

I. IDENTIFICATION DATA

Thesis title:	Separation of microalgae from culture medium using flocculant
Author's name:	Lucie Scholleová
Type of thesis :	bachelor
Faculty/Institute:	Faculty of Mechanical Engineering (FME)
Department:	Department of Process Engineering
Thesis reviewer:	Assoc. Prof. Ing. Lukáš Krátký, Ph.D.
Reviewer's department:	FME CTU in Prague, Department of Process Engineering

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	ordinarily challenging
<i>How demanding was the assigned project?</i>	
The assignment of the bachelor thesis includes the elaboration of a critical research and subsequent laboratory experiments. Based on the experimental results, the basic design and operational parameters of the separation technologies were to be defined.	

Fulfilment of assignment	fulfilled with minor objections
<i>How well does the thesis fulfil the assigned task? Have the primary goals been achieved? Which assigned tasks have been incompletely covered, and which parts of the thesis are overextended? Justify your answer.</i>	
The review part describes in detail the technologies of microalgae cultivation, their utilization and subsequent applications in biorefinery concepts. However, the review of separation methods is only elementary. The basic design and design of operating conditions as a key part of the bachelor thesis is incomplete and there is no detailed commentary on the calculated design parameters of the equipment. The whole thesis is influenced by inconsistent elaboration and the individual steps are not finalized and specified. It is obvious from the level of the thesis that it was completed at the very last moment.	

Activity and independence when creating final thesis	D - satisfactory.
<i>Assess whether the student had a positive approach, whether the time limits were met, whether the conception was regularly consulted and whether the student was well prepared for the consultations. Assess the student's ability to work independently.</i>	
During the preparation of the bachelor thesis, the student worked only in short but intensive intervals. However, the student constantly returned to the already completed parts, which subsequently had an impact on the incoherence of the bachelor thesis.	

Technical level	D - satisfactory.
<i>Is the thesis technically sound? How well did the student employ expertise in his/her field of study? Does the student explain clearly what he/she has done?</i>	
The student has technical knowledge acquired during her studies, but due to inconsistent elaboration of the thesis she was not able to use it very well in the basic design and selection of operating conditions. From a technical point of view, there are reserves in the design of key separation equipment.	

Formal level and language level, scope of thesis	B - very good.
<i>Are formalisms and notations used properly? Is the thesis organized in a logical way? Is the thesis sufficiently extensive? Is the thesis well-presented? Is the language clear and understandable? Is the English satisfactory?</i>	
The prepared bachelor thesis contains all necessary formal parts. The structure of the text is clear, and the technical terminology is at a good level. However, regarding the last-minute elaboration of the thesis, some inconsistencies in the text related to insufficient revision and formatting occur.	

Selection of sources, citation correctness**C - good.**

Does the thesis make adequate reference to earlier work on the topic? Was the selection of sources adequate? Is the student's original work clearly distinguished from earlier work in the field? Do the bibliographic citations meet the standards?

The student correctly referenced the original sources. However, the list of cited sources does not meet the requirements for a uniform citation style.

III. OVERALL EVALUATION, QUESTIONS FOR THE PRESENTATION AND DEFENSE OF THE THESIS, SUGGESTED GRADE

The student has sufficient technical knowledge acquired during her studies to be able to process the bachelor thesis assignment at a higher professional level. The structure of the thesis is inconsistent, and the conclusions contain gaps and errors in the basic design of key separation equipment. If more time and energy had been devoted to the design part of the thesis, it could have been at a significantly higher level.

The grade that I award for the thesis is **D - satisfactory**.

Date: **24.1.2023**

Signature: Vojtěch Bělohav