

CYPRUS INTERNATIONAL UNIVERSITY

INSTITUTE OF GRADUATE STUDIES AND RESEARCH

THESIS AND PROJECT REPORT WRITING GUIDELINES

NICOSIA- 2023

PART 1: WRITING GUIDELINE

1. GENERAL INFORMATION

• The minimum and maximum number of words (except references, attachments, front cover, abstract, contents, figures and table lists) for the Master's and Doctoral theses that will be written according to their fields are determined as follows.

Field Master's Thesis/Project		PhD Thesis
Social Sciences	10.000-25.000	40.000-100.000
Basic Sciences	8.000-20.000	25.000-80.000

- The Print out of Theses/Project Reports will be on A4 size, one sided paper.
- The logo of Cyprus International University will only be on the outside cover page of the theses.
- The margins of the pages should be set to 4 cm at the top, 3.5 cm on the left, 3 cm on the right, and 2.5 cm at the bottom.
- The Times New Roman font size should be used (12 font size).
- The font must be *italic* and **bold** for highlights to be made within the body of the text.
- Short notes explaining a thought in the text can be placed under the page in 8 points. Notes exceeding 10 lines are included in the appendix.
- Alignment: Create equal margins using "Justify Alignment" (except in headings).
- Line spacing: Use 1.5 line spacing throughout the thesis. Use single line spacing for cover pages, footnotes, abstract and references. The "Before" and "After" options must be set on "Auto".
- Headings: type section and subsection numbers with Arabic numerals according to the decimal classification system (2.1-2.2-2.3-2.3.1).
- The titles and subheadings of the sections are highlighted in bold. Sections and subheadings in main text must be 12 font size. The titles of the main section headings should be 14 font size.
- Tables: The table title should be as short as possible and above the table. The source should be written below the table.
- Use Times New Roman, and preferably 10 font size, for the content of the table.
- Column and row names of the tables that do not fit on a single page must be rewritten on the second and next page.
- Font size can be reduced to 8 if necessary in tables and figures.

- Tables are written with the font used in the report, and the font used in the figures should be consistent throughout the report.
- Figures: Number figures consecutively. (I.e. Figure 2.1, Figure 3.3 etc.). The heading of the figure should be short and it should be written under the figure. Sources for figures should be written below the figures.
- Figures titles must be centered at below of the figures.
- Figures sources must be centered at below of the figures.
- A space must be left in the text after commas and the full stop.

2. PAGE STRUCTURE

Parts that do not contain page numbers:

- First Inside Cover (Appendix 1)
- Second Inside Cover (Appendix 2)
- Thesis/Project Approval Report (Appendix 3)
- Declaration (Appendix 4)

Parts that contain Roman numerals (i, ii, iii, iv ...):

- Acknowledgements (i)
- Abstract (ii)
- The content page (iii)
- List of Tables
- List of Figures
- Abbreviations

Parts that contain Arabic numerals (1, 2, 3, 4, 5 ...):

- The text body
- Reference list
- Appendices
- Curriculum Vitae (CV) (Optional)

All page numbers are placed 1.5 cm above the bottom center of the page.

The font size of the page numbers should be Times New Roman and 11 font size.

The order of the sections to be included in the report should be in the following order;

- 1. Outside Cover
- 2. First Inside Cover
- 3. Second Inside Cover
- 4. Approval page
- 5. Declaration
- 6. Acknowledgements
- 7. Abstract (Turkish/English) (language of the thesis is first)
- 8. Table of Contents
- 9. List of Tables
- 10. List of Figures
- 11. Abbreviations
- 12. Introduction (Chapter One)
- 13. Other sections (Literature, Research Method, Findings)
- 14. Conclusion and Recommendations
- 15. References
- 16. Appendices
- 17. CV (Optional)

2.1 The Cover Pages

There is an outside cover page and two inside cover pages. The outside cover page **(Appendix 1)** is dark blue for English Master thesis books, light blue for Turkish thesis books, black for projects and burgundy for PhD thesis books. The outside cover page has to be clothbound with gold ink, and include the following information:

- 1. Title of study (Single line spaced)
- 2. Name and surname of the student.
- 3. Program name with its full and abbreviated diploma degree
- 4. The name of the University and the Institute should be indicated
- 5. All of the letters in cover pages must be uppercases.
- 6. The city and year of submission (e.g. Nicosia–2023).

All information on these pages should be centered.

2.2 Thesis / Project Approval Certificate Page

The thesis/project approval page is completed by the student after the thesis defense is completed and signed by the advisor and the jury members with the final version of the thesis. Thesis/Project approval page should be placed in the volume as the first page after the cover pages. You have to download the updated version of the thesis approval page which you can find it in the CIU website (https://www.ciu.edu.tr/en/about-us/faculties-andschools/institute-graduate-studies-and-research) Fill all the required information Ask your supervisor about your defense decision, write it and make it bold style. Specify who the Thesis supervisor is and who Members are. Place the thesis supervisor and members below each of the jury names No page number Write the defense date

2.3 Declaration

The declaration form is a document that the students confirm and declare that the information they use and present within the scope of their studies is in compliance with academic principles and ethics that they must sign. This document should be on the 4th page of the thesis. You have to download the updated version of the declaration page which you can find it in the CIU Institute webpage.

2.4 Acknowledgements (page number: i)

On this page you express gratitude to the people, institutions and advisors that helped you throughout your work. Roman numbers must be used for paginations, start from the acknowledgement page till the Chapter One.

2.5 Abstract (page number: ii)

The title of the thesis, your name, abbreviated diploma degree, the name of the program, the supervisor's and co-supervisor's name, thesis defense date and the number of pages should appear as bold and centered at the top of the Abstract page. The abstract should be a brief description of the definition, importance and purpose of the problem the study is attempting to solve. The main parts of the problem should be highlighted. Then, the research method should be explained briefly. The findings of the research method are then briefly explained. Abstract should not be longer than 400 words and should be written with 1 (Single) line spacing. At the bottom of the abstract, keywords related to the study should be included. Capitalize the first letter in each word in the keywords.

2.6 The Contents Page

The table of contents should include the headings of all the main sections and subsections with their numbers and the respective page numbers.

Place lists of figures and tables as separate contents and pages.

The table of contents must be start from acknowledgement page.

2.7 Tables and List of Tables

If there are tables in the study, they should be listed together with the page numbers in the table list that will be placed on a separate page.

In the text, the table title (eg **Table 3.1:** Economic Development in Europe) should be placed above the table and the source (if any) (**Source:** OECD, 2022) should be below the table. An example of an in-text table is given below.

Position	Country	Total Capacity	Added Capacity	Growth Rate 2015 [%]
1.	China	2015148,0 00	32,970	29.0
2.	United States	74,347	8598	13.1
3.	Germany	45,192	4919	11.7
4.	Poland	5100	1266	33.0
5.	Portugal	5079	126	2.5
6.	Denmark	5064	217	3.7
7.	Turkey	4718	955	25.4
	Rest of the	40,800	5000	14.0
	World TOTAL	434,856	63690	17.2

Table 2.1: Wind plants capacity and growth rate

Source: (Igliński, et al, 2016)

- 1. You have to write a table number and table title for each table
- 2. The table number and the table title must be placed on top of the table, left-aligned
- 3. The table number and table title must be not italicized.
- 4. The table title must be not bolded.
- 5. The table number and table title must be in size 12pt.
- 6. The font color for the table number and the table title must be black
- 7. Make the table number and table title bold. e.g.: Table 4.1
- 8. The table source must be placed below the table.
- 9. Make the word source bold. e.g.: Source
- 10. The font size inside the table must be 10pt.
- 11. Line spacing must be 1.5 lines within the rows.
- 12. The table source must be placed in the same page of the table

Follow the same comments for all the tables throughout the work.

2.8 List of Figures

If figures are included in the study, they should be listed along with the page numbers in the figure list, which will appear on a separate page.

The title of the figure and the source of the figure (if any) should be placed under the figure in the text of the study. (Ex. **Figure 2.3:** Universal Income Inequality) (Under the title, **Source:** OECD, 2022). In-text example:

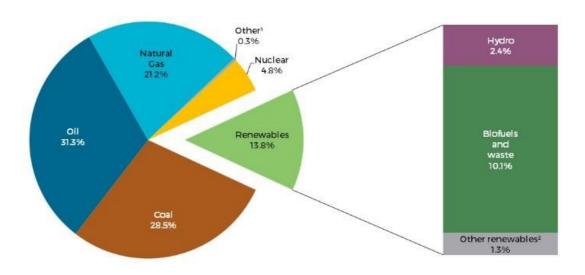


Figure 2.3: Overall primary energy supplies for 2022 fuel shares around the globe

Source: (Iea.org, 2022)

- 1. Center the figure
- 2. Center the figure source
- 3. Center the figure title
- 4. The figure number and figure title must be placed below the figure
- 5. Make the word Figure and the figure number bold. E.g.: Figure 2.1
- 6. Make the word Source bold. E.g.: Source
- 7. The figure source must be placed below the figure

Follow the same comments for all the Figures throughout the work.

2.9 Important Information about Tables and Figures

• Tables and figures should be placed as close as possible immediately after the first mention in the text, provided that they comply with the principles of the page layout. Before the tables and figures, reference should be made to the relevant table or figure.

- All figures and their descriptions should be centered with respect to the text block.
- All tables and their descriptions should be left-aligned with respect to the text block.
- Tables and figures are assigned the first digit section number (letters in the appendix) and the second number the sequence number of the table (or figure) within the section. (Example: **Table 1.2, Figure 3.5, Table A.1, Figure B.5**). As in the example, tables, figure words and numbers are written in bold style.
- The number and description of each figure is written at the bottom of the figure, and the number and description of each table is left-aligned in the row above the table.
- Multiple tables or figures can be placed on the same page.
- In tables and figures larger than one page, the same table/figure number and description should be written on the second page and between the table/figure number and its description, in parenthesis (continued). (Eg **Table 1.1** (continued): Metal contents in wastes, **Figure 1.1** (continued): Istanbul's water supply.
- The graphics and pictures given in the report should be accepted as figures and must be numbered and explained.
- Pages that disrupt the opening order of the thesis by increasing the page thickness such as folded page and visual material attached on the page should be given in the appendices section.

2.10 Equations

- Equations are written with the Equation Editor in accordance with the following rules.
- Equations are written at 1.5 line spacing.
- 6 point spacing should be left before and after the equations.
- There are no blank lines before and after the equations. In this case, between the equations and the text, 12 pt above and 12 pt below are left.
- Equations are centered aligned to the text block.
- An equation number is assigned to all equations. Equations in intermediate steps of a derivation, if any, may not be numbered. Equation numbers are given in sequence starting from 1, provided that the section number is the first number in the relevant section. These numbers are typed with normal style (not bold or italic) and are, for example, in the first part (1.1), (1.2), the second part (2.1), (2.2), if necessary, in the form of subexpressions (1.1a) and (1.1b)

of the same equation. It is written to the far right of the line where the equation is located.

• The equations given in the appendix section are numbered by specifying the appendix section in which they are given. (Example: A.1, A.2).

2.11 Abbreviations (Appendix 10)

Abbreviations may be used with names or concepts that are commonly used in the text of the study [example: **EU** (European Union)]. Following the figures and tables pages, a table of abbreviations can be prepared on a separate page. The name or concept should be used in its entirety at least once without using its abbreviation in the text.

3. HOW TO CITE SOURCES

Citation shows the sources used in the study in the text and on the references page. You should cite and refer to the work of another author you use within your own work. If citations are not cited, this is considered plagiarism and the thesis/project is considered unsuccessful. The maximum accepted quote rate is %20 in total and should not exceed 2% from a single source. The accepted form of referral in the Institute is APA.

A plagiarism report must be submitted to the Institute together with the thesis/project and a

'Thesis/Project Submission Form', available at

 $\underline{https://www.ciu.edu.tr/en/about-us/faculties-and-schools/institute-graduate-studies-and-research}$

3.1 In-text Citations

You may refer to someone else's ideas or work either by repeating the exact words that another author has written ('quoting') or by expressing what somebody has written by using your own words ('paraphrasing').

The most important point when citing within the study is that the same citation style should be used throughout the study. In-text citations from the beginning to the end of the study should be consistent with a particular style.

Quoting:

Place quotation marks ("...") around the words being taken from another author.

Give publication dates (the name of the author, the year of publication of the text being quoted and the **page number** of the text from which the quote has been taken) in brackets after the second quotation mark.

Example: The metaphor "the sun was crying tears from hell" is linked to that of "devilish spawns erupted from under the ground to calm the Gods…" (Neve, 1996, p. 27).

Paraphrasing:

Provide publication dates (the name of the author, the year of publication of the text being paraphrased and the number of the page the paraphrasing is based upon) in brackets after the sentence or paragraph in which the ideas written down by somebody else are paraphrased. Example: (Rees, 1998)

If the name of the author is referred to in the text is mentioned, the year of the author's publication has to be given immediately after the author's name. Example: Rees, (1998) explains.....

If the source you are using has 2 authors, you will cite it as (Soyer and Kucuksener, 2018), whereas if the source has 3 authors you will cite it as (Soyer, Kucuksener and Ozgit, 2018). If the source has more than 3 authors, you will in-text cite it as (Soyer, et al., 2018).

3.2 References List

The structure of the list of references will differ upon the referencing style chosen APA is the accepted format by our university.

➤ Journal or Magazine Article:

In-text: (Uzunoglu, 2017)

In the References List: Uzunoglu, S. (2017). Evaluation of style preferences in architectural design among the undergraduate students from different nationalities in North Cyprus. *New Trends and Issues Proceedings on Humanities and Social Sciences*, 4(4), pp.184-194.

➢ <u>For Electronic journal articles</u>:

In-text: (Saidi, Rahman and Amamri, 2017)

In the References List: Saidi, K., Rahman, M. ve Amamri, M. (2017). The causal nexus between economic growth and energy consumption: New evidence from

global panel of 53 countries. *Sustainable Cities and Society*, [online] 33, pp.45-56. Available at: http://www.sciencedirect.com [Accessed 14 Dec. 2017].

≻ <u>Book:</u>

In-text: (Plum ve diğerleri, 2008)

In the References List: Plum, E., Achen, B., Dræby, I. ve Jensen, I. (2008). CI. London: Middlesex University Press.

➤ Chapter in a Book:

In-text: (EL-Shimy, Soyer ve Balcıoğlu, 2017)

In the References List: EL-Shimy, M., Soyer, K. ve Balcıoğlu, H. (2017). Renewable Energy– Background. In: E. Mohamed, ed., *Economics of Variable Renewable Sources for Electric Power Production*. Germany: Lambert Academic Publishing / Omniscriptum Gmbh & Company Kg, pp.17-33.

Further information:

APA Manual (Publication manual of the American Psychological Association) (2020 7th Edition). Washington, DC: American Psychological Association.

The most important aspect of referencing is that the same style must be used throughout the list. Starting from the beginning of the list, the same type of source must be referenced the same.

3.3 Footnotes

In addition to in-text citations, it is preferable to use footnotes to facilitate reading. When referencing a source by footnote method, the page number of the source should be specified.

To cite a book previously cited in footnotes, you can use "ibid" with the number of the footnote the book was first mentioned in, then put the page number. For example:

¹ Sturgeon, T. (1995). Science fiction. In The Encyclopedia Americana (Vol. 24). Danbury, CT: Grolier,

pp. 390-392 ² *Ibid*, 1, 394

3.4 Sample References List

REFERENCES

- Aydin, G. (2014). Modeling of energy consumption based on economic and demographic factors: The case of Turkey with projections. *Renewable and Sustainable Energy Reviews*, 35, pp.382-389.
- Beneking, A., Ellenbeck, S. and Battaglini, A. (2016). Renewable energy cooperation between the EU and North Africa. *International Journal of Energy Sector Management*, 10(3), pp.312-336.
- Chen, W., Kim, H. and Yamaguchi, H. (2014). Renewable energy in eastern Asia: Renewable energy policy review and comparative SWOT analysis for promoting renewable energy in Japan, South Korea, and Taiwan. *Energy Policy*, 74, pp.319-329.
- Dii GmbH, (2013). Desert Power: Getting Started. The manual for renewable electricity in MENA Full Report. [Online] Munich: Dii GmbH, pp.1-262. Available at: https://www.db.com/cr/en/docs/Desert-Power-Getting-Started-Full-ReportEnglishScreen (1).pdf [Accessed 2 Apr. 2017].
- Energy.gov. (2017). *Hydrothermal Resources* | *Department of Energy*. [Online] Available at: https://energy.gov/eere/geothermal/hydrothermal-resources [Accessed 25 Mar. 2017].
- Energybc.ca. (2012). High Temperature Geothermal Power Energy British Columbia.
 [online] Available at: http://www.energybc.ca/hightempgeo.html [Accessed 25 Mar. 2017].
- Exposing the New Energy Realities. (2017). [online] Wales: World Energy Council 2017, pp.1-40. Available at: http://file:///C:/Users/user/Pictures/1.-World-Energy-Issues Monitor 2017-Full-Report.pdf [Accessed 1 Apr. 2017].
- Hawila, D., Mondal, M., Kennedy, S. and Mezher, T. (2014). Renewable energy readiness assessment for North African countries. *Renewable and Sustainable Energy Reviews*, 33, pp.128-140.

Haugen, D. and Musser, S. (2012). Renewable energy. Detroit: Greenhaven Press.

- IEA Bioenergy, (2012). Energy recovery from renewable content of waste: incentives and methodology for analysing biogenic content of mixed waste. Task 36. [online] Milano: RSE S. p. A. Ricerca sul Sistema Energetico – RSE S.p.A., pp.1-68. Available at: <u>http://task36.ieabioenergy.com/wpcontent/uploads/2016/06/Energy-recovery-from</u> therenewable-content-ofwaste-2.pdf [Accessed 1 Apr. 2017].
- Iea.org. (2016). July: Renewable energy continuing to increase market share. [Online] Available at: https://www.iea.org/newsroom/news/2016/july/renewableenergy-continuingtoincrease-market-share.html [Accessed 1 Apr. 2017].
- Iglinski, B., Buczkowski, R., Cichosz, M., Iglinska, A. and Plaskacz-Dziuba, M. (2015). SWOT analysis of the renewable energy sector in Poland. Case study of Wielkopolskie region. *Journal of Power Technologies*, 95(2), pp.143-157.

4. THE SUBMISSION OF THE THESIS AND PROJECT TO THE INSTITUTE OF GRADUATE STUDIES AND RESEARCH

Requirements;

THESIS:

<u>2 copies</u> of bound thesis books

<u>**3 copies**</u> of CD's (including theses in PDF format and please write your name on the CD)

Plagiarism Report (maximum %20)

Thesis submission form (downloadable from: https://www.ciu.edu.tr/en/aboutus/faculties-and-schools/institute-graduate-studies-and-research) For PhD thesis, also publication form. (Can be accessed via:

https://www.ciu.edu.tr/en/about-us/faculties-and-schools/institute-graduate-studiesand-research)

PROJECTS:

1 copy of bound project books

2 copies of CD's (including theses in PDF format and please write your name on the CD) Plagiarism Report (maximum %20)

<u>**Project submission form**</u> (downloadable from <u>https://www.ciu.edu.tr/en/about-us/faculties-and-schools/institute-graduate-studies-and-research</u>)

COLORS OF OUTSIDE COVERS

Doctorate or Professional Doctorate Thesis: RED



Master Thesis English programs: NAVY BLUE

POLYMERIZATION OF MONOISOCY ANATES BY ADVANCED FREE RADICAL INITIATION WITH A NOVEL ROOM TEMPERATURE INITIATOR



Master Thesis

Term Project Report: BLACK (Non-thesis Master Programs)

COMPARISON OF PICTURES FROM TWO SPACE
TELESCOPES: JAMES WEBB VS HUBBLE
OSMAN YILDIRIM
A TERM PROJECT FOR THE DEGREE OF MASTER OF ARTS (MA)
ASTRONOMY
CYPRUS INTERNATIONAL UNIVERSITY
INSTITUTE OF GRADUATE STUDIES AND RESEARCH
NECOSIA - 2023

Cyprus International University

Institute of Graduate Studies and Research

SAMPLE THESIS PAGES

Dear student.

This document contains some sample pages for a well-written thesis.

The "CIU - Thesis Writing Template" Word file was used to create these sample pages based on "CIU - Thesis Writing Guidelines."

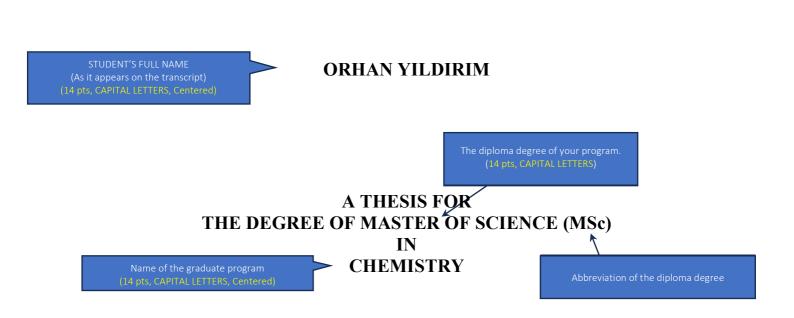
Please note that this document is not intended to be used as a "Thesis Writing Guidelines" file. Therefore, the format of a thesis prepared by using this document as a reference may be incomplete. Instead, this document should be used to understand how the sample pages look like. Alternatively, you can use it to quickly compare the format of your thesis and the content and format of the cover pages to identify any errors.

You can find the "CIU - Thesis Writing Guidelines" and "CIU - Thesis Writing Template" files on the Institute's website for download.

I wish you all the best in your thesis, including this writing phase..

Prof. Dr. Osman YILMAZ Director, Institute of Graduate Studies and Research THESIS TITLE (16 pts, CAPITAL LETTERS, Centered, Single Spacing)

POLYMERIZATION OF MONOISOCYANATES BY FREE RADICAL INITIATION WITH A NOVEL ROOM TEMPERATURE INITIATOR





CYPRUS INTERNATIONAL UNIVERSITY

INSTITUTE OF GRADUATE STUDIES AND RESEARCH

NICOSIA – 2023 –

Year of the thesis defense date

Title of the thesis. (16 pts, CAPITAL LETTERS, Centered, Single Spacing)

POLYMERIZATION OF MONOISOCYANATES BY FREE RADICAL INITIATION WITH A NOVEL ROOM TEMPERATURE INITIATOR

INSIDE COVER PAGES

A THESIS SUBMITTED TO THE INSTITUTE OF GRADUATE STUDIES AND RESEARCH OF CYPRUS INTERNATIONAL UNIVERSITY

BY

14 pts, CAPITAL LETTERS

ORHAN YILDIRIM

(14 PTS, CAPITAL LETTERS) IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF MASTER OF SCIENCE (MSc) IN CHEMISTRY

SUPERVISOR : PROF: DR: ALİ USANMAZ CO-SUPERVISOR: PROF. DR. KEMAL ALYÜREK

(14 PTS, CAPITAL LETTERS)

NICOSIA – 2023 (14 PTS, CAPITAL LETTERS)

THESIS APPROVAL CERTIFICATE



The thesis study of Chemistry Program student Orhan Yıldırım with student number 1234567 titled "Polymerization Of Monoisocyanates By Free Radical Initiation With A Novel Room Temperature Initiator" has been approved with unanimity of votes by the jury and has been accepted as an MSc Thesis.

Thesis Defense Date: 22/12/2023

Jury Members		ry Members	Signature
1st name: Chairperson	1)	Prof. Dr. Savaş Yavuz Chair	
2nd name: Supervisor	>2)	Prof. Dr. Ali Usanmaz Supervisor	
	3)	Prof. Dr. Güngör Akgündüz Member	
move the rows 4 ad 5 if there are three jury members	4)	Assoc. Prof. Dr. Kemal Alyürek Member	
	5)	Asst. Prof. Dr. Serpil Alsoy Member (12 pts, Title Case)	

Prof. Dr. Ali Usanmaz Supervisor

Prof. Dr. Namik Kemal Uras Head of Department / Program Coordinator Department of Chemistry

Prof. Dr. Osman Yılmaz Director

Institute of Graduate Studies and Research

.

.

.

DECLARATION

Name and Surname:	Orhan Yıldırım	
Title of the Thesis:	Polymerization Of Monoisocyanates By Free Radical Initiation With A Novel Room Temperature Initiator	
Supervisor(s):	Prof. Dr. Ali Usanmaz	
Year:	2023 (12 pts, Not bold, Title Case)	

I hereby declare that all information in this document has been obtained and presented by following the academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

I hereby declare that the Cyprus International University, Institute of Graduate Studies and Research is allowed to store and make available electronically the present thesis.

This thesis will be published via CIU Library;

- o Immediately;
- \circ 1 year after;
- \circ 2 years after;
- \circ 3 years after;
- o Never.

Upon submission to the Cyprus International University, Institute of Graduate Studies and Research.

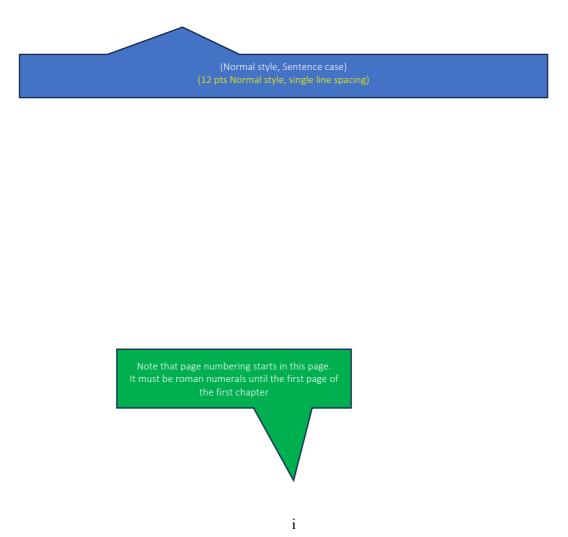
Date:		Use a pen with blue ink in the day of submission
Signature:		

ACKNOWLEDGEMENTS

Primarily, I extend my heartfelt gratitude to my PhD supervisors, Professor Xui Lung and Professor Fred Samoss, for their unwavering support, guidance, and encouragement throughout the entire doctoral journey.

I am also immensely grateful for the exceptional support of my lab mates, who have been a constant source of motivation. Ali, your late-night phone calls helped me to navigate self-doubt with resilience. And Maria, your enthusiasm and upbeat personality made even the longest hours in the lab enjoyable.

Finally, I want to express my profound gratitude to my family, whose unwavering belief in my abilities and unwavering support have been instrumental in my accomplishments. Your encouragement has been an integral force driving my achievements. To my mom, dad, and Mustafa: Thank you for everything. I dedicate this PhD thesis to you with love and admiration.



ABSTRACT

POLYMERIZATION OF MONOISOCYANATES BY FREE RADICAL INITIATION WITH A NOVEL ROOM TEMPERATURE INITIATION



Orhan Yıldırım MSc Thesis in Chemistry Supervisor: Prof. Dr. Ali Usanmaz Co-Supervisor: Prof. Dr. Kemal Alyürek

(12 pts, Bold, single spaced,)

2023, 157 pages

Minimum 200, maximum 400 words

(12 pnts Normal style, single line spacing) n-Butyl isocyanate (nBIC) was polymerized in bulk by the Pruitt–Baggett adduct (PBA) at -23, 0.0, and 25.0°C. Polymerization was accompanied by trimerization to the cyclic isocyanurates at all temperatures. Spectroscopic evidence supported the nylon-1 structure for both trimer and polymer. The polymer/trimer ratio and the molecular weight of produced polymers were found to increase with decreasing temperature. The Pruitt–Baggett catalyst (PBC), which is the reaction product of (PBA + H2O) system, also polymerized nBIC, but with a relatively slower rate. In aromatic and etheric solutions, nBIC was only trimerized by PBA. Copolymerization of nBIC with propylene oxide by PBA and PBC failed. Some selected monoisocyanates were also polymerized by PBA.

Keywords: Allyl Polymerization, Catalysis, Free radical polymerization, Initiation, Polymerization, Polymers, Temperature dependence

Maximum 7 keywords in alphabetical order (12 pts, not bold, Capitalize first letter of each keyword)

TABLE OF CONTENTS

ACKNOWLEDGEMENTS......i ABSTRACT Points must lead i the page numbers TABLE OF CONTENTSiii TYPE YOUR CHAPTER TITLE HERE 1 1.3 TYPE YOUR SUBTITLE HERE...... 1 iii

12 points, CAPITAL LETTERS, 1.5 lines spacing

TYPE YOUR CHAPTER TITLE HERE	3
2.1 TYPE YOUR SUBTITLE HERE	3
2.2 TYPE YOUR SUBTITLE HERE	3
2.3 TYPE YOUR SUBTITLE HERE	3
2.4.1 TYPE YOUR SUBTITLE HERE	3
2.4.2 TYPE YOUR SUBTITLE HERE	3
2.4.3 TYPE YOUR SUBTITLE HERE	3
2.5 TYPE YOUR SUBTITLE HERE	4
2.6 TYPE YOUR SUBTITLE HERE	4
2.7 TYPE YOUR SUBTITLE HERE	4
2.8 TYPE YOUR SUBTITLE HERE	4
2.9 TYPE YOUR SUBTITLE HERE	4
2.10 TYPE YOUR SUBTITLE HERE	4
CHAPTER THREE	5
TYPE YOUR CHAPTER TITLE HERE	5
3.1 TYPE YOUR SUBTITLE HERE	5
3.2 TYPE YOUR SUBTITLE HERE	5
3.3 TYPE YOUR SUBTITLE HERE	5
3.4.1 TYPE YOUR SUBTITLE HERE	5
3.4.2 TYPE YOUR SUBTITLE HERE	5
3.4.3 TYPE YOUR SUBTITLE HERE	5
3.5 TYPE YOUR SUBTITLE HERE Error! Bookmark not defined	d.

3.6 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
3.7 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
3.8 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
3.9 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
3.10 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
CHAPTER FOUR	Error! Bookmark not defined.
TYPE YOUR CHAPTER TITLE HERE	Error! Bookmark not defined.
4.1 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
4.2 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
4.3 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
4.4.1 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
4.4.2 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
4.4.3 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
4.5 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
4.6 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
4.7 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
4.8 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
4.9 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
4.10 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
CHAPTER FIVE	Error! Bookmark not defined.
TYPE YOUR CHAPTER TITLE HERE	Error! Bookmark not defined.
5.1 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.

5.2 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
5.3 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
5.4.1 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
5.4.2 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
5.4.3 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
5.5 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
5.6 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
5.7 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
5.8 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
5.9 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
5.10 TYPE YOUR SUBTITLE HERE	Error! Bookmark not defined.
REFERENCES	
APPENDIX A	
IN-TEXT CITATION EXAMPLES	
APPENDIX B	
SAMPLE EQUATIONS	
APPENDIX C	
SAMPLE TABLES	
APPENDIX D	
SAMPLE FIGURES	

LIST OF TABLES

Page number must be right alligned

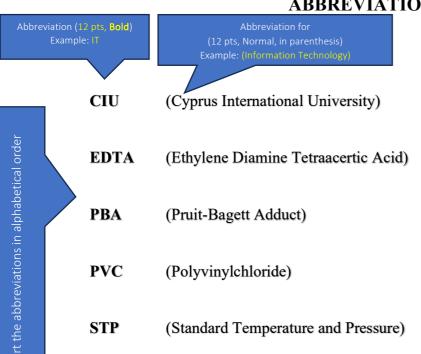
Table 2.1: Variation of the percent yield with concentration	
Table 2.2: Variation of the percent yield with temperature	
Table 3.1: Free radicalic initiators41	

(List of Tables style, Times New Roman, 12 pts, 1.5 line spacing)

LIST OF FIGURES

Figure 2.1: Variation of the percent yield with concentration	28
Figure 2.2: Variation of the percent yield with temperature	31
Figure 2.1: SEM picture of the products at varying temperatures	41
Figure 4.2: Flowchart of the synthesis method	45

(List of Figures style, Times New Roman, 12 pts, 1.5 line spacing)



ABBREVIATIONS

CHAPTER ONE -

ading-1 style, Times New Roman, 14 pts, Bold APITAL LETTERS, centered, 1.5 line spacing)

TYPE YOUR CHAPTER TITLE HERE

1.1 TYPE YOUR SUBTITLE HERE

Type your text here. The font must be Times New Roman with a size of 12 points. The line spacing must be 1.5 lines.

Paragraphs must have no indentation. They must be justified from both sides.

Type your statements here

1.2 TYPE YOUR SUBTITLE HERE

Type your statements here

1.3 TYPE YOUR SUBTITLE HERE

Type your statements here *k*

1.4 TYPE YOUR SUBTITLE HERE

Type your statements here

1.5 TYPE YOUR SUBTITLE HERE

Type your statements here

1.6 TYPE YOUR SUBTITLE HERE^{*}

Type your statements here

Normal text Normal style, Times New Boman, 12 points, 1.5 line s

Subtitles

Heading-2 style, Times New Roman, 12 pts, Bold, CAPITAL ETTERS, 1.5 line spacing)

1.7 TYPE YOUR SUBTITLE HERE

Type your statements here

1.8 TYPE YOUR SUBTITLE HERE

Type your statements here

1.8.1 TYPE YOUR SUB-SUBTITLE HERE <-

Type your statements here

1.8.2 TYPE YOUR SUB-SUBTITLE HERE

Type your statements here

1.9 TYPE YOUR SUBTITLE HERE

Type your statements here

1.10 TYPE YOUR SUBTITLE HERE

Type your statements here

Sub-Subtitles (Heading-3 style, Times New Roman, 12 pts, Bold, CAPITAL LETTERS, 1.5 line spacing)

CHAPTER TWO

TYPE YOUR CHAPTER TITLE HERE

2.1 TYPE YOUR SUBTITLE HERE

Type your text here. The font must be Times New Roman with a size of 12 points. The line spacing must be 1.5 lines.

Paragraphs must have no indentation. They must be justified from both sides.

Type your statements here

2.2 TYPE YOUR SUBTITLE HERE

Type your statements here

2.3 TYPE YOUR SUBTITLE HERE

Type your statements here

2.4.1 TYPE YOUR SUBTITLE HERE

Type your statements here

2.4.2 TYPE YOUR SUBTITLE HERE

Type your statements here

2.4.3 TYPE YOUR SUBTITLE HERE

Type your statements here

2.5 TYPE YOUR SUBTITLE HERE

Type your statements here

2.6 TYPE YOUR SUBTITLE HERE

Type your statements here

2.7 TYPE YOUR SUBTITLE HERE

Type your statements here

2.8 TYPE YOUR SUBTITLE HERE

Type your statements here

2.9 TYPE YOUR SUBTITLE HERE

Type your statements here

2.10 TYPE YOUR SUBTITLE HERE

Type your statements here

CHAPTER THREE

TYPE YOUR CHAPTER TITLE HERE

3.1 TYPE YOUR SUBTITLE HERE

Type your text here. The font must be Times New Roman with a size of 12 points. The line spacing must be 1.5 lines.

Paragraphs must have no indentation. They must be justified from both sides.

Type your statements here

3.2 TYPE YOUR SUBTITLE HERE

Type your statements here

3.3 TYPE YOUR SUBTITLE HERE

Type your statements here

3.4.1 TYPE YOUR SUBTITLE HERE

Type your statements here

3.4.2 TYPE YOUR SUBTITLE HERE

Type your statements here

3.4.3 TYPE YOUR SUBTITLE HERE

Type your statements here

Examples to JOURNAL	REFERENCES Authors Publication year Title of the Article Bass, B. M. and Avolio, B. J. (1994). Transformational leadership and organizational culture. <i>The International Journal of Public Administration</i> , 17(3-4), 541-554.
ARTICLES	Betts, S. C. (2005). Contingency theory: science or termiologyood/mar of Dustness. Page number(s) & Economics Research (JBER), 1(8).
	Dii GmbH, (2013). Desert Power: Getting Started. The manual for renewable electricity in MENA Full Report. [Online] Munich: Dii GmbH, pp.1-262. Available at: https://www.db.com/cr/en/docs/Desert-Power-Getting-Started- Full-ReportEnglishScreen (1).pdf [Accessed 2 Apr. 2017].
	Eisenbeis, S. A., & Boerner, S. (2013). A double-edged sword: Transformational leadership and individual creativity. <i>British Journal of Management</i> , 24(1), 54-68.
	Franco-Santos, M., Kennerley, M., Micheli, P., Martinez, V., Mason, S., Marr, B. and Neely, A. (2007). Towards a definition of a business performance measurement system. <i>International journal of operations & production management</i> .
	Hilton, S. K., Arkorful, H., & Martins, A. (2021). Democratic leadership and organizational performance: the moderating effect of contingent reward. <i>Management Research Review</i> .
	Iglinski, B., Buczkowski, R., Cichosz, M., Iglinska, A. and Plaskacz-Dziuba, M. (2015). SWOT analysis of the renewable energy sector in Poland. Case study of Wielkopolskie region. <i>Journal of Power Technologies</i> , 95(2), 143-157.
Example to an ONLINE JOURNAL ARTICLES	 Isaidi, K., Rehman, M. and Amamri, M. (2018). The causal nexus between economic growth and energy consumption obtained from petroleum coal and other resources: New evidence from global panel of 53 countries. <i>Cities and Society</i>, [online] 38, pp.49-561. Available at: <u>http://www.sciencedirect.com</u> [Accessed 17 Dec. 2018]. Page number
Example to a	Jarrant, J. S. (1975). Principles and practice of education. London: Longman
BOOK	Klum, E., Achen, B., Dræby, I. ve Jensen, I. (2008). Cultural intelligence: The art of leading cultural complexity. London: Middlesex University Press.
Sort the ref alphabetical order	

Examples to
OTHER
ONLINE
RESOURCES

KEnergy.gov. (2017). *Hydrothermal Resources* | *Department of Energy*. [Online] Available at: https://energy.gov/eere/geothermal/hydrothermal-resources [Accessed 25 Mar. 2017].

New Energy Realities. (2017). [online] Wales: World Energy Council 2017, pp.1-40. Available at: http://file:///C:/Users/user/Pictures/1.-World-Energy-Issues Monitor 2017-Full-Report.pdf [Accessed 1 Apr. 2017].

 WIEA Bioenergy, (2012). Energy recovery from renewable content of waste: incentives and methodology for analysing biogenic content of mixed waste. Task 36. [online] Milano: RSE S. p. A. Ricerca sul Sistema Energetico – RSE S.p.A., pp.1-68. Available at: http://task36.ieabioenergy.com/wpcontent/uploads/2016/06/Energy-recovery-from therenewable-content-ofwaste-2.pdf [Accessed 1 Apr. 2017].

1.27 cm (half inch) hanging of paragraphs

APPENDIX A

IN-TEXT CITATION EXAMPLES

Exar	nple to citation for a reference with single author
best way to organize d	epends on the nature of the environment to which the
organization relates (Betts, 2	2003). The agile organization is more
The last name of the first author No initials of the first and middle names	The year of publication
	citation for a reference with two authors
By observing the work and	abilities of transformational leaders, managers acquire
knowledge and creativity sk	ills (Eisenbeiss and Boerner, 2013).
	Seperation of authors' last names by "and" (Do not use "&")
perfor Example to a citation for	a reference with three authors. nforce positive performance, the
	tructive transaction between the members and the leader
e t	ns, 2021). Management-by-exception, on the other hand,
	etween members and leaders

"and" before the last author

Example to a citation for a reference with more than three authors. This citation is for a reference in which there are five authors: (Iglinski, B., Buczkowski, R., Cichosz, M., Iglinska, A. and Plaskacz-Dziuba, M.)

... it has been reported (Iglinski *et al*, 2015) that this phenomenon can be used to develop solutions in

First author	"et al" means "others", or "his/her co-workers" (<i>italic</i>)
--------------	--

Example to a citation to a reference if the author's name is mentioned in the sentence.

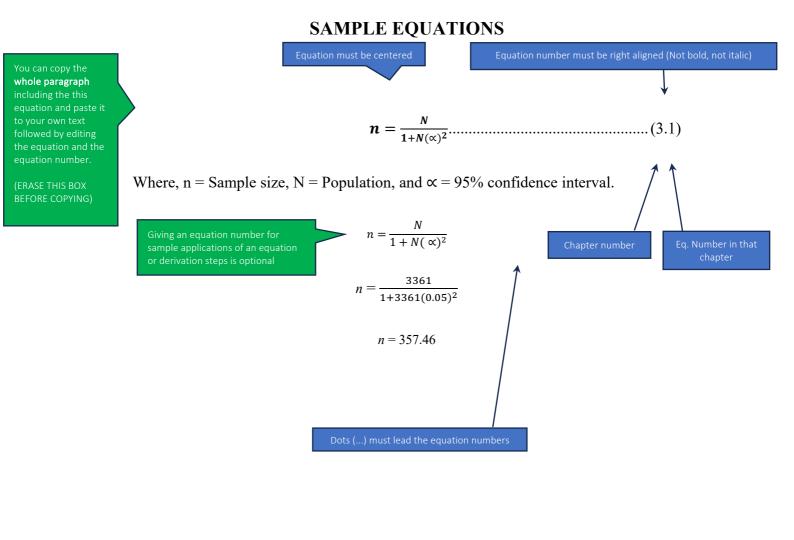
... The fundamental claim of contingency theory, as stated by Betts (2003), is that an organization's organizational structure is influenced by its environment. Similarly, organizational theorists in contingency theory argue t Author's last name is out of the parenthesis

Example to a citation for a reference with more than three authors when the authors are mentioned within the sentence

... it has been reported by Iglinski *et al* (2015) that this phenomenon can be used to develop solutions in

Only the year of publication is in parenthesis only

APPENDIX B



 $CH_4 + O_2 \rightarrow CO_2 + H_2O$ (4.3)

Chemical equations are treated similarly

APPENDIX C

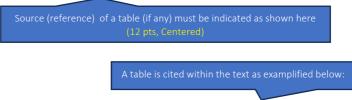
SAMPLE TABLES

|--|

Table 2.1: Wind plants capacity and growth rate

Position	Country	/	Capacity		Growth Rate 2015	
1 USITION	Country		Total Added		[%]	
1.	China		2015148,0 00	32,970	29.0	
2.	United States		74,347	8598	13.1	
3.	Germany		45,192	4919	Font size = 10 points, 1.5 line spacing	
4	Poland		5100	1266	inside the table and its footnotes	
	erlines for only captions e last data row	'//	5079	126	2.5	
6.	Denmark		5064	217	3.7	
7.	Turkey		4718	955	25.4	
	Rest of the World		40,800	5000	14.0	

(Source: Igliński, et al, 2016)

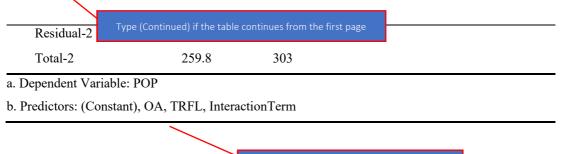


.... Wind plants capacity and growth rates are shown in Table 2.1 that has been...

Moo	del	s	In tables larger than one page, the same table number and description should be written on the second page. The word "continued" is written in between the table number and its description as exemplified below. (See the next page)					
	Regression	141.939	2	70.969	182.715	0.000^{a}		
1	Residual	116.136	299	0.388				
	Total	258.075	301					

Table 4.7: ANOVA results

Table 4.7 (Continued): ANOVA result

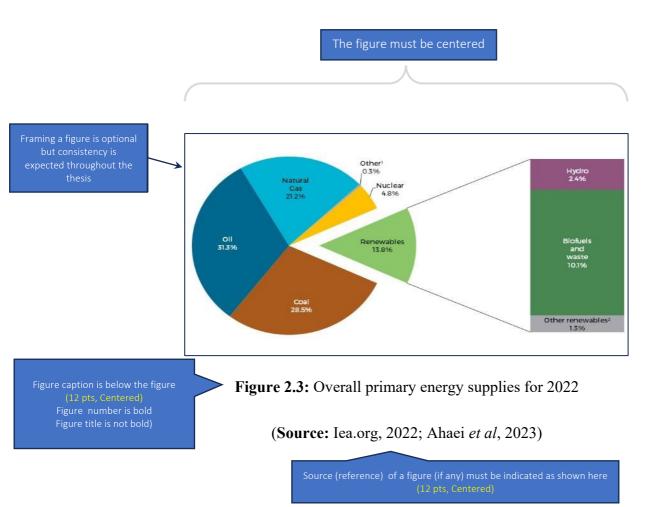


Draw a borderline after the footnotes as well

APPENDIX D

SAMPLE FIGURES

... As shown in **Figure 2.3** only 13.8% of the energy supplies is from renewable energy sources. The vast majority of the energy is produced from fossil sources ...



... side-by-side comparison of galaxy cluster MACS0416 as seen by the Hubble Space Telescope in optical light (**Figure 4.4 (a)**) and the James Webb Space Telescope in infrared light (**Figure 4.4 (b)**) reveals different details...

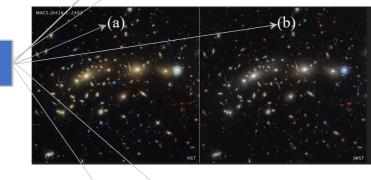


Figure 4.4: Same galaxy from two different space telescopes (a) Hubble, (b) James Webb

(Source:

https://www.flickr.com/photos/nasawebbtelescope/53321377829/in/album-72177720305127361/)

These show how we use the parts of a figure as (a), (b), (c) etc.,)