

## BLANK PAGE

## T.C.

## NİĞDE ÖMER HALİSDEMİR UNIVERSITY

## GRADUATE SCHOOL OF NATURAL AND APPLIED SCIENCES

#### DEPARTMENT OF MECHANICAL ENGINEERING

THESIS TITLE

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Açıklamalı [1]: FBE: This section should be 4 cm below

NAME SURNAME Açıklamalı [2]: This section should be 16 cm below the top of the page and written in Times New Roman, 12-

point font.

MASTER'S / PH.D. THESIS

**Açıklamalı [3]:** This section should be 18 cm below the top of the page and written in Times New Roman, 12-point font.

Advisor

Title Name SURNAME

Month 20..

**Açıklamalı [5]:** This section should be 26 cm below the top of the page and written in Times New Roman, 12-point font.

**Açıklamalı [4]:** This section should be 20 cm below the top of the page and written in Times New Roman, 12-point font.

tarafından This study, titled "," prepared under the supervision of [Advisor's Name], has been accepted as a Master's thesis by our jury at Niğde Ömer Halisdemir University, Graduate School of Natural and Applied Sciences, Department of [Department Name]. (*Blanks should be in Times New Roman, 12-point, Bold*)

Chair	: Title, Name Surname	
	Institution	
Member	: Title, Name Surname	
	Institution	
Member	: Title, Name Surname	
	Institution	

## **APPROVAL:**

This thesis has been deemed appropriate by the jury members appointed by the Graduate School of Natural and Applied Sciences Board of Directors on ..../20.... and has been approved by the Institute Board of Directors with the decision dated ..../20.... and numbered .....

...../..../20...

Prof. Dr. Mustafa KARATEPE DIRECTOR

## THESIS DECLARATION

I hereby declare that all the information presented in this thesis has been obtained and presented in accordance with scientific and academic principles. Furthermore, I confirm that this study has been prepared in compliance with the thesis writing guidelines and that full attribution has been provided for any statements and information that do not belong to me.

Signature Student's Name SURNAME **Açıklamalı [6]:** Bu kısım sayfa başından 4 cm aşağıda olmalı ve Times New Roman 12 punto ile yazılmalıdır.

**Açıklamalı [7]:** This section should be 4 cm below the top of the page and written in Times New Roman, 12-point font.

## ABSTRACT

THESIS TITLE

SURNAME, Name Niğde Ömer Halisdemir University Graduate School of Natural and Applied Sciences Department of Mechanical Engineering

Advisor

: Title Name SURNAME

Month 20.., ... pages

Theses must be typed on a computer and printed only on the front side of the paper. The font type should be **Times New Roman**. The font size used in the text should be **twelve** (12) points. A single-character space should be left after all punctuation marks. The abstract should not exceed one (1) page. Throughout the thesis, the line spacing should be set to 1.5 with '0 pt' spacing before and after lines. For theses written in English, the English abstract should precede the Turkish abstract.

Keywords: Times New Roman, ten (10) points, geometric optimization, mathematical model, numerical analysis

**Açıklamalı [8]:** This section should be 4 cm below the top of the page and written in Times New Roman, 12-point font.

The page numbering should start from the Abstract page using Roman numerals, beginning with iv, as shown in the example. Pages preceding the Abstract should not have a page number.

Açıklamalı [9]: The page number must be indicated on the Curriculum Vitae page.

## SUMMARY

THESIS TITLE

SURNAME, Name Nigde Omer Halisdemir University Graduate School of Natural and Applied Sciences Department of Mechanical Engineering

Supervisor

: Title Name SURNAME

Month 20.., ... pages

**Açıklamalı [11]:** The page number must be indicated on the Curriculum Vitae page.

**Açıklamalı [10]:** This section should be 4 cm below the top of the page and written in Times New Roman, 12-point font.

In this thesis,

Keywords: Times New Roman, Ten (10) point size, geometric optimization, mathematical modelling, numerical analysis

v

#### PREFACE

Writing a preface is mandatory and should not exceed one page. The **preface** title must be written in all capital letters, centered, bold, and positioned 4.0 cm below the top edge of the page. The preface should include additional information that is considered important but would disrupt the integrity of the thesis if presented within the main text. Factors that limit or support the study should be mentioned. If the thesis study was conducted within the scope of a project, it is mandatory to specify the name of the project and the relevant institution on the preface page. Additionally, acknowledgments should be included in this section.

In this master's thesis, the effects of SV mineral, produced under laboratory conditions using a special method, on the durability and dimensional stability properties of designed cement-based composites were investigated. The hardened mortars produced were subjected to rapid chloride permeability, capillary water permeability, freeze-thaw testing, drying shrinkage, and restrained shrinkage tests. According to the obtained results, the SV%6\_C-UK mixture containing 6% SV demonstrated the best performance.

During my master's thesis study, I would like to express my sincere gratitude to my esteemed advisor Dr. Öğr. Üyesi Hasan Erhan YÜCEL, who guided my studies and research, shared his knowledge and experience, and provided assistance and support in every aspect. I also owe my thanks to my esteemed professor Muhammet GÜNEŞ, who shared his knowledge and experience with me and assisted me during the experiments. I am grateful to my master's colleague Yasin KAYA, who supported me in many aspects during my research.

I dedicate this master's thesis to my beloved mother Emine YILMAZ, my father Ahmet YILMAZ, and my aunts Doç. Dr. Servet HALİ and Fatma DADI, who have always been by my side throughout my life and encouraged me in this study.

I would also like to thank the Scientific and Technological Research Council of Turkey (TÜBİTAK) and its staff for their financial support through project MAG-217M182.

**Açıklamalı** [12]: This section should be 4 cm below the top of the page and written in Times New Roman, 12-point font.

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For directories extending to a second page, the top margin should be set to 2.5 cm.

## SYMBOLS AND ABBREVIATIONS

Symbols	Explanation
Т	Temperature
V	Velocity
W/m <sup>3</sup>	Volumetric power density
W/kg	Mass-specific power density
σ	True stress
ε	True strain
K	Strength coefficient
Ν	Work hardening exponent

Açıklamalı [17]: Adjust the content of the Symbols and Abbreviations section according to your thesis. If you need additional rows, you can use the Insert option in the Edit tab to add rows.

In the explanation section of symbols, only the first letter of the first word should be uppercase, and all other letters should be lowercase.

In the explanation section of abbreviations, the first letter of each word should be uppercase, and all other letters should be lowercase.

This section should be positioned 4 cm below the top of the page and written in Times New Roman, 12-point font.

For indexes extending to a second page, the top margin should be set to 2.5 cm.

Abbreviation	Explanation
DC	Direct Current
MEG	Membrane Electrode Group
kg	Kilogram
kW	Kilowatt
W	Watt
YSZ	Yttria-Stabilized Zirconia
LSM	Lanthanum Strontium Manganese

#### CHAPTER I

## INTRODUCTION

## 1.1 Purpose and Scope

This guide has been prepared to ensure a standard that complies with the principles of scientific presentation in master's and doctoral theses prepared in the departments affiliated with the Graduate School of Natural and Applied Sciences at Niğde Ömer Halisdemir University. Theses prepared for master's and doctoral degrees are works that present an original research study in an organized and scientifically coherent manner. Each research study is conducted in a way that meets the scientific criteria and standards of the relevant department, and the completed work is presented in accordance with the standards of the Graduate School of Natural and Applied Sciences. Students who will prepare a master's or doctoral thesis in the departments affiliated with the Graduate School of Natural and Applied Ömer Halisdemir University are required to comply with all principles, writing techniques, and rules specified in this guide.

## Table 1.1. There should be 1.5 line spacing before and 1 line spacing after the table

			uue	
	XX	XX	XX	XX
XX	XX	XX	XX	XX

A double line spacing should be left after the table.

1.1.1 Second-Level Subheading

1.1.1.1 Third-Level Subheading

1.1.2 Second-Level Subheading

1.1.3 Second-Level Subheading

Açıklamalı [18]: Throughout the thesis, except for Figures, Photographs, and Tables, all text line spacing should be set to 1.5, with "0 pt" before and after the lines.

The page numbering should start from the INTRODUCTION section as 1 (one) and continue uninterrupted until the end of the thesis.

Açıklamalı [19]: Use the "Main Title", "Subheading 1", "Subheading 2", and "Subheading 3" styles within "Heading Styles" to set the levels of headings.

DO NOT use a period (.) after the last number in heading numbering!

Leave one (1) line space before and after headings.

Açıklamalı [20]: In the numbering of Tables, Figures, and Photographs, a period (.) MUST be used after the last number.

The line spacing between the Table title and the Table itself should be set to "Single" spacing, with "0 pt" before and after". The spacing after the table should be set to "Double" spacing, with "0 pt" before and after".

If the table does not fit in the remaining space on the page after the text, it should continue on the next page, and the table should not be split across pages. It is not a problem if empty space remains on the previous page. If the table is too large to fit on a single page, it should be divided. In this case, the remaining space on the page after the text should be utilized.

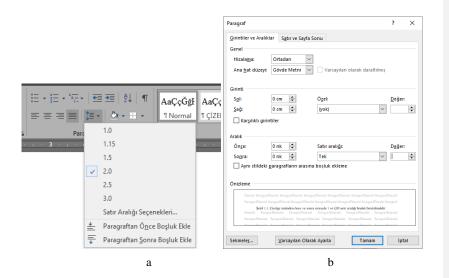


Figure 1.1. Adjusting line spacing (a) and setting line spacing options (b)





All mathematical and chemical formulas, equations, and expressions should be written clearly and neatly. Equations are numbered sequentially within their respective sections. These numbers are written on the far right of the line in the format [(1.1), (1.2), ...., (2.1), (2.2), ...], and if necessary, sub-expressions of the same equation are labeled as (1.1a), (1.1b).

Anode:  $H_2 + O^2 \rightarrow H_2O + 2e^-$  (1.1)

Cathode:  $\frac{1}{2}O_2 + 2e^- \rightarrow O^{-2}$  (1.2)

Total : 
$$H_2 + \frac{1}{2}O_2 \rightarrow H_2O$$
 (1.3)

A 1.5 line spacing should be left between the **formula** and the **text**, with **"0 pt before and after"**. The formula should be aligned to the **left margin** of the page.

Açıklamalı [21]: Çizelge, Şekil ve Fotoğraf numaralandırmalarında son rakamdan sonra da nokta işareti KULLANILMALIDIR!

Boşluk ayarlarının tam olabilmesi için beyaz arka plana sahip şekiller kırpılarak eklenmelidir.

Tek Şekil yazısında birden fazla Şekil verilmesi durumunda örnekte verildiği gibi her bir şekil için alfabetik harfler sırasıyla kullanılmalıdır.

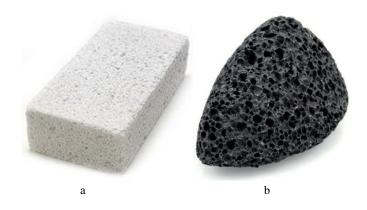
Şekil ile Şekil yazısı arasında satır aralıkları üstten ve alttan "0 nk" olacak şekilde "Tek satır" aralığına ayarlanmalıdır. Şekilden sonraki boşluk ise satır aralıkları üstten ve alttan "0 nk" olacak şekilde "Çift satır" aralığına ayarlanmalıdır.

**Açıklamalı [22]:** In the numbering of Tables, Figures, and Photographs, a period (.) MUST be used after the last number.

To ensure proper spacing settings, figures with a white background should be cropped before being inserted.

If multiple figures are provided under a single Figure title, alphabetical letters should be used for each figure in order, as shown in the example.

The line spacing between the Figure title and the Figure itself should be set to "Single" spacing, with "0 pt before and after". The spacing after the figure should be set to "Double" spacing, with "0 pt before and after".



Photograph 1.1. Appearance of acidic pumice (a) and basic pumice (b)

If two or more related illustrations need to be placed on the same page, each should be labeled sequentially with letters (**a**), (**b**), (**c**), ..., and a single table or figure number should be assigned to all of them. In the illustration caption, (**a**), (**b**), (**c**), ... should be explained separately.

Açıklamalı [23]: In the numbering of Tables, Figures, and Photographs, a period (.) MUST be used after the last number.

To ensure proper spacing settings, figures with a white background should be cropped before being inserted.

If multiple photographs are provided under a single Photograph title, alphabetical letters should be used for each photograph in order, as shown in the example.

The line spacing between the Photograph title and the Photograph itself should be set to "Single" spacing, with "0 pt before and after". The spacing after the photograph should be set to "Double" spacing, with "0 pt before and after".

#### CHAPTER II

#### GENERAL OVERVIEW AND WRITING RULES

#### 2.1 Subheading

#### 2.2 Writing

Theses must be written on a computer and printed only on the front side of the paper. The font type should be Times New Roman. The font size used in the text should be twelve (12) points. If wide and long tables need to fit on a single page, the font size may be reduced to as small as 8 points. A single-character space must be left after every punctuation mark.

## 2.3 Line Spacing

The line spacing for the main text and the list of references should be 1.5 (one and a half); whereas, the descriptions of figures, tables, images, and maps, as well as quotations and footnotes, should have a line spacing of 1 (one). A 1.5-line spacing should be left between chapter titles and subheadings and the following paragraphs. Paragraphs within the text should also be separated by a 1.5-line spacing. In cases where necessary (e.g., program codes, etc.), the font size in the appendix section may be reduced to ten (10) points, with a line spacing of 1 (one).

#### 2.4 Margins and Page Layout

Each page should have a left margin of 3.5 cm, and top, bottom, and right margins of 2.5 cm. In thesis writing, all lines should start from the end of the left margin without paragraph indentation. All lines should be justified, and hyphenation should not be used in the text.

#### 2.5 Page Numbering

Page numbers should be centered 1.5 cm above the bottom edge of the paper and should be in the same font type and size as the main text. All pages except the outer cover, inner cover, approval page, and thesis declaration page should be numbered. For pages preceding the main text, such as the inner cover, approval, and thesis declaration, as well as the abstract, summary, preface, table of contents, and, if applicable, lists of tables, figures, symbols, and abbreviations, lowercase Roman numerals (i, ii, iii, iv, v, vi) should be used. The page numbering should start with "iv" on the abstract page.

The main body of the thesis, starting from the introduction and including the references and appendices, should be numbered continuously using Arabic numerals (1, 2, 3...). Numbering should proceed without interruption, including pages containing figures, images, and diagrams.

#### 2.6 Language and Expression

Unless there are exceptional circumstances, the thesis must be written in Turkish using a scientific and formal language in the third-person perspective.

Additionally, concerning participation in EU programs and the adaptation process, if the student, the advisor, and the faculty members involved in presentations and examinations during the study period meet the foreign language teaching proficiency criteria set by the Higher Education Council (YÖK), and if an extended Turkish summary explaining the thesis's purpose, scope, scientific methods, and findings is included, the thesis may be written in a foreign language upon the recommendation of the relevant department head and the approval of the Institute Board. In cases where theses are written in a foreign language, the same rules outlined in the Thesis Writing Guide must be followed.

#### 2.7 Chapters and Subsections

Each chapter must start on a new page. The chapters and subsections of the thesis should not include unnecessary details, and the priority order of chapters and subsections should be maintained. Chapter and subsection headings should be written in bold and numbered as specified in Appendix-H.

Primary chapter titles (12 points) should be written in all uppercase letters and centered; second-level chapter titles should have the first letter of each word capitalized, while the rest remain in lowercase, and should be justified. In second-level chapter titles, if conjunctions such as "and," "or," or "with" are used, their first letters should be in lowercase. Third-level chapter titles should have only the first letter of the first word

capitalized, with all other words in lowercase. If fourth-level headings are necessary, they should be formatted like third-level subsection headings.

Additional lower-level subsections should not be used unless absolutely necessary. If there are unnumbered subheadings within numbered chapters and subsections, they should be formatted as follows: <u>underlined</u>, *italic*, and *underlined italic*, respectively. These subheadings should be written in a standard font size.

## 2.8 Thesis Special Pages and Main Text

The thesis consists of three main sections: Preliminary Pages, Main Text, and Final Pages. The order of the headings within these sections should follow the example below. Mandatory sections are marked with an asterisk (\*) on the left side.

## PRELIMINARY PAGES

- Blank Page
- Inner Cover
- Approval Page
- Thesis Declaration Page
- Abstract
- Summary
- Preface
- Table of Contents
- List of Tables (if applicable)
- List of Figures (if applicable)
- List of Photographs and Similar Materials (if applicable)
- List of Symbols and Abbreviations (if applicable)

## THESIS TEXT

#### FINAL PAGES

• References

Appendices (if applicable)

- Curriculum Vitae
- Publications Derived from the Thesis (articles, conference papers, posters, etc.) (if applicable)
- Blank Page

## 2.8.1 Thesis Cover and Preliminary Pages

## 2.8.1.1 Outer Cover

The content and layout of the outer cover should be as specified in Appendix A. The outer cover should be prepared in standard 12-point font. The thesis title should be written in all uppercase letters, using single line spacing.

#### 2.8.1.2 Blank Page

A blank page should be left between the front outer cover and the inner cover, as well as between the back outer cover and the final page of the thesis.

## 2.8.1.3 Inner Cover

The content and layout of this page should be as specified in Appendix B. The inner cover should be prepared in standard 12-point font. The thesis title should be written in all uppercase letters, using single line spacing.

## 2.8.1.4 Approval Page

The approval page should be prepared by completing the form specified in Appendix C, which is determined by the Institute. Blue ink must be used for signatures.

#### 2.8.1.5 Thesis Declaration Page

The "thesis declaration" page, which includes statements regarding the originality of the thesis and adherence to ethical values, is provided in Appendix D. This page is prepared by filling out the form issued by the Institute and must be signed by the student.

#### 2.8.1.6 Abstract and Summary (English Abstract)

The Abstract and Summary pages should be placed immediately after the Thesis Declaration Page. The headings "ABSTRACT" and "SUMMARY" must be written in all uppercase letters, aligned in the center, 4.0 cm below the top edge of the page, in bold 12-point font. The abstract and summary should clearly state the purpose, scope, methods used, results, and examples (if necessary) of the thesis study. Figures, diagrams, and mathematical formulas should not be included unless absolutely necessary, and each section should not exceed one page. After the Abstract/Summary text, "Keywords" should be written (for the English abstract: "Keywords"). The font size for "Keywords" should be 10 points, and the words "Keywords" should be italicized. The Abstract and Summary pages should be formatted according to the examples provided in Appendices E and F.

#### 2.8.1.7 Preface

Writing a preface is mandatory and should not exceed one page. The heading "PREFACE" must be written in all uppercase letters, aligned in the center, 4.0 cm below the top edge of the page, and in bold font. The preface should include supplementary information that is considered important but would disrupt the integrity of the thesis if included in the main text. If the thesis study was conducted within the scope of a project, the name of the project and the related institution must be specified on the preface page. Acknowledgments should also be included in this section (Appendix G).

#### 2.8.1.8 Table of Contents

The Table of Contents must include all special pages starting from the Abstract, as well as all chapter and subsection titles, references, appendices (if any), and the curriculum vitae. The heading "TABLE OF CONTENTS" must be written in all uppercase letters, centered 4.0 cm below the top edge of the page, and in bold font. The titles should be listed exactly as they appear in the thesis text, with their corresponding page numbers aligned. Dots should be used to connect the last word of each title to its page number. If a title extends to two or more lines, the page number should be placed opposite the last

line. The second and subsequent lines should start from the same indentation as the first word of the title (Appendix H).

#### 2.8.1.9 List of Tables

The heading "LIST OF TABLES" must be written in all uppercase letters, centered 4.0 cm below the top edge of the page, and in bold font. Table numbers and titles should be identical to those in the main text. The corresponding page numbers should be aligned, and dots should be used to connect the last word of each title to its page number. If a title extends beyond one line, subsequent lines should start from the same indentation as the first line (excluding the table number) (Appendix I).

#### 2.8.1.10 List of Figures

This section contains a list of figure numbers, titles, and page numbers. The page layout should be similar to that of the "List of Tables" (Appendix J).

#### 2.8.1.11 List of Photographs and Similar Materials

If applicable, the list of photographs and similar materials should be provided on a separate page and formatted similarly to the "List of Tables" (Appendix K).

#### 2.8.1.12 List of Symbols and Abbreviations

This section should include symbols and abbreviations except for those that are internationally recognized. The heading "LIST OF SYMBOLS AND ABBREVIATIONS" must be written in all uppercase letters, centered 4.0 cm below the top edge of the page, and in bold font. The list should be aligned to the left margin of the page. Explanations of symbols should have only the first letter of the first word capitalized, whereas abbreviations should have all words capitalized (Appendix L).

## 2.9 Thesis Main Text

The thesis main text should be divided into sections to facilitate reader comprehension. Although the detailed structure of academic texts varies by discipline, the overall format and writing style of the main text should follow a consistent structure throughout. All sections should be numbered using Roman numerals, and their titles should be written in uppercase letters (e.g., CHAPTER I, CHAPTER II, CHAPTER III). Each chapter must begin on a new page. Topics within a chapter should be presented continuously, following

the page layout rules. Partially filled pages are only acceptable for pages containing tables, figures, diagrams, photographs, or similar materials.

#### 2.9.1 Introduction

The introduction, one of the key sections of the thesis, should be presented under the heading "INTRODUCTION." This section should provide the reader with general background information on the topic and, if necessary, a literature review. The research objective should be stated briefly and clearly. Additionally, brief descriptions of the content of the following sections should be included.

#### 2.9.2 Main Body of the Thesis

All sections between the introduction and the conclusion constitute the "Main Body." However, a separate heading titled "MAIN BODY" should not be used.

Depending on the nature of the thesis topic, the level of detail of the research, and the overall length of the thesis, the main body may be divided into numbered subsections at the first, second, and third levels. Appropriate headings (e.g., General Information, Literature Review, Materials and Methods, Results and Discussion) should be used, along with a consistent numbering system.

#### 2.9.2.1 Materials and Methods

This section should describe the subject or object of study (such as a specific field, region, organism, or system). It should also explain the purification, measurement, and evaluation methods (including statistical analyses) applied at various stages of the research. If an existing method has been modified, the changes and their justifications should be clearly stated. In some disciplines (e.g., Mathematics), a "Materials and Methods" section may not be necessary.

#### 2.9.2.2 Results and Discussion

This section should present numerical values and data obtained from surveys, observations, measurements, experiments, or analytical studies in a clear and concise manner, preferably in a format that facilitates statistical analysis. If necessary, the

discussion can be presented as a separate section or under a different title depending on the field of study.

#### 2.9.2.3 Conclusion

This section should summarize the findings of the thesis study as concisely and clearly as possible. The significance of these findings within the existing literature and their contributions to the field should be discussed. Comparisons with previous studies should be made, and any suggestions for future research should be provided.

## 2.10 Final Pages

The final pages consist of the References, Appendices (if applicable), and Curriculum Vitae

#### **CHAPTER III**

## CITATIONS

#### 3.1 Citations

Expressions of three lines or fewer that are taken from other sources and intended to be included in the thesis text should be presented within the thesis text and enclosed in double quotation marks.

#### Example:

As the number of data increases, the results obtained become more reliable and approach the true characteristics of the population. Gürtan (2000) states on this matter, "If it is based on a large number of data, even a correlation coefficient as low as 0.25 can be considered significant."

For longer expressions, the text to be quoted should be placed below the last line of the main text with a 1.5 (one and a half) line spacing, starting from the beginning of the line as a separate paragraph, enclosed in double quotation marks, and written with single (1) line spacing. After the quotation, a 1.5 (one and a half) line spacing should again be left before continuing with the main text of the thesis.

As the number of data increases, the results obtained become more reliable and approach the true characteristics of the population. Gürtan (2000) states the following on this matter: "If it is based on a large number of data, even a correlation coefficient as low as 0.25 can be considered significant. However, for a correlation coefficient based on a small number of data to be considered reliable, it must be high enough to not arise from chance."

The in-text citation format for articles in periodicals, proceedings from congresses, conferences, symposia, etc., books, book chapters, lecture notes and educational notes, theses, reports, maps, patents, standards, statistical yearbooks, and internet sources with identified authors is the same. Examples for these are provided below.

If a scientific study is conducted by a single author, it should be cited as (Surname, year).

- Example: In high-performance concretes (HPC), the water content is low, and the cement dosage is high. As a result, the amount of dissolved alkalis in the interfacial liquid is high, and its concentration within the liquid is elevated. This situation may lead to alkali-aggregate reactions in HPC (Akman, 2003).

If a scientific study is conducted by **two authors**, it should be cited as (Surname and Surname, year).

Example: The cement dosage used in HPC production is quite high. As is known, cement, particularly Portland cement, causes significant energy and natural resource consumption, CO2 emissions, and consequently air, water, and environmental pollution. Therefore, mineral additives such as silica fume, fly ash, and blast furnace slag are used in HPC production (Ransinchung and Kumar, 2010).

If a scientific study is conducted by **three or more authors**, it should be cited as (Surname et al., year).

Example: The fire resistance of HPC is an important topic of discussion. In a reinforced concrete structure, concrete protects the steel from fire to some extent due to the voids within it and the movement of free water in those voids. However, HPC with a water/binder ratio below 0.30 does not possess this specific property (Noumowe et al., 1996).

If two or more scientific studies cited are by the same authors and published in the same year, they should be cited as (Surname et al., yeara), (Surname et al., yearb), etc.

 Example: It is known that chemical additives such as superplasticizers and mineral additives such as silica fume, nano-silica, fly ash, blast furnace slag, metakaolin, glass powder, rice husk ash, marble powder, natural zeolite, limestone powder, etc., are used in the production of HPC (Henkensiefken et al., 2009a; Henkensiefken et al., 2009b). If a statement is quoted from multiple studies, the citations should be listed in alphabetical order (not by year) and separated by semicolons (;).

- Example: It is known that chemical additives such as superplasticizers and mineral additives such as silica fume, nano-silica, fly ash, blast furnace slag, metakaolin, glass powder, rice husk ash, marble powder, natural zeolite, limestone powder, etc., are used in the production of HPC (Ari et al., 2016; Henkensiefken et al., 2009a; Henkensiefken et al., 2009b; Sabet et al., 2013).

The in-text citation format for internet sources without identified authors is different.

For information obtained from websites where no specific author(s) is indicated, if the site is in Turkish, it should be cited as "**Anonim**," and if in a foreign language, as "**Anonymous**," followed by the access date in the format of month and year.

- Example: .....(Anonim, September 2020)

#### **3.2 References**

The heading "**REFERENCES**" should be written in uppercase letters, 4 cm below the top edge of the page, and centered. References should be written with 1.5 line spacing. For entries spanning two or more lines, the second and subsequent lines should start from the same column as the first word of the first line. Each source should be presented in its original language. For information obtained from the internet, the full electronic address that directly leads to the used information should be provided, along with the last access date.

In the "REFERENCES" section, sources are listed alphabetically by the author's surname and begin from the left margin of the page. If there are multiple sources by the same surname, they are ordered chronologically from the oldest to the most recent year. The format for writing references should be as shown below.

#### 3.2.1 Citation Format for Articles in Periodicals

Author's surname, initials of the first name(s), "article title," *journal name (bold and italic)*, volume number (issue number if applicable), page range, year. Authors are separated by commas, but for two or more authors, the last author is separated by "and."

Arpat, E. and Şaroğlu, F., "Some significant tectonic events in Turkey," *Türkiye Jeoloji Kurumu Bülteni*, 18, 29-41, 1975.

Acar, M.H. and Küçüköner, M., "Synthesis of block copolymers by combination of cationic and initer polymerization system," *Polymer*, 38(2), 2829-2833, 1997.

McKenzie, D.P. and Yılmaz, Y., "Deformation and volcanism in western Turkey and the Aegean," *Bull. Tech. Univ. İstanbul*, 44, 345-373, 1991.

Taymaz, T., Jackson, J.A. and McKenzie, D., "Active tectonics of the North and Central Aegean Sea," *Geophys. J. Int.*, 106, 433-490, 1991.

If multiple articles by the same author from the same year are cited:

Arpat, E. and Şaroğlu, F., "Some significant tectonic events in Turkey I," *Türkiye Jeoloji Kurumu Bülteni*, 18, 29-41, 1975a.

Arpat, E. and Şaroğlu, F., "Some significant tectonic events in Turkey II," *Türkiye Jeoloji Kurumu Bülteni*, 18, 41-48, 1975b.

#### 3.2.2 Citation Format for Congress, Conference, Symposium, etc., Proceedings

Author's surname, initials of the first name(s), "title of the paper," *name of the congress, seminar, or conference (bold and italic)*, location, page range in the proceedings book, year. Authors are separated by commas, but for two or more authors, the last author is separated by "and."

Acar, M.H. and Yılmaz, P., "Effect of tetramethylthiuramdisulfide on the cationic polymerization of cyclohexene oxide," *The 2nd International Conferences on Advanced* 

*Polymers via Macromolecular Engineering*, Orlando, Florida, USA, pp. 1-2, 19-23 April, 1997.

Karakuzu, R., Orhan, A. and Sayman, O., "Increasing the strength of composite plates with semi-circular notches under elasto-plastic stresses," *V. Ulusal Makina Tasarım ve İmalat Kongresi*, ODTÜ, Ankara, pp. 449-458, 16-18 September, 1992.

**3.2.3** Citation Format for Books, Book Chapters, Lecture Notes, and Educational Notes

Author's surname, initials of the first name(s), book title, volume number, editor(s)/translator(s) if applicable, *publisher (bold and italic)*, place of publication, year. Authors are separated by commas, but for two or more authors, the last author is separated by "and."

Mc Adams, W.H., Heat Transmission, 2nd ed., Translator Editor(s)/Editor(s), *Mc Graw Hill*, New York, 1942.

Çetmeli, E. and Çakıroğlu, A., Yapı Statiği II, *İ.T.Ü İnşaat Fakültesi Matbaası*, İstanbul, 1976.

#### **3.2.4 Citation Format for Theses**

Author's surname, initials of the first name(s), thesis title, thesis type (Master's/PhD), *institute where the thesis was submitted (bold and italic)*, city of submission, page range, year.

Yılmaz, P., Effect of tetramethylthiuramdisulfide on the cationic polymerization of cyclohexene oxide, Master's Thesis, *İ.T.Ü. Fen Bilimleri Enstitüsü*, İstanbul, pp. 5-7, 1997.

Nelson, M.R., Constraints on the seismic velocity structure of the crust and upper mantle beneath the eastern Tien Shan, Central Asia, PhD Thesis, *MIT*, Cambridge, pp. 1-2, 1988.

#### 3.2.5 Reports

Author's surname, initials of the first name(s) (or the name of the preparing institution if it is a legal entity), report title, *abbreviated name of the preparing institution and report number (bold and italic)*, place of publication, page range, year.

Burke, W.F. and Uğurtaş, G., Seismic interpretation of Thrace basin, *TPAO internal report*, Ankara, Turkey, 1974.

McCaffrey, R. and Abers, G., SYN3: A program for inversion of teleseismic body wave forms on microcomputers, *Air Force Geophysics Laboratory Technical Report, AFGL-TR-88-0099*, Hanscomb Air Force Base, MA, 1988.

#### 3.2.6 Maps

IOC-UNESCO, International bathymetric chart of the Mediterranean, Scale 1:1,000,000, 10 sheets, Ministry of Defence, Leningrad, 1981.

## 3.2.7 Patents

Sisaky, A., Golab, F. and Myer, B., Rust resistant potatoes, United Kingdom Patent, No: 2394783 dated 23.1.1989, 1989.

## 3.2.8 Standards

TS-40561, Rules for the calculation of steel structures according to plastic theory, *Türk Standartlart Enstitüsü*, Ankara, 1985.

## **3.2.9 Internet Sources**

Börklü, A., Yıldırım, N. and Gülal, Z., "How to build an earthquake-resistant building?," Milliyet, Bilim Teknik, <u>http://bilimteknik.milliyet.com.tr-/w/b08.-html</u>, 14 October 2000.

Carranza, L.E., "Corbusier and the problems of representation," Journal of Architectural Education, <u>http://www.mitpress.mit.edu/jrnls-catalog/arch-ed-abstracts/File:jae48-</u>2.htm, 14 November 1994.

Anonymous, Research title, <u>http://www.mitpress.mit.edu/jrnls-catalog/arch-ed-abstracts/File:jae48-2.htm</u>, 20 September 2022.

## 3.2.10 Statistical Yearbooks

Türkiye İstatistik Yıllığı, TC Başbakanlık Devlet İstatistik Enstitüsü, ISSN 0082-691-X, 2004.

## 3.2.11 Software

QwikNet v2.23, Craig Jensen, http://www.kagi.com/cjensen, Copyright (C) 1996-1999.

Sam v3.0 for Windows, Artas Engineering Software, Copyright (C) 1995-1997.

#### REFERENCES

Abbas, S., Saleem, M.A., Kazmi S.M.S. and Munir M.J., "Production of sustainable clay bricks using waste fly ash: Mechanical and durability properties", *J. Build. Eng.*, 14, 7-14, 2017.

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Aitcin, P.C., High performance concrete, E. & F.N. Spon, London, New York, 1998.

Akkaya, Y. ve Kesler, Y.E., "Mikro kalsit katkısının betonun işlenebilirliğine, mekanik özelliklerine ve dayanıklılığına etkisi", *İMO Teknik Dergi*, 384, 6051-6061, 2012.

Akman, M.S., "Yüksek performanslı betonlarda otojen rötre", *SIKA Teknik Bülten*, 2000(4), 3-9, 2000.

Akman, M.S., "Yüksek performanslı betonların teknolojisi, özellikleri, sorunları, geleceği", *TMH – Türkiye Mühendislik Haberleri*, 427, 2003.

Ali, M. H., Dinkha, Y. Z. and Haido, J. H., "Mechanical properties and spalling at elevated temperature of high performance concrete made with reactive and waste inert powders", **Eng. Sci. Tech. Int. J.**, 2016.

Andrews, R.W., Wollastonite, *London: Institute of Geological Sciences, Her Majesty's Stationary Office*, London, 1970.

**Açıklamalı [24]:** This section should be placed 4 cm below the top of the page and written in Times New Roman, 12-point font.

If it extends to a second page, the top margin from the second page onward should be adjusted to 2.5 cm.

Journal names in article references should either be fully written out or abbreviated.

ASTM C618, Standard specification for coal fly ash and raw or calcined natural pozzolan for use in concrete, *American Society for Testing and Materials, ASTM International*, West Conshohocken, United States, 2015.

Atis, C.D. and Bilim, C., "Wet and dry cured compressive strength of concrete containing ground granulated blast-furnace slag", *Build. Environ.*, 42, 3060–3065, 2007.

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Badogiannis, E. and Tsivilis, S., "Exploitation of poor Greek kaolins: durability of metakaolin concrete", *Cem. Concr. Compos.*, 31(2), 128–133, 2009.

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Dumont, M., Wollastonite, Canadian Minerals Yearbook, Kanada, 2004.

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Hameed, R., Turatsinze, A., Duprat, F. and Sellier, A., "Metallic fiber reinforced concrete: effect of fiber aspect ratio on the flexural properties", *ARPN J. Eng. Appl. Sci.*, 4(5), 67-72, 2009.

Virta, R.L., "Wollastonite", In Minerals yearbook, U.S. Geological Survey, http://minerals.usgs.gov/minerals/pubs/commodity/wollastonite/myb1-2010-wolla.pdf, 2011.

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Ulusu, H., Aruntas, H. Y. and Gencel, O., "Investigation on characteristics of blended cements containing pumice", *Constr. Build. Mater.*, 118, 11-19, 2016.

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Zhou, F.P., Barn, B.I.G. and Lydon, F.D., "Fracture properties of high strength concrete with varying silica fume content and aggregates", *Cem. Concr. Res.*, 25(3), 543–552 1995.

Zhu, L., Preparation of high-aspect-ratio particles through the high temperature growth of 2M-Wollastonite crystals, PhD Thesis, *The University of Utah Graduate School*, Utah, 2013.

## APPENDICES (IF APPLICABLE)

This section should include methods, test forms, raw data tables, maps, diagrams, derivations of certain formulas, computer programs, etc., that are not suitable to be included in the main body of the thesis. Each appendix should have an appropriate title and should be labeled sequentially as "Appendix A, Appendix B..." according to their order in the text, with each appendix starting on a new page. If an appendix continues onto the next page, the same appendix number and title should be repeated, followed by the notation (Continued) immediately after the appendix number (Example: Appendix A (Continued) Appendix Title). Page numbers should be continued throughout the appendix section.

**Açıklamalı [25]:** This section should be placed 4 cm below the top of the page and written in Times New Roman, 12-point font.

If it extends to a second page, the top margin from the second page onward should be adjusted to 2.5 cm.

## CURRICULUM VITAE

Born on	in	. Completed primary and secondary	education in . Enrolled
in	University in	and graduated from the	Department in . Since
, has been pursuing Master's/Doctoral studies in the		Department at Niğde Ömer	
Halisden	nir University.		

## PUBLICATIONS DERIVED FROM THE THESIS STUDY

From this thesis study, 1 (**one**) national and 1 (**one**) international article, as well as 2 (**two**) national and 2 (**two**) international conference papers, have been produced. These publications are presented below:

Koç, M.E. and Özcan, F., "Determination of Air-voids by using image processing Technique and freezing-thawing resistance of air-entrained concretes", *Construction and Building Materials*, 22, 721-728, 2012.

Koç, M.E. and Özcan, F., "Determination of Air-voids by using image processing Technique and freezing-thawing resistance of air-entrained concretes", *The 2<sup>nd</sup> International Civil Engineering Conference*, Orlando, Florida, USA, s.1-2, 19-23 April, 2012.

Koç, M.E. and Özcan, F., "Determination of Air-voids by using image processing Technique and freezing-thawing resistance of air-entrained concretes", *Uluslararası Hazır Beton Kongresi*, İstanbul, s. 449-458, 16-18 Eylül, 2011.

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### THESIS CHECK AND SUBMISSION PROCEDURES

Full compliance with the rules specified in this guide must be ensured when writing the thesis.

#### Once the theses are completed,

The faculty member supervising the thesis work must submit:

- \* A petition stating that the student has completed their thesis,
- \* A digital copy of the completed thesis saved on a CD,
- \* Thesis Jury Recommendation Form,
- \* Plagiarism Report,

to the relevant Department Head. The Department Head forwards the relevant documents to the Graduate School of Natural and Applied Sciences with an official cover letter.

Once discussed and approved by the Institute Executive Board, appointment letters are sent to the designated Thesis Jury Members. The Thesis Defense Examination is held within one (1) month from the date the Thesis Jury Recommendation Form is approved by the Institute Executive Board, on a date determined by the advisor in consultation with the other jury members.

#### After the thesis defense examination,

The relevant department must send the following examination documents to the institute within a maximum of three (3) days:

- \* Thesis Defense Examination Minutes Form,
- \* Audience List,
- \* Individual Jury Member Reports,
- \* If there is a change in the thesis title, a report prepared by the jury members.

A student who successfully passes the thesis defense examination must make the corrections specified by the jury members and submit an unbound copy of the thesis for compliance check with the Thesis Writing Guide, along with the advisor-approved Thesis Writing Guide Compliance Checklist (Appendix-O) to the institute.

After receiving approval from the institute, within one month from the date of the Thesis Defense Examination,

\* One bound copy of the thesis for a master's degree,

\* One bound copy of the thesis for a doctoral degree,

\* Advisor-approved petition (Appendix-P),

\* One Thesis Approval Page with all required signatures,

\* Two copies of the Thesis Data Entry Form (which can be obtained by registering at http://tez2.yok.gov.tr),

\* Thesis Submission Form,

must be submitted to the Graduate School of Natural and Applied Sciences.

#### Additionally,

\* Theses must also be submitted in digital format on a compact disk (CD). The full text of the thesis should be in PDF format, and the PDF file name should be recorded with the reference number from the Thesis Data Entry Form. The prepared PDF file must be identical to the approved copy of the thesis in the institute. Properly prepared compact disks (CDs) must be submitted in two copies.

NOTE: Additional copies of the thesis may be printed at the request of the student and the advisor.