

PHD THESIS TEMPLATE FOR NEW YORK UNIVERSITY GRADUATE

SCHOOL OF ARTS AND SCIENCE

DEPARTMENT OF CHEM-IS-TRY

by

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A DISSERTATION SUBMITTED IN PARTIAL FULFILLMENT

OF THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

DEPARTMENT OF CHEMISTRY

NEW YORK UNIVERSITY

SEPTEMBER, 2023

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Dr. Erwin Schrödinger

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# DEDICATION

To My Love

# ACKNOWLEDGMENTS

I extend my heartfelt appreciation to ...

# ABSTRACT

Summary of the thesis

The primary focus of this thesis is to [].

The results presented in Chapter 2 demonstrate [].

Additionally, this work explores [] in Chapter 3.

Furthermore, Chapter X discusses [].

Overall, this thesis provides [].

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# 1 | INTRODUCTION

## 1.1 SECTION TITLE

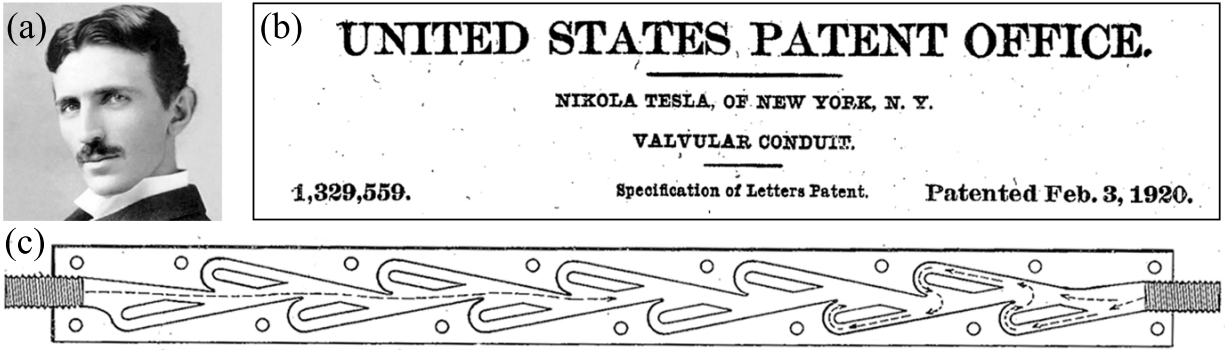
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Citing some works [1, 2].

Showing some maths

$$\mathbf{u}^* = \mathbf{u}/U, \mathbf{x}^* = \mathbf{x}/L, \text{ and } p^* = p/(\mu U/L) \text{ or } p/\rho U^2, \quad (1.1)$$

where  $U, L$  are characteristic velocity and length scales, respectively.



**Figure 1.1:** (a) The genius Nikola Tesla (b) His patent (c) Tesla's channel

## 1.2 ANOTHER SECTION

### 1.2.1 SUBSECTION

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### 1.2.2 ANOTHER SUBSECTION

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Here is a table [1.1](#).

Equations	Initial-boundary value problem	Applicability	Under $(\mathbf{u}, p) \mapsto (-\mathbf{u}, -p + c(t))$
Stokes	$\nabla p - \mu \nabla^2 \mathbf{u} = 0$ $\nabla \cdot \mathbf{u} = 0$ , with boundary conditions	$\text{Re} \ll 1$ . The solution is exact near rigid boundaries [3].	Reversible
Navier-Stokes	$\rho [\partial \mathbf{u} / \partial t + (\mathbf{u} \cdot \nabla) \mathbf{u}] = -\nabla p + \mu \nabla^2 \mathbf{u}$ $\nabla \cdot \mathbf{u} = 0$ , with initial and boundary conditions	$\text{Re} > 1$	Irreversible
Euler's	$\partial \mathbf{u} / \partial t + (\mathbf{u} \cdot \nabla) \mathbf{u} = -\nabla p$ $\nabla \cdot \mathbf{u} = 0$ , with initial and boundary conditions	$\text{Re} \gg 1$ , in free flow regions [4].	Irreversible

**Table 1.1:** The governing equations of fluid flow at different dynamical regimes and kinematic (ir)reversibility

## 2 | THIS IS A PLACEHOLDER TITLE FOR THE CHAPTER 1 (REPLACE WITH YOUR OWN)

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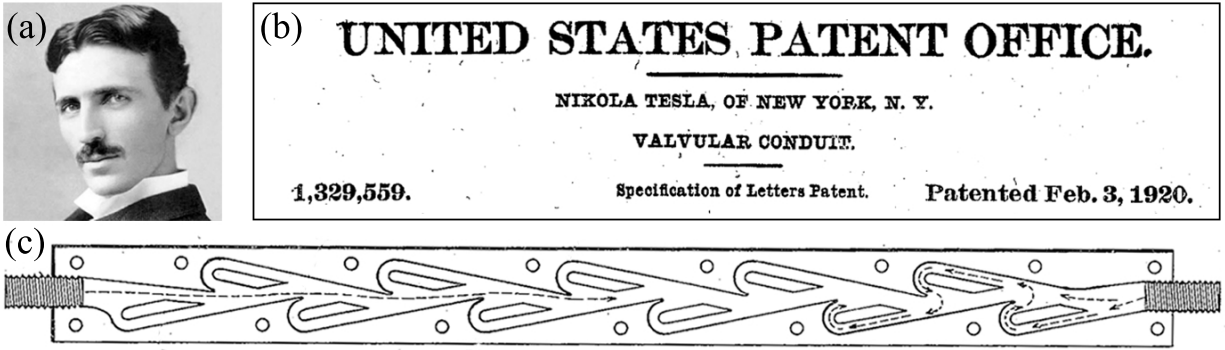
Warren<sup>†</sup>, Lemon<sup>†</sup>, *Journal Name* **Year**

DOI: XXX

<sup>†</sup>These authors contributed equally to the reproduced part in this thesis.

### ABSTRACT

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**Figure 2.1:** (a) The genius Nikola Tesla (b) His patent (c) Tesla's channel

**Table 2.1:** Data sheet

Column 1		Column 2	Column 3	Column 4
A	B	C	D	E
A	B	C	D	E
A	B	C	D	E
A	B	C	D	E
A	B	C	D	E
A	B	C	D	E
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Notes		Notes	Notes	Notes
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## 2.1 INTRODUCTION

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Example of a Figure reference Fig. 2.1. Example of a Three-part table reference Fig. 2.1. Example of a SI Figure reference Fig. A1. Example of a SI table reference Fig. A1.



# 3 | THIS IS A PLACEHOLDER TITLE FOR THE CHAPTER 2 (REPLACE WITH YOUR OWN)

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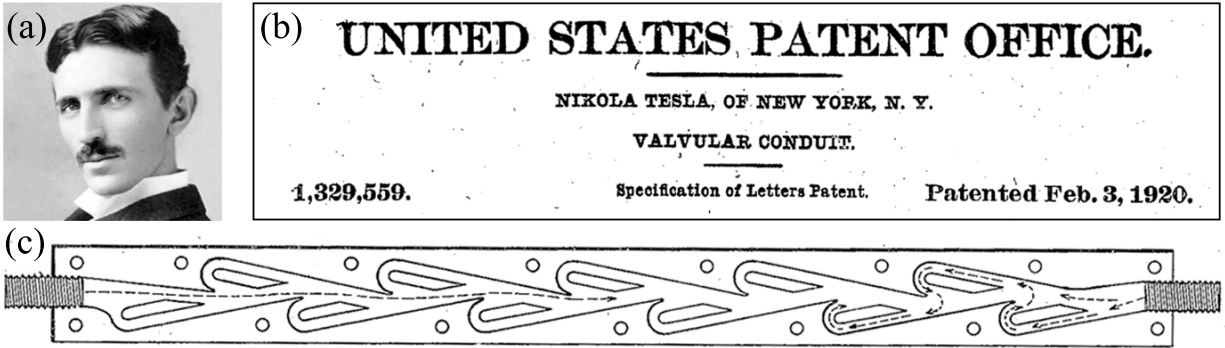
Warren<sup>†</sup>, Lemon<sup>†</sup>, *Journal Name* **Year**

DOI: XXX

<sup>†</sup>These authors contributed equally to the reproduced part in this thesis.

## ABSTRACT

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**Figure 3.1:** (a) The genius Nikola Tesla (b) His patent (c) Tesla's channel

### 3.1 INTRODUCTION

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Example of a Figure reference Fig. 3.1.

Example of citations reference [2]

## 4 | CONCLUSION

The objective of this thesis is to elucidate, providing insights into.

Motivated by, this work explores .

In conclusion, the findings presented in this thesis contribute to, offering potential implications for .

## 5 | APPENDICES

### APPENDIX A

#### APPENDIX A: SUPPLEMENTARY MATERIAL FOR CHAPTER 2

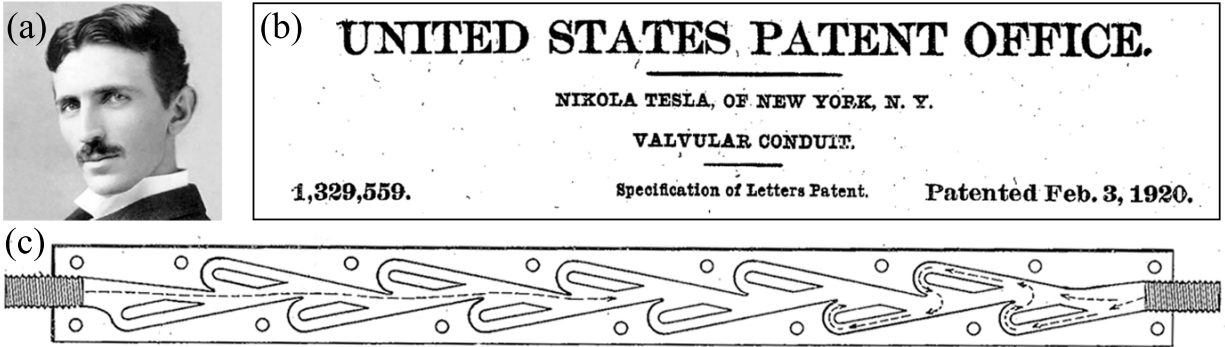
##### BRIDGING CONCEPTS AND DISCOVERIES

##### FROM THEORY TO APPLICATION

**Table A1:** Data sheet

Column 1		Column 2	Column 3	Column 4
A	B	C	D	E
A	B	C	D	E
A	B	C	D	E
A	B	C	D	E
A	B	C	D	E
A	B	C	D	E
A	B	C	D	E
Notes	Notes	Notes	Notes	Notes
Notes				

## SUPPORTING FIGURES



**Figure A1:** (a) The genius Nikola Tesla (b) His patent (c) Tesla's channel

## APPENDIX B

### APPENDIX B: SUPPLEMENTARY MATERIAL FOR CHAPTER 3

#### BRIDGING CONCEPTS AND DISCOVERIES

#### FROM THEORY TO APPLICATION

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