## Institute of Science and Technology (IOST) Tribhuvan University (T.U.) Kirtipur, Kathmandu Nepal 2014

#### **General Guidelines for Ph.D. Thesis Format:**

In order to maintain the uniformity in the format of the Ph.D. thesis carried out in different departments under Institute of Science and Technology (IOST), Tribhuvan University, Nepal, the following guidelines are prepared.

#### Items included in Ph.D. Thesis:

- i. Cover Page
- ii. Blank Page
- iii. Inner cover page
- iv. Declaration
- v. Recommendation
- vi. Certificate of Approval
- vii. Acknowledgements
- viii. Abstract
- ix. Table of Contents
- x. List of Abbreviations
- xi. List of symbols (if any)
- xii. List of Tables
- xiii. List of Figures

The details of these items with examples are given below.

### (Format for cover page) [TITLE OF THE Ph.D. THESIS] Comment [s1]: (All caps, Bold, Font size: 18) [Logo of T.U.] A THESIS SUBMITTED TO THE Comment [s2]: All caps, not bold, font size: 14) CENTRAL DEPARTMENT OF ..... INSTITUTE OF SCIENCE AND TECHNOLOGY TRIBHUVAN UNIVERSITY **NEPAL** Comment [s3]: All caps, Bold, Font size: 14 FOR THE AWARD OF DOCTOR OF PHILOSOPHY IN ..... Comment [s4]: (All caps, Bold, Font size:14) BYComment [s5]: All caps, not bold, Font size: 14 [FULL NAME OF THE RESEARCH SCHOLAR]

Comment [s6]: All caps, Bold, Font size:14

[MONTH YEAR]

#### (Example of Cover page)

### INVESTIGATION ON INORGANIC SALTS BASED ION SELECTIVE ELECTRODES



## A THESIS SUBMITTED TO THE CENTRAL DEPARTMENT OF CHEMISTRY

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TRIBHUVAN UNIVERSITY

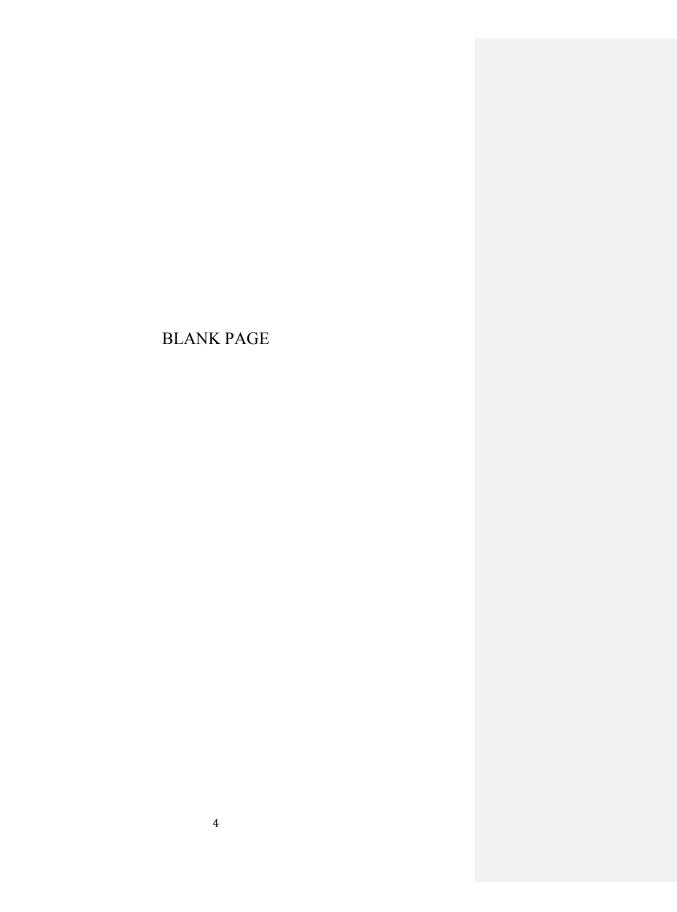
**NEPAL** 

FOR THE AWARD OF
DOCTOR OF PHILOSOPHY
IN CHEMISTRY

BY

ARMILA RAJBHANDARI (NYACHHYON)

JULY 2011



## (Format for inner cover page) [TITLE OF THE Ph.D. THESIS]

[Logo of T.U.]

A THESIS SUBMITTED TO THE

CENTRAL DEPARTMENT OF ......

INSTITUTE OF SCIENCE AND TECHNOLOGY

TRIBHUVAN UNIVERSITY

NEPAL

FOR THE AWARD OF
DOCTOR OF PHILOSOPHY
IN .....

BY

[FULL NAME OF THE RESEARCH SCHOLAR]
[MONTH YEAR]

## (Example of inner cover page) INVESTIGATION ON INORGANIC SALTS BASED ION SELECTIVE ELECTRODES



# A THESIS SUBMITTED TO THE CENTRAL DEPARTMENT OF CHEMISTRY INSTITUTE OF SCIENCE AND TECHNOLOGY TRIBHUVAN UNIVERSITY NEPAL

FOR THE AWARD OF
DOCTOR OF PHILOSOPHY
IN CHEMISTRY

BY
ARMILA RAJBHANDARI (NYACHHYON)
JULY 2011

#### **DECLERATON**

Thesis entitled ".....(in Bold faced letter) ....." which is being submitted to the Central

Comment [s7]: All caps, Bold, Font size: 16

Dep	artme	nt of		, Institute of	Scien	nce and T	Technology(IOST),	Tribhuva	n University,	
Nep	al for	the awar	d of tl	he degree of D	octor o	of Philoso	ophy (Ph.D.), is a re	search wo	rk carried out	
by	me	under	the	supervision	of	Prof.	Dr,	Central	Department	
of	• • • • • •			, Tribhuvar	Univ	ersity and	co supervised by F	rof. Dr		
Thi	s resea	arch is o	rigina	l and has not	been s	ubmitted	earlier in part or f	full in this	or any other	
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#### [signature]

[Name of research scholar]

**Comment [s9]:** Times New Roman, not bold, Font size:12

#### RECOMMENDATION

Comment [s10]: All caps, Bold, Font size: 16

This is to recommend that (official name of research scholar in bold faced letter)	
has carried out research entitled "(in Bold faced letter)	
<b>Bold faced letter</b> ) under my/our supervision. To my /our knowledge, this work has	
not been submitted for any other degree.	
He/She has fulfilled all the requirements laid down by the Institute of Science and Technology	
(IOST), Tribhuvan University, Kirtipur for the submission of the thesis for the award of Ph.D.	
degree.	Comment [s11]: Times New Roman, Font size:
Name of Supervisor	
Supervisor	
(Designation) Central Department of	<b>Comment [s12]:</b> Times New Roman, Bold, Font size: 12
Tribhuvan University	
Kirtipur, Kathmandu,	
Nepal	Comment [s13]: Times New Roman, Font size: 12
Name of Co-Supervisor (if any)	
Co-Supervisor	
(Designation) Central Department of	<b>Comment [s14]:</b> Times New Roman, Bold, Font size: 12
Tribhuvan University	
Kirtipur, Kathmandu,	
Nepal	Comment [s15]: Times New Roman, Font size: 12
[Month Year]	Comment [s16]: Times New Roman, Bold, Font size: 12

#### (This content should be in Letter Head of concerned Department)

#### LETTER OF APPROVAL

Comment [s17]: All caps, Bold, Font size: 16

[Date: Day/Month/Year]	
On the recommendation of Prof. Dr (official name of supervisor/co-supervisor (if any)	
, this Ph. D. thesis submitted by (official name of research scholar)	
, entitled "(in Bold faced letter)" is forwarded by Central Department Research	
Committee (CDRC) to the Dean, IOST, T.U	 <b>Comment [s18]:</b> Times New Roman, Font size: 12
Name of Head of Department	 Comment [s19]: Bold, Times New Roman, Font size:12
Professor, Head,	( <del>******</del>
Central Department of,	
Tribhuvan University	
Kirtipur, Kathmandu	
Nepal	 Comment [s20]: Times New Roman, Font size:

#### **ACKNOWLEDGEMENTS** (Font size – 16, Bold faced letter, all caps)

Text:

12 points font size Not more than 2 pages in justified form Page size:

(Name of Research Scholar)

Month, Year

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#### **ABSTRACT**

#### (Font size – 16, Bold faced letter, all caps)

Text: 12 points font size

Page size: Preferably one page but not more than 2 pages in justified form

#### LIST OF ACRONYMS AND ABBREVIATIONS

(Font size – 16, Bold faced letter, all caps)

