

THESIS REVIEWER'S REPORT

I. IDENTIFICATION DATA

Thesis title: Automatic characterization of particulate matter by sedimentation

Author's name: Paranjit Pareshbhai Patel

Type of thesis: bachelor

Faculty/Institute: Faculty of Mechanical Engineering (FME)

Department: Process Engineering **Thesis reviewer:** Ing. Sujit Prakash Patil

Reviewer's department: Škoda Auto a.s., Development of air intake systems

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment extraordinarily challenging

Lot of activities were involved during this assignment E.g., Individual experimental part, MATLAB coding.

Fulfilment of assignment

fulfilled with minor objections

Primary goals have been achieved. Theoretical part and Experimental part are covered very well. Detailed conclusion part is missing.

Methodology correct

Experimental part explains methodology correctly.

Technical level C - good.

Theoretical and Experimental part are very well. But student did not explain procedure very well. Graphs in the data evaluation are not done carefully, legends and unit of axis are missing. Conclusion is not up to the mark.

Formal and language level, scope of thesis

D - satisfactory.

Formalisms and notations are used properly. Thesis is organized in a logical way. Thesis is well presented. Text contains lot of grammatical mistakes which could have been avoided easily, but it is understandable.

Selection of sources, citation correctness

B - very good.

There are sufficient references on this topic. Student's original work is clearly distinguished from the references. But bibliographic citations do not meet standards.

Additional commentary and evaluation (optional)

Overall quality of the thesis is good. With more skills of programming and improved quality of work student can continue to study in the same topic in future.

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

Overall quality of thesis is good. Experimental part is not explained very well, data evaluation is not presented as expected. Conclusion is not enough; student could have explored it more.

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

Questions:

- 1. What is the unit on y-axis in Fig.15, 16, 18, 20, 22? Shouldn't be the ratio H/H0 in range 0-1?
- 2. What is dust classification A1-A4? What is the importance of this classification?

Date: **17.8.2022**

Signature: S.P. Palit