#### Unofficial Laurentian University thesis LATEX template

by

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A thesis submitted in partial fulfilment of the requirements for the degree of Degree (Abbr.) in Program

The Faculty of Graduate Studies Laurentian University Sudbury, Ontario, Canada

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Faculty of Graduate Studies/Faculté des études supérieres

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## Abstract

Abstract text goes here. To satisfy the requirements of Library and Archives Canada, the abstract must be no longer than 350 words for a Doctoral thesis and 150 words for a Master's thesis.

# ${\bf Keywords}$

Keywords go here in normal text.

# Co-authoship Statement

Use body text or Normal style for text in this section. If co-authorship statement is not required, remove from front matter.

# Acknowledgements

Use body text or Normal style for text in this section. If acknowledgements are not required, remove from front matter.

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#### Nomenclature

- A Area
- d Diameter
- H Henry's constant
- $K_H$  Henry's constant temperature coefficient
- l Segment slanted wall length
- T Temperature

#### Greek letters

 $\pi$  Dimensionless mathematical constant

#### Superscripts

- cp Defined by concentration and pressure
- $\ominus$  Value at standard conditions

#### Subscripts

- 1 Segment inlet
- 2 Segment outlet
- w Segment wall

# Preface

Use body text or Normal style for text in this section. If preface is not required, remove from front matter.

## Chapter titles use the chapter command

### 1.1 First level subheading uses section command

A sample table is shown in table 1.1. Use the booktabs and caption packages for better table and caption formatting.

Table 1.1: Sample table which will automatically update in List of Tables

Sample Table	Sample Table	Sample Table
-	Sample Table Sample Table	-

## Chapter titles use the chapter command

- 2.1 First level subheading uses section command
- 2.1.1 Second level subheading uses subsection command



Figure 2.1: Sample figure. Use the figure environment for figures to automatically populate in the list of figures

### Chapter titles use the chapter command

## 3.1 First level subheading uses section command

The custom plate environment is added to this document. If it is not required, remove the list of plates declaration in the front matter.



Plate 3.1: Sample plate. Use the plate environment for plates to automatically populate in the list of plates

### Chapter titles use the chapter command

### 4.1 First level subheading uses section command

Use the equation environment for numbered equations. Use nomenclature commands to add the symbols to nomenclature at their first use.

$$A_w = \frac{\pi l}{2} (d_1 + d_2) \tag{4.1}$$

$$H^{cp} = H^{\ominus} \exp\left[K_H \left(\frac{1}{T} - \frac{1}{T^{\ominus}}\right)\right] \tag{4.2}$$

The amsmath package provides other useful math environments. For example, the gather environment enables the grouping of equations with each equation numbered.

$$\dot{m}_{l,1}e_{l,1} + \dot{m}_{g,1}e_{g,1} = \dot{m}_{l,2}e_{l,2} + \dot{m}_{g,2}e_{g,2} \tag{4.3}$$

$$e_{l,k} = \frac{P_k}{\rho_{l,k}} + \frac{U_{l,k}^2}{2} + gz_k + u_{l,k}$$
(4.4)

$$e_{g,k} = \frac{P_k}{\rho_{g,k}} + \frac{(U_{l,k} - U_{s,k})^2}{2} + gz_k + u_{g,k}$$
(4.5)

### Chapter titles use the chapter command

### 5.1 First level subheading uses section command

The natbib package is used for formatting citations and references/bibliography section. Collect your references with the software of your choice (e.g., Zotero) and export your references to BibTeX format and add them to the .bib file. Harvard style referencing has been implemented in this template. See the natbib documentation if a different style is required.

In-text citations are done with the citet command while parenthetical citations are done with the citep command. Example of an in-text citation: Sander (2015). Example of an parenthetical citation: (Sander 2015). Multiple citation (in-text): Sander (2015), Akita and Yoshida (1974). Multiple citation (parenthetical): (Sander 2015, Akita and Yoshida 1974). Citation with repeating author: (Millar et al. 2016, 2018). Citation with repeating author: Millar et al. (2016, 2018).

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URL: http://www.atmos-chem-phys.net/15/4399/2015/acp-15-4399-2015.html

# Appendices

# Appendix A: Sample Appendix

Use the startappendices macro to start the appendices section. Add appendices with the newappendix macro and entries in the list of appendices and table of contents will automatically generated.

# Appendix B: Another Appendix