

**...TITLE...**



**A PROJECT WORK SUBMITTED TO THE  
DEPARTMENT OF ...SUB...  
...CLZ...  
INSTITUTE OF SCIENCE AND TECHNOLOGY  
TRIBHUVAN UNIVERSITY  
NEPAL**

**FOR THE AWARD OF  
BACHELOR OF SCIENCE (B.Sc.) IN ...SUB...**

**BY  
...NAM...  
SYMBOL NO. ...NUM...  
T.U. REGISTRATION NO. ...NUM...**

**SEPTEMBER, 2023**

## RECOMENDATION

This is to recommend that **...nam...**, (Symbol No. ...num..., T.U. Registration No. ...num...), has carried out project work entitled “**...title...**” for the requirement to the project work in Bachelor of Science (B.Sc.) degree in ...sub..., Institute of Science and Technology (IoST), Tribhuvan University (T.U.), Nepal.

To our knowledge, this work has not been submitted for any other degree.

He has fulfilled all the requirements laid down by the Institute of Science and Technology (IoST), Tribhuvan University (T.U.), Nepal for the submission of the project work for the partial fulfilment of Bachelor of Science (B.Sc.) degree.

-----

**...nam...**

### **Supervisor**

Department: Department of ...sub...

Campus/Institute: ...nam...

University: ...nam...

-----

**...nam...**

### **Co-Supervisor**

Department: Department of ...sub...

Campus/Institute: ...nam...

University: ...nam...

**30, SEPTEMBER, 2023**

## DECLARATION

This project work entitled “**...title...**” is being submitted to Department of ...sub..., ...clz..., Institute of Science and Technology (IoST), Tribhuvan University (T.U.), Nepal for the partial fulfillment of the requirement to the project work in Bachelor of Science (B.Sc.) degree in ...sub.... This project work is carried out by me under the supervision of ...nam... and co-supervision of ...nam... in the Department of ...sub..., ...clz..., Institute of Science and Technology (IoST), Tribhuvan University (T.U.), Nepal.

This work is original and has not been submitted earlier in part or full in this or any other form to any university or institute, here or elsewhere, for the award of any degree.

-----

Signature

Name of student: ...nam...

Symbol No. ...num...

T.U. Registration No. ...num...

## LETTER OF FORWARD

Date: 30/September/2023

On the recommendation of **...nam...** and **...nam...** this project work is submitted by **...nam...**, Symbol No. **...num...**, T.U. Registration No. **...num...**, entitled “**...title...**” is forwarded by the Department of **...sub...**, **...clz...**, for the approval to the Evaluation Committee, Institute of Science and Technology (IoST), Tribhuvan University (T.U.), Nepal.

He has fulfilled all the requirements laid down by the Institute of Science and Technology (IoST), Tribhuvan University (T.U.), Nepal for the project work.

-----

**...nam...**

**Head of Department**

Department of **...sub...**

**...clz...**

Tribhuvan University

## BOARD OF EXAMINATION AND CERTIFICATE OF APPROVAL

This project work (PRO-460) entitled “**...title...**” by ...nam..., Symbol No. ...num... and T.U. Registration No. ...num... under the supervision of ...nam... and co-supervision of ...nam... in the Department of ...sub..., ...clz..., Institute of Science and Technology (IoST), Tribhuvan University (T.U.), is hereby submitted for the partial fulfillment of the Bachelor of Science (B.Sc.) degree in ...sub.... This report has been accepted and forwarded to the Controller of Examination, Institute of Science and Technology, Tribhuvan University, Nepal for the legal procedure.

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**...nam...**

**Supervisor**

Department: Department of ...sub...

Campus/Institute: ...nam...

University: ...nam...

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**External Examiner**

Department:

Campus/Institute:

University:

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**...nam...**

**Co-Supervisor**

Department: Department of ...sub...

Campus/Institute: ...nam...

University: ...nam...

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.....

**Internal Examiner**

Department:

Campus/Institute:

University:

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**...nam...**

**Head of Department**

Department of ...sub...

...clz...

Tribhuvan University

**30, SEPTEMBER, 2023**

## **ACKNOWLEDGEMENTS**

I would like to express my full-hearted appreciation to my supervisor, ...nam..., whose steady guidance and support have been influential in the completion of this project. I would also like to give special mention to my co-supervisor, ...nam..., for their significant contributions to this report. Their insightful feedback and encouragement have truly inspired me to push the boundaries of my knowledge and brought improvement upon my skills. Their expertise and dedication have elevated my research and brought new perspectives to light. I am deeply appreciative for the time and effort they devoted throughout this journey. I am truly fortunate to have their mentorship, which have undoubtedly uplifted the quality of my work.

I would like to extend my sincere appreciation to the Head of the Department, ...nam..., for providing the environment that made this study possible. Their vision and management have created a strong academic environment that encourages excellence. To my beloved family and friends, I am deeply grateful for their understanding and kindest word of encouragement throughout this academic journey. Their constant support and belief in me have been a driving force behind this accomplishments. Their presence in my life has made this journey all the more meaningful and enjoyable.

# **ABSTRACT**

## शोधसार

नमस्कार छ हजुरलाई



## LIST OF ACRONYMS AND ABBREVIATIONS

$\mu_B$  Bohr magneton

**LAPW** Linearized Augmented Plane Wave

**LSDA** Local Spin Density Approximation

## LIST OF SYMBOLS

$t_{2g}$  Group of  $d$  orbitals that include  $d_{xy}$ ,  $d_{yz}$  and  $d_{xz}$

$e_g$  Group of  $d$  orbitals that include  $d_{x^2-y^2}$  and  $d_{z^2}$

$\nabla^2$  Laplace operator

$U$  On-site Coulomb interaction

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## **REFERENCE**

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## EXAMPLE

### Creating mini-pages

Use 2 backslashes (\\) and the end to line to change the paragraph

This is an example for writing 2 paragraph side by side:

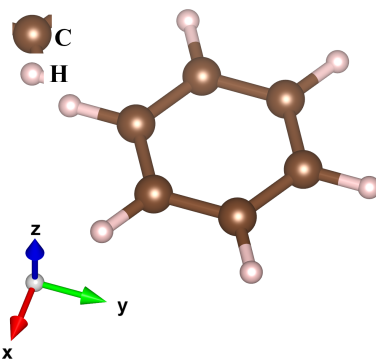
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Mauris vitae viverra felis. Pellentesque dui sapien, ullamcorper vel justo vestibulum, molestie ultricies mauris. Donec nec nunc ullamcorper, suscipit tortor sed, hendrerit	dapibus nibh tincidunt nec. Sed aliquet nisl at diam pharetra, et volutpat dui dictum. Vestibulum condimentum, leo eget vestibulum vestibulum, turpis sem tempor ante, id rutrum orci elit sed diam. Mauris mattis justo ut erat
---	--

This is an example for writing 3 paragraph side by side:

Curabitur mi diam, sagittis sed laoreet eu, lacinia vel augue. Quisque pretium nunc a mauris semper accumsan et at nisl. Vestibulum vitae commodo erat, non tristique leo. Ut non semper libero. Cras luctus orci ut eros egestas, quis	elementum urna. Suspendisse accumsan finibus odio posuere facilisis. Sed cursus, lectus elementum fringilla auctor, justo quam lacinia erat, ac blandit nunc arcu in lorem. Nunc nec pulvinar lacus. Vivamus tristique imperdiet ipsum,	urna molestie, nec molestie elit suscipit. Duis fringilla leo fringilla enim pulvinar, ut rutrum orci tincidunt. Morbi scelerisque est at eros lobortis luctus. Ut ipsum nisl, faucibus quis ultricies eget, rhoncus et nulla.
---	---	--

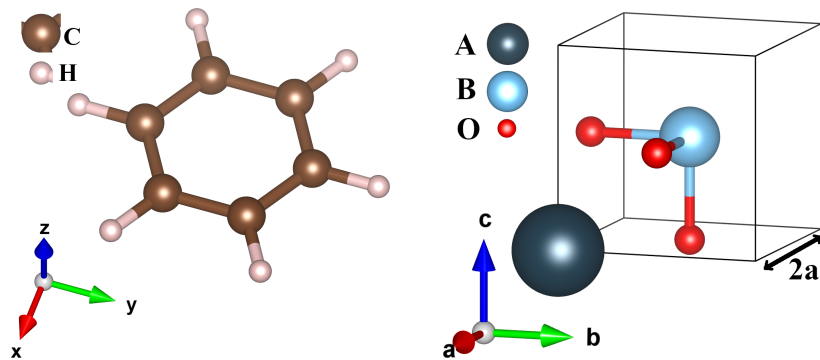
### Inserting images

This is an example of insterting graphics.



**Figure 1:** Structure of Benzene (Created using VESTA & edited with GIMP)

This is an example of insterting multiple images in same line.



**Figure 2:** Structure of Benzene and Unit cell of perovskite (Created using VESTA & edited with GIMP)

### Inserting tables

This is an example of insterting table.

Atoms	x	y	z
A	0.25	0.25	0.25
B	0.25	0.00	0.00
C	0.00	0.00	0.00
D	0.50	0.00	0.00

**Table 1:** Atomic coordinates 1

This is an example of combining multiple column or multiple row in a table.

Atoms	x	y & z	
A	0.25	0.25	0.25
	0.25	0.00	0.00
C	0.00	0.00	0.00
D	0.50	0.00	0.00

**Table 2:** Atomic coordinates 2

### Writing equations

This is an example for lengthy equation which doesn't fit in one line. Use multiline environment for this.

$$\begin{aligned}
 e^x = 1 + x + \frac{x^2}{2!} + \frac{x^3}{3!} + \frac{x^4}{4!} + \frac{x^5}{5!} + \frac{x^6}{6!} + \frac{x^7}{7!} \\
 + \frac{x^8}{8!} + \frac{x^9}{9!} + \frac{x^{10}}{10!} + \frac{x^{11}}{11!} + \frac{x^{12}}{12!} + \frac{x^{13}}{13!} + \frac{x^{14}}{14!} + \cdots \quad (1)
 \end{aligned}$$



This is an example for writing multiple equations at a time. Use align environment for this.

$$2x + 6y = 64 \quad (2)$$

$$x + 3y = 32 \quad (3)$$

## Referencing

You can the bibtex citation key to put in reference.bib file in the site Google Scholar.

Cite website and application like this: Williams et al. (2022)

Cite articles and books like this: Hohenberg and Kohn (1964)

You can also put it inside square brackets like this: [Hohenberg and Kohn (1964)]

You also can reference tables like this: **Table 1**

You also can reference figure like this: **Figure 1**

You also can reference equations like this: **Equation 1**

## Using acronyms/symbols

You can write acronyms/symbols as follow:

in short form like this  $t_{2g}$

in long form like this Linearized Augmented Plane Wave

# **CHAPTER 1**

## **1. INTRODUCTION**

### **1.1 Heading**

#### **1.1.1 Sub-heading-1**

#### **1.1.2 Sub-heading-2**

### **1.2 Rationale**

### **1.3 Objectives**

#### **1.3.1 General objectives**

#### **1.3.2 Specific objectives**

## **CHAPTER 2**

### **2. LITERATURE REVIEW**

#### **2.1 Heading-1**

#### **2.2 Heading-2**

## **CHAPTER 3**

### **3. MATERIALS AND METHODS**

#### **3.1 Materials**

##### **3.1.1 Sub-heading-1**

##### **3.1.2 Sub-heading-2**

#### **3.2 Methods**

##### **3.2.1 Sub-heading-1**

##### **3.2.3 Sub-heading-2**

## **CHAPTER 4**

### **4. RESULTS AND DISCUSSION**

#### **4.1 Heading-1**

#### **4.2 Heading-2**

## **CHAPTER 5**

### **5. CONCLUSION AND RECOMMENDATION**

#### **5.1 Conclusions**

#### **5.2 Novelty and National Prosperity aspect of Project work**

#### **5.3 Limitations of the work**

#### **5.4 Recommendations for the further work**

## REFERENCE

- Hohenberg, P. and Kohn, W. (1964). Inhomogeneous electron gas. *Physical review*, 136(3B):B864.
- Williams, T., Kelley, C., Merritt, E. A., Bersch, C., Bröker, H. B., Campbell, J., Cunningham, R., Denholm, D., Elber, E., and Fearick, R. (2022). Gnuplot 5.4. 4: An Interactive Plotting Program; 2022. <https://www.gnuplot.info/>.

## **APPENDIX**