, Laura; Smith, Jane D.; White, Sigmund. “The Effect of Stress Distribution on Photoelasticity”.

OR

We request permission for Laura Smith to use material in her doctoral dissertation/master’s thesis. Ms. Smith was the principal researcher/author on this paper.

Smith, Laura; Smith, Jane D.; White, Sigmund. Chapter 6, Title.

Chair of Committee

Student’s Name
MM/DD/YYYY

Laura Smith has my permission to include the following paper, of which I was a co-author, in her doctoral dissertation/master’s thesis.


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Smith, Laura; Smith, Jane D.; White, Sigmund. Chapter 6, Title.

Jane D. Smith

Typed stylized font signatures — not permitted
ProQuest – Publishing Options

- Will be published on ProQuest and UC eScholarship

Publishing Options

- Traditional (no charge) vs. Open Access
  - This option pertains specifically to how your dissertation/thesis is released in the ProQuest database. Your work will always be open access on eScholarship

- Immediate release
- Embargo: One year
- Embargo: Two years
  - Mandatory for Biology, Biomedical Sciences, Sociology

- MFA in Writing: 10 years

- Upload signed dissertation/thesis release form with ProQuest submission – match with publishing option
  - Your Advisor’s signature is required regardless of the publishing option
Final Submission on ProQuest

- The submission process is free of charge unless you select any of the following optional payment items during final submission:
  - Register copyright at the Library of Congress
    - ProQuest can only do this on your behalf if you are the sole author. If you have co-authors and want to register your copyright, you have to go through the Library of Congress directly on your own
    - You have copyright regardless, registering at the Library of Congress is just an extra level of protection
  - Select open access publishing for ProQuest (eScholarship is already open source)
  - Order personal copies

- Important!!!
  - Remember to submit your dissertation/thesis all the way through prior to your final appointment for review
  - Don’t worry, it’s not final until your paper is accepted so it won’t be published immediately after submission and ordered copies will not be printed at that point
Summary Timeline

- Make a preliminary appointment up to one month prior to your defense date. Final appointments should also be scheduled ahead of time for after your defense (by the quarter deadline)
- Work on dissertation or thesis draft so that it is formatted for your preliminary appointment
- Collect permission letters if necessary *(start early!)*
- Defend
- Upload and submit final version on ProQuest and submit all necessary paperwork at final appointment
Q & A
Note: Please refer to the [Graduate Division website](https://grad.ucsd.edu) for the full [formatting manual](https://grad.ucsd.edu) and other details. The previous slides only provide a summary and contain information specific to fall 2019 and winter 2020.
We wish you great success in this final stage of completing your degree!