#### Example:

(Text:12 points font size)

DC Direct Current

DTA Differential Thermal Analysis

#### LIST OF SYMBOLS (if any)

#### (Font size – 16, Bold faced letter, all caps)

#### Example:

(Text: 12 points font size)

- γ Activity Coefficient
- ε Relative Dielectric Constant
- $\epsilon_0$  Dielectric Permittivity

#### LIST OF TABLES

(Text : 12 points font size)	Page No.
Table 1(Bold faced letter):(not bold)	1
Table 2(Bold faced letter):(not bold)	2

#### LIST OF FIGURES

Example: (Text: 12 points font size)	
P	Page No
Figure 1(Bold faced letter):(not bold)	- 1
Figure 2(Bold faced letter):(not bold)	- 2

#### TABLE OF CONTENTS

(Text: 12 points font size)	D. M
	Page No.
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List of Symbols (if any)	viii
List of Tables	ix
List of Figures	X
CHAPTER 1 (Bold faced, all caps, 14 font size)	
1. INTRODUCTION (Bold faced, all caps, 12 font size)	. 1
1.1 Introduction ( bold, 12 font size)	
1.2 Rational	
1.3 Objectives	
CHAPTER 2 (Bold faced, all caps, 14 font size)	•••••
2. LITERATURE REVIEW	•••••
2.1 (Sub headings, if any)	
2.2, etc.	
CHAPTER 3 (Bold faced, all caps, 14 font size)	•••••
3. MATERIALS AND METHODS	
3.1 (Sub headings, if any)	

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٤.	2.			etc.	

CHAPTER 4 (Bold faced, all caps, 14 font size).....

#### 4. RESULTS AND DISCUSSION

- 4.1 (Sub headings, if any)
- 4.2...., etc.

CHAPTER 5 (Bold faced, all caps, 14 font size).....

#### 5. CONCLUSION AND RECOMMENDATIONS

CHAPTER 6 (Bold faced, all caps, 14 font size).....

6. SUMMARY

#### REFERENCES

**APPENDIX:** Scientific Publication, questionnaires, long computational algorithms (if necessary)

**Note:** Ph.D. thesis for some of the departments such as Statistics and Mathematics may not fit into the above mentioned patterns (Introduction, Review of Literature, Materials and Methods, Results and Discussion, Conclusion, Summary and Recommendation for Further Work). For such situations, the body part of the thesis should be of having the following order:

- i. Introduction
- ii. Chapters with the specific heading covering the research work done by the Ph.D. research scholar.
- iii. Summary and conclusions (This includes the overall summary, conclusions and the recommendation for further work if applicable).

Hence the Ph.D. research scholar from Department of Mathematics and Statistics may follow either one of these two patterns whichever suits based on the nature of the work. This alternative format is given below.

#### **TABLE OF CONTENTS**

(Text: 12 points font size)	Page No.
Title Page	i
Declaration	ii
Recommendation	iii
Certificate of Approval	iv
Acknowledgements	v
Abstract	vi
List of Abbreviations	vii
List of Symbols (if any)	viii
List of Tables	ix
List of Figures	X
CHAPTER 1(Bold faced, all caps, 14 font size)	
1. INTRODUCTION-(Bold faced, all caps, 12 font size)	
1.4 Introduction (not bold, 12 font size)	
1.5 Rational	
1.6 Objectives	
CHAPTER 2(Bold faced, all caps, 14 font size)	•••••
Chapter 2 (Chapters with specific heading based on research work)	
Chapter 3(Chapters with specific heading based on research work)	
Chapter 4(Chapters with specific heading based on research work)	

CHAPTER 5 (Bold faced, all caps, 14 font size).....

#### 5. SUMMARY AND CONCLUSIONS

- 5.1 Summary
- 5.2 Conclusions
- 5.3 Recommendations for Further work

#### REFERENCES

**APPENDIX:** Scientific Publication, questionnaires, long computational algorithms (if necessary)

#### Language:

- Must be written in English language
- Presentation of thesis in Viva-Voce examination should also be conducted in English medium.

#### Length:

• Preferably is between 100 to 300 pages including all pages of the thesis

#### **Printing:**

- High contrast laser printing (single sided printing only)
- Good quality of white bond paper of A4 size (210 mm × 297mm)
- Photocopy is not acceptable

#### Typeface and font size:

- Must be written in Times New Roman.
- The font size should be 12 points throughout the text including page numbers except other things mentioned in some preliminary pages
- The font size for headings should be 12 (bold faced letter) and for subheadings 12(bold faced letter).
- The scientific names should be in italics
- Equations and formulae should be preferably typed in 10 or 12 point font size.

#### **Tables and Figures:**

- Should appear in the text closely following the point where it is first discussed
- The table number and heading should be placed above the body of the table
- The figure number and the caption should be in general placed below the figure except some constraints for the software generated figures.
- The text font size in the table and figure should be 10 and font is Times New Roman.

Example: <b>Figure 1(Bold):</b>	(	(Title: Not bold)
Table 1(Bold):		(Title: Not bold)

• Figure and table numbering must be continuous throughout the thesis.

#### **Margins:**

• Top, right hand, and bottom margins: 2.5 cm

- Left hand margin: At least  $1\frac{1}{2}$  inches so that binding should be accommodated
- Page numbers should be at least  $\frac{1}{2}$  inch from every lower edge
- The text should be justified

#### **Spacing:**

- Spacing throughout body of text: 1.5 spacing
- Spacing for references: 1.5 spacing *within* each entry but double spacing *between* each entry.
- Spacing for table of contents, list of tables, list of figures or illustrations, and lengthy tables: 1.5 or even single spacing may be used.

#### **Binding:**

- Good quality of hard binding (in black color and printed with golden ink) is required.
- The following information must be printed on the spine of the binding:
  - o Title (the student should provide a shortened version if necessary)
    - Author's last name
    - Year of submission of the thesis

#### Pagination:

- Every page in the thesis has a number.
- For the preliminary pages (such as declaration, certificate of approval, table of Contents, list of tables, list of figures, list of tables, list of symbols, etc.) use small Roman numerals (i, ii, iii, iv, v...). These may be placed at the bottom of the page. Count the inner cover page as page i and the other pages such as declaration, certificate of approval, dedication page (if any) ii, iii, iv, etc, but do not print the page number on inner cover page. Print the page numbers from "Declaration.
- For the text, use Arabic Hindu numbers (1, 2, 3, 4, 5...) starting with page one (the first page of the text

itself i.e. Chapter 1).

#### **Subunits in the Contents:**

Subunits of the contents should be as follows:

1.1 1.1.1

1.1.1.1

1.1.1.1.1

1.1.1.1.1.a

Page numbers can be centered at bottom and should be at least half an inch from any edge of the
paper to avoid loss when the thesis is trimmed. Since page numbers are used to demonstrate that
the thesis is complete, every page must be consecutively numbered, including the pages
containing tables, graphs, illustrations, and references.

#### **Photographs:**

- The clear with high resolution photographs should be used wherever necessary
- The colored or black and white photographs can be used in the thesis.

#### Use of color:

• Colored graphics may be used when appropriate. However, all copies of the thesis must be identical.

#### **Reference and Citation in the Text:**

The references should be arranged in alphabetical with chronological order by surname of the first author. American Psychological Association (APA) format should be preferably followed for references and citations in the text. Spacing for references should be of 1.5 spacing within each entry but double spacing between each entry. Also use hanging indents: entries should begin flush left with subsequent lines indented. However, any other standard format such as AMS (American Mathematical Society), AIP (American Institute of Physics), ACS (American Chemical Society), etc. can also be accepted in their respective subjects but the format must be uniform throughout the thesis.

Typical style of writing the references and citations in APA format are given below.

#### **BOOKS:**

#### One Author:

Surname, initials, (year), Title of the book, Place, Publication

Gore, A. (2013). An inconvenient truth: The Planetary emergency of global warming and what we can do about it. Emmaus, PA: Rodale.

Citation in the text: (Gore, 2013) or Gore (2013) explained.......

#### Two Authors:

Michaels, P.J., & Balling, R.C. (2000). *The satanic gases: Clearing the air about global warming.* Washington, DC: Cato Institute.

Citation in the text: (Michaels & Balling, 2000) or Michaels and Balling (2000) stated that.....

#### **Three Authors:**

Sthapit, A., Yadav, R., & Khanal, S. (2013). *Fundamentals of Statistics*. Kathmandu, Ashmita Publications.

Citations in the text: (Sthapit, et al., 2013) explained .....

#### **JOURNAL ARTICLES:**

#### One Author:

Khanal S. P. (2011). Achievements, Challenges and Opportunities of Statistics for the Twenty First Century. *Management Dynamics*, **15**(1), 15-21.

Citations in the text: (Khanal, 2011) or Khanal (2011) highlighted.......

#### **Many Authors:**

Thapa, S.S., Khanal, S.P., Paudel, I., Gurung, R., Ruit, S., & Van Rens, H.M.B.(2012). A Population based Survey of the Prevalence and Types of Glaucoma in Nepal: The Bhaktapur Glaucoma Study. *Opthalmology*, 119(4), 759-764.

Citations in the text: (Thapa et al., 2012) or Thapa et al.(2012) found that......

The names of the Journals should be typed exactly as the name of the journal such Stat Med, J Am Stat Assoc, J Chem Phys, Nat Commun, etc.

#### PH.D. /MASTER'S THESIS:

Rajbhandari (Nyachhyon), A. (2011). *Investigation on Inorganic Salts based Ion Selective Electrodes* (Unpublished doctoral dissertation). Central Department of Chemistry, Institute of Science and Technology, Tribhuvan University, Kathmandu, Nepal.

#### INTERNET ARTICLE BASED ON A POINT SOURCE (EXACT DUPLICATE) WITH DOI ASSIGNED:

Stultz, J. (2006). Integrating exposure therapy and analytic therapy in trauma treatment.

\*American Journal of Orthopsychiatry, 76(4), 482-488. doi:10.1037/0002-9432.76.4.482

#### INTERNET ARTICLE (E-JOURNAL) WITH NO DOI ASSIGNED:

Sillick, T. J., & Schutte, N. S. (2006). Emotional intelligence and self-esteem mediate between perceived early parental love and adult happiness. *E-Journal of Applied Psychology, 2*(2), 38-48. Retrieved from <a href="http://ojs.lib.swin.edu.au/index.php/ejap/article/view/71/100">http://ojs.lib.swin.edu.au/index.php/ejap/article/view/71/100</a>
Accessed on (dd/mm/yy).............

#### Format of Examiner's Report

## Examiner's Report (Internal) Institute of Science and Technology (IOST) Tribhuvan University, Nepal Recommendation of Ph.D. Thesis

Name of the Candidate:			
Title of the Thesis:			
	<b>mendation</b> by ticking $()$ any one of the our <b>detailed report</b> on separate sheet(s) with		
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Encl: (i) Detailed report on separa (ii) List of points for clarific			

#### Format of Examiner's Report

## Examiner's Report (External) Institute of Science and Technology (IOST) Tribhuvan University, Nepal Recommendation of Ph.D. Thesis

Name of the Candidate:			
Title of the Thesis:			
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Encl: (i) Detailed report on separa (ii) List of points for clarific			

#### **Format of Remuneration Receipt for Examiner**

### Institute of Science and Technology (IOST) Tribhuvan University, Nepal

I have received amount of NRs(In words:
as a remuneration for the work of Ph.D. thesis evaluation and report preparation (Interna
examiner/External examiner)/ viva-voce examiner/ format checking.

IOST office Authority Receiver's Details

Signature:
Name:
Name:
Designation:
Designation:
Institution:
Date:

#### (Ph.D. Application Form)

Master

#### **Tribhuvan University**

### INSTITUTE OF SCIENCE AND TECHNOLOGY (IOST)

#### Dean's Office, Kirtipur, Kathmandu

Tel: 4330844

Passport Size Photograph

	Application for	m for the	Enrolment in I	Ph.D. Progra	mme	
	Central Departmen	t of				
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ii. iii. iv.	Photo copies of certificates Photo copy of citizenship copies of Ph.D. proposal copies of updated Curr Consent letter from the worl	riculum V	vitae of applica	nt			
16. Dec	laration by the Applicant:						
ii. iii.	<ul><li>i. The information provided above is true and accurate</li><li>i. All documents attached with this Application Form are authentic</li></ul>						
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Place:

<ul> <li>Copies of the documents submitted have been checked with the original document</li> </ul>					
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•	Comments of CDRC (Please attach separate paper if necessary)				
	• Signature of the Head of the Department :	Date			