CTU CZECH TECHNICAL UNIVERSITY IN PRAGUE

THESIS REVIEWER'S REPORT

I. IDENTIFICATION DATA

Thesis title: Design of gypsum based composites with wooden waste

Author's name: Guedes Josemar Bruno Da C. M.

Type of thesis: bachelor

Faculty/Institute: Faculty of Civil Engineering (FCE)

Department: Department of Material Engineering and Chemistry

Thesis reviewer: Assoc. prof. Pavel Reiterman

Reviewer's department: Experimental Centre

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment challenging

How demanding was the assigned project?

The core of this work is an experimental program, which was focused on the development of a new type of gypsum-based composite containing wooden waste. This concept is always challenging, because it is necessary to adsorb number information and testing procedures to prepare and evaluate designed research campaign.

Fulfilment of assignment

fulfilled with minor objections

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.

The student performed a literature research, where are described various types of fillers used on the field of gypsum-based composites, properties of gypsum and technology of its production. The student realized basic experimental program using selected testing procedures. The discussion of results attained is quite simple, I would appreciate an optimizing process.

Methodology correct

Comment on the correctness of the approach and/or the solution methods.

The used methodology reflects available research infrastructure on the supervising department. It is obvious, that used procedures were applied correctly, which is also well documented in the work by number of pictures and charts.

Technical level C - good.

Is the thesis technically sound? How well did the student employ expertise in the field of his/her field of study? Does the student explain clearly what he/she has done?

This work is prepared correctly, however there are often useless information or facts, which are, in my opinion, quite far from the studied topic. I would appreciate to perform literature research in more details and well compared currently used materials.

Formal and language level, scope of thesis

C - good.

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?

This work is written in English, which is understandable and on the solid level, satisfactory in general. The thesis is well organized and structured. The work has logical structure.

Selection of sources, citation correctness

B - very 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 used a number of foreign research works and in this work partially followed research of the department. The used references are cited correctly and in accordance with research standards.



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Additional commentary and evaluation (optional)

Comment on the overall quality of the thesis, its novelty and its impact on the field, its strengths and weaknesses, the utility of the solution that is presented, the theoretical/formal level, the student's skillfulness, etc.

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

Present work was focused on the utilization of wooden waste for the development of new type of gypsum-based composites, which could be used in tropical areas. I have following comments, which could be discussed during the defense:

Could be such a gypsum-wood composite volume stable under humid condition? Used wood is biodegradable. Is the final composite resistant?

The grade that I award for the thesis is C - good.

Date: **12.6.2023** Signature: