**YILDIZ TECHNICAL UNIVERSITY**

**DEPARTMENT OF BIOENGINEERING**

**BYM3401 SEPARATION PROCESSES IN BIOENGINEERING**

**FINAL REPORT**

**2022-2023 FALL**

**EXPERIMENT TITLE**

**Responsible Faculty Member :**

**Responsible Teaching Staff :**

**Date of Experiment :**

**Date of Submission :**

**GROUP NUMBER :**

| **Student**  **Name-Surname** | **Student ID** | **Student’s Signature** | **Student’s**  **Contribution (%)** | **Getting Instruction**  **(%)** | **Giving Instruction**  **(%)** |
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Final report of experiment shall include the following sections.

**FINAL REPORT**

1. The Aim of Experiment
2. Introduction (Theoretical Information)
3. Experimental Methods
4. Schematic representation of the experimental setup
5. Experimental conditions
6. Safety Concern
7. Determination and Analysis of Experimental Data
   1. Experimental Data
   2. Graphics/equations/calculations
8. Discussion of Experimental Data
9. References
10. **The aim of Experiment:** In this part, the objective of the experiment should be summarized. (summary cannot exceed 100 words and be less than 50 words)
11. **Introduction (Theoretical Information):** In this part, fundamentals of the experiment, theories and working principles of related devices will be given. All scanned references must be cited by giving number and referring on the main text. If this portion includes formulas, they also must be numbered. In the same way for tables and graphics from any sources, necessary procedures must be done.

**3. Experimental Methods**

1. **Schematic representation of the experimental setup:** Experimental setup must be shown schematically. On the drawing of the experimental setup which is in accordance to engineering regulations, important parts need to be numbered. Necessary descriptions need to be written in front of the number, which is given under the figure.
2. **Experimental conditions:** Experimental conditions (pH, temperature, flow rate, stirring rate, etc.) must be stated in this section. If these conditions directly affect the results, it must be explained clearly.

**3.3 Safety Concern:** The effects on health and MSDS (Material Safety Data Sheets)(www.hazard.com) of the chemical materials, like a solvent etc., which is used during the experiment, should be written in this part.

**4. Determination and Analysis of Experimental Data**:

**Experimental Data**

The experiment’s results need to be given properly (by tables, graphics).

**Graphics/equations/calculations**

Equations and calculations to process experimental data should be clearly indicated in this section. Graphics obtained from data should be given with proper axis setup.

1. **Discussion of Experimental Data**

Experimental results should be explained using theoretical information. Any difference from the expected results should be described with reasons. If there is any suggestion about the experiment and its procedure, it should be added in this part. Necessary statistic calculations should be placed here.

**6.** **References:**

All references used in report must be ordered in the last section of the report as given below:

*The writers (firstly surname, first letter of the name). The reference’s name in quotation marks. If there is the publisher of the source or editor, cover, number, city of the publisher and publish year.*

Examples:

1. Bird, R.B., Stewart, W.E. and Lightfoot, E.N., **“**Transport Phenomena” John Wiley & Sons, Revised Second Edition ed., 2007.

2. [Yoshida, Y](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=PubMed&Cmd=Search&Term=%22Yoshida%20Y%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVCitation)., [Niki, E](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=PubMed&Cmd=Search&Term=%22Niki%20E%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVCitation)., [Noguchi, N](http://www.ncbi.nlm.nih.gov/sites/entrez?Db=PubMed&Cmd=Search&Term=%22Noguchi%20N%22%5BAuthor%5D&itool=EntrezSystem2.PEntrez.Pubmed.Pubmed_ResultsPanel.Pubmed_RVCitation). “Comparative study on the action of tocopherols and tocotrienols as antioxidant: chemical and physical effects”, Chemistry Physics Lipids, 123, 63-75, 2003.