THESIS SUPERVISOR'S REPORT

I. IDENTIFICATION DATA

Thesis title:	**Simulace vlivu provozního prostředí na kompozitní materiály.**
Author's name:	**Jaykishan Harishbhai Patel**
Type of thesis :	master
Faculty/Institute:	Faculty of Mechanical Engineering (FME)
Department:	Department of Automotive, Combustion Engine and Railway Engineering
Thesis reviewer:	Ing. Lukáš Kazda
Reviewer's department:	Department of Automotive, Combustion Engine and Railway Engineering

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	**ordinarily challenging**

How demanding was the assigned project?

The assignment was complex. Required to master variety of skills such as FEM, programming, data analysis and physical testing. Yet it was ordinarily difficult.

Fulfilment of assignment	**fulfilled**

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 assignment was fulfilled.

Activity and independence when creating final thesis	**C - good.**

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.

The activity and readiness for the consultations varied. The last semester was certainly an improvement with almost no negative issue. But in the previous ones, Mr. Patel was often unprepared for the consultations (for example looking for results that he himself wanted to discuss during consultation). Also, the originally planned length of the project was exceeded by one semester. Mr. Patel was very active when it came to carry out the experiments and measurements.

Technical level	**C - good.**

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?

The thesis contains detailed theoretical part with a lot of sources. The models are functional but need an improvement which is suggested in the last chapter of the thesis. I have some objections towards presenting the findings that are described in next point.

Formal level 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?

The thesis is written formally well, extensive enough with understandable language. Nevertheless, the organization of the thesis can be very confusing for someone who reads it for the first time and wasn't part of the process. It would be good to think what the potential reader knows and what doesn't and how to pass the information clearly. Mr. Patel jumps from topic to topic and the thesis is incoherent. For example, results from tensile tests are described in 3 different chapters. Or introduction to one simulation is followed by describing other simulations and then there are results from the first simulation. That isn't, in my opinion, the best way to explain something.

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?	
I don't have any objections to selection of the sources. I appreciate that the theoretical part contains references to a lot of scientific papers. The form of the citations is sometimes incorrect. For example, citation [3] is just the name of the university with a title 'Research Report'. Also, citations 10 and higher lack right bracket.	

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.
Please insert your comments here.

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

Summarize your opinion on the thesis and explain your final grading.

The work has been successfully finished even though the original hypothesis was refuted – the material doesn't degrade under effect of oil and higher temperature and absorption of oil is low and doesn't clearly follow Fick's law. However, all the models have been used correctly and are still valid. For a future career, I would recommend Mr. Patel to question results of his work more and don't consider them correct right away before he presents them.

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

Date: **6.9.2021**   Signature: