

## I. IDENTIFICATION DATA

<b>Thesis title:</b>	<b>Assessment and Comparison of Mathematical Models for Thermal Conductivity and Dynamic Viscosity of Refrigerants Superheated Vapour</b>
<b>Author's name:</b>	<b>Monilkumar Nalinkumar DABHI.</b>
<b>Type of thesis :</b>	bachelor
<b>Faculty/Institute:</b>	Faculty of Mechanical Engineering (FME)
<b>Department:</b>	Department of Environmental Engineering
<b>Thesis reviewer:</b>	Ing. Vladimír Šulc
<b>Reviewer's department:</b>	Department of Environmental Engineering

## II. EVALUATION OF INDIVIDUAL CRITERIA

<b>Assignment</