**TEMPLATE FOR DRAFTING**

**MASTER’S OR DOCTORATE THESIS BY INSERTION OF SCIENTIFC PAPERS**

Department of Chemistry, Université de Sherbrooke

*By Professors Guillaume Bélanger and Pedro A. Segura*

***Read carefully before you start writing.***

In order to write a master’s or doctorate thesis by insertion of scientific papers the student **must obtain prior approval from the Departmental Graduate Studies Committee** (*Comité d’études supérieures départamental*, CESD). The form can be found on the Department of Chemistry website under "Current Students", "Graduate Studies".

Portions of the thesis other than the articles themselves and the appendices must be written in French, **unless express permission from the Faculty Graduate Studies Committee has been requested in advance by the student from the CESD.**

The entire text must be composed using the same verb tense, preferably the **past tense**, in a consistent manner.

**Document sections**

The first two pages of this template are for a dissertation, the next two for a thesis. They must be in French (except for the title) regardless of the language of the document. Fill in the correct pages and delete the other two. The thesis is divided into several parts. The following are specific guidelines for writing and the content of each part:

*Summary:* This section should be succinct and summarize the content of each chapter of results (inserted papers) and the overall conclusion. The summary should not exceed 2 pages.

*Acknowledgements:* Acknowledgements should begin with the research supervisor and end with the financial support. Be sure to include the professionals and others who helped you during your research or writing. Acknowledgements usually fit on one page.

*Table of contents, List of abbreviations, List of tables, List of figures, List of equations, List of diagrams:* See the indications directly in the template.

*Chapter 1 (Introduction):* In this section, you should present the following subsections in a logical order for the readership:

* Contextualize the subject
* Review the relevant literature to ensure that your readership is well informed about the state of the art of research in the field.
* Objectives
* Link between the chapters of your document

*Chapter 2 (Methodology)*: This section is optional. The purpose of this chapter is to allow the reader to understand how the results presented in the thesis were obtained. If the inserted papers contain a methods portion, it is not necessary to repeat that information here. However, additional information could be included in this chapter if it is relevant to the readership.

*Paper Insertion Chapters (Note: You must obtain permission to do a paper insertion thesis from your supervisory committee and the CESD):* The title of your chapter must be the French translation of your article title. The following information must be placed before the text of your article:

* Preliminary notes: indicate the publication status of your article (submitted, accepted with revisions, published), as well as the name of the journal. If the article has been published, give the full reference. If the article has been accepted for publication, give the *Digitial Object Identifier* (doi).
* Authors' contribution: clearly indicate your contribution and that of the other authors to the writing of the article and to the experimental production of results.

The text of the article should then be inserted in its most recent version, in the language used for publication (typically English). Place the figures and tables in appropriate places to facilitate the reading of the chapter. The formatting of the text (margins, line spacing, font) of the inserted article should normally follow that of the thesis template and not the format of the article.

*Overall conclusion*: In this section, it is important to clearly state the contribution of your work to the advancement of knowledge in your field and the likely impact of your research. Emphasize the importance of your results and the conclusions drawn from your research, as well as the prospects and possible future developments. The **conclusion should not be a summary of the other chapters**.

*Appendix:* Place additional material from your articles in the appendix. Clearly identify which article the supporting material corresponds with.

**Page layout**

The following template is already properly formatted for font size, line spacing, margins, pagination and bibliography. The square brackets indicate places to enter your custom text. By typing between the square brackets, your text will immediately be in the correct format (remove the brackets at the end). Make sure each page is filled in. Only the last page of a chapter may not be complete. Therefore, you may have to change the position of figures, diagrams, equations, etc.

**Styles**

For each chapter ***title***, ***subtitle*** and ***sub-subtitle***, simply type the titles in the appropriate places, then remove the brackets. If you need to add titles, subtitles or sub-subtitles, you will need to select them once typed and then choose the appropriate style in the toolbar or in *Format*, *Style* (choose *Title 1*, *Title 2* and *Title 3* respectively). This is important for the automatic generation of the *Table of Contents* at the end of the writing process.

Do the same for the titles of ***diagrams*** (choose the *diagram* style), ***figures*** (choose the *figure* style) and ***tables*** (choose the *table* style). For the insertion of tables of contents, figures, tables and diagrams, refer to the comments inserted in the document at the appropriate places. Note that the tables of contents as well as the lists of figures, tables and diagrams are interactive, i.e., by clicking on an item in these tables, Microsoft Word refers directly to the corresponding page in the text (these interactive tables also remain interactive when the document is transformed into a PDF format). The list of equations must however be entered manually. The ***caption under a table*** must be in the style *Caption of table*. The rest of the ***text*** must be in *Normal* style.

For ***references***, you must add them at the end of the sentence after the period (*e.g.* Alcohol **2** was oxidized using Swern conditions in 88% yield. 3). You may use any format you wish (***Note: in organic chemistry, the ACS format is required***), but the bibliography must contain all the information necessary to find the cited document easily. **You must insert the bibliography at the end of each chapter** (in the *References* tab, set *Location* to *Endnote* and choose *End of Section*)

**Figures, diagrams, equations and tables**

Each figure, diagram, equation, and table must be cited in the text before it is presented (e.g., ...the oxidation reaction (Diagram 2) is...). In order to have a consistent format, you must change the figures and tables in inserted papers to have a continuous numbering. You must ensure that the citation for each table in the text matches the citation for the table in your inserted paper.

***Schemes*** are usually untitled and are used for synthetic sequences, reactions, mechanisms or other dynamic events. If multiple reactions are placed on the same arrow, a letter or number is assigned for each reaction separated by isolation of the product (pure or crude), but subsequent additions of reagent to the reaction medium within the same reaction are separated by i, ii, iii (e.*g.,* 1) i- LDA, THF, -78°C; ii- TMSCl. 2) TBAF, THF).

***Equations*** are used for chemical equations, generic reactions (*i.e.,* the reaction between a diene and a dienophile with 'R's as substituents to exemplify the Diels-Alder reaction), mathematical equations, etc. The equations are listed in square brackets, with 2 parameters (the first number for the chapter number, the second corresponding to the rank of the equation in that chapter).

For theses in organic chemistry only, all molecules found in figures, diagrams and equations must be numbered, with different numbers and in ascending numerical order according to their appearance in the dissertation or thesis. The numbering can be continuous throughout the thesis, or by chapter (molecules 1.1, 1.2, 1.3 in chapter 1, and 2.1, 2.2, 2.3 in chapter 2). For ***figures***, ***equations*** and ***diagrams***, copy and open the templates already inserted in the following document. These *ChemDraw* templates already have the correct drawing, font, line spacing and margin formats. Once the template has been inserted into the text, select and set the *ChemDraw* style. Make sure that the format of the object is *Aligned with the text* (in *Format*, *Object...*, *Wrapping*).

You must own the copyright to all figures added to your document. If you do not, you must request permission from the copyright holder (usually the journal in which the paper was published) and mention this permission in the figure's caption. For example:

Figure 1. Evolution of relative emission intensity vs. Pb(II) ion concentration. Reprinted with permission from Journal of Materials Chemistry A 2017, 5 (21), 10200-10205. Copyright 2021 Royal Society of Chemistry.

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**General remarks**

* Do not use an acronym without first defining it
* Use the correct abbreviations for your units, *e.g. "*h" for hour and "min" for minute.
* When writing in French, the decimal is expressed as a comma. When writing in English, a period should be used.
* Put a space between each digit and its unit, except for % (no space): e.g. 5.3 g, 3.2 mL, 4 °C, 1 N, 54%.
* Use the appropriate number of significant figures depending on the precision of the method used. Normally, yields are rounded to the nearest unit and NMR coupling constants are rounded to the nearest tenth.
* For melting points, a range (Tfus 89-91 °C) and the recrystallization solvent, if used, shall be given. For the optical rotations, they are reported as follows:
[]D25 +64.4 (c = 0.263, CHCl3 )

**[Titre du mémoire]**

par

**[Prénom et nom]**

Mémoire présenté au Département de chimie en vue
de l’obtention du grade de maître ès sciences (M.Sc.)

Faculté des sciences

Université de Sherbrooke

Sherbrooke, Québec, Canada, [mois et année du dépôt final]

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Président-rapporteur

Département de chimie

**[Titre de la thèse]**

par

**[Prénom et nom]**

Thèse présentée au Département de chimie en vue
de l’obtention du grade de docteur ès sciences (Ph.D.)

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**[Titre de la thèse en cotutelle]**

par

**[Prénom et nom de l’étudiant]**

Thèse en cotutelle présentée

au Département de chimie en vue
de l’obtention du grade de docteur ès sciences (Ph.D.)

Faculté des sciences, Université de Sherbrooke

à [Nom de l’autre institution] en vue
de l’obtention du grade de [titre de grade]

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Évaluateur interne

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# Summary

[Enter your text here].

At the end of the summary, at the bottom of the page, please insert 5 to 8 keywords for indexing by the National Library.

# Acknowledgements

[Enter your text here. Acknowledgements should include supervisor(s), jury members, and financial supporter(s). Acknowledgements are also generally given to co-workers, technical staff, and close associates who have had an impact on the successful completion of the studies].

# Table of Contents

[delete the following table of contents and reinsert the table here, by going to *Insert*, *Tables and Indexes*, *Tables of Contents*, check *Show page numbers*, check *Align page numbers to the right*, consecutive character: choose .... Format: choose *From template* and Show levels: type *4*]

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# List of abbreviations

[do not include abbreviations common to the International System, such as mL, Hz, min, etc. ]

[abbreviation] [name]

[abbreviation] [name]

[abbreviation] [name]

[abbreviation] [name]

[abbreviation] [name]

[abbreviation] [name]

# List of tables

[delete the following table of contents and reinsert the table here, by going to *Insert*, *Tables and Indexes*, *Illustration Tables*, check *Display page numbers*, check *Align page numbers to the right*, continuation character: choose .... Format: choose *From Template*, Caption: choose *Figure*, do not check *Include title and number*, click on *Options*, check *Style*, choose *Table*]

[**Table [number].** [Title]. 3](#_Toc514935726)

[**Table G.1**: Desiccants used in the distillation of various solvents and reagents. 8](#_Toc514935727)

# List of figures

[delete the following table of contents and reinsert the table here, by going to *Insert*, *Tables and Indexes*, *Illustration Tables*, check *Display page numbers*, check *Align page numbers to the right*, continuation character: choose .... , Format: choose *From Template*, Caption: choose *Figure*, do not check *Include title and number*, click on *Options*, check *Style*, choose *Figure*]

[**Figure [number].** [Title]. 3](#_Toc514935757)

# List of Equations

[This list must be entered manually]

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# List of diagrams

[delete the following table of contents and reinsert the table here, by going to *Insert*, *Tables and Indexes*, *Illustration Tables*, check *Display page numbers*, check *Align page numbers to the right*, continuation character: choose .... Format: choose *From Template*, Caption: choose *Figure*, do not check *Include title and number*, click on *Options*, check *Style*, choose *Outline*]

[Diagram [number]. 2](#_Toc514935758)

# Chapter 1: Introduction

[Enter your text here].

## 1.1. [Subtitle]

[Enter your text here].

### 1.1.1 [Sub-subtitle]

[Enter your text here].

### 1.1.2 [Sub-subtitle]

[Enter your text here].

## 1.2 [Subtitle]

[Enter your text here].

# Chapter 2.

## 2.1. [Preliminary note]

[Enter your text here].

## 2.2. [Authors’ contributions]

[Enter your text here].

## 2.3. [Abstract]

[Enter your text here].

## 2.4. [Introduction]

[Enter your text here].[[1]](#endnote-1)



Scheme [number].

[Enter your text here].

  [1.1]

[Enter your text here].

[Enter your text here].[[2]](#endnote-2)



**Figure [number].** [Title].

[Enter your text here].[[3]](#endnote-3)

### 2.4.1 [Subtitle]

[Enter your text here].[[4]](#endnote-4)

**Table [number].** [Title].

|  |  |  |  |
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| Input | [column heading] | [column heading] | [column heading] |
| 1 |  | [result]a |  |
| 2 |  | [result]b |  |
| 3 |  |  |  |
| 4 |  |  |  |

a) [type note here]. b) [type note here].

# Chapter 3.

## 3.1. [Preliminary note]

[Enter your text here].

## 3.2. [Authors’ contributions]

[Enter your text here].

## 3.3. [Abstract]

[Enter your text here].

## 3.4. [Introduction]

[Enter your text here].

### 3.4.1 [Subtitle]

[Enter your text here].

[Enter your text here].

### 3.4.2 [Subtitle]

[Enter your text here].

# General conclusion

[Write your paper here. In the conclusion, the author shows the extent to which they have achieved the objectives they set out to achieve and verified the hypotheses they stated. The conclusion may indicate possible extensions of the work done. The conclusion should not exceed 3 pages.]

#

# APPENDIX 1

[If this is supplementary material to an inserted article, identify the appendix appropriately.]

1. [↑](#endnote-ref-1)
2. [↑](#endnote-ref-2)
3. [↑](#endnote-ref-3)
4. [↑](#endnote-ref-4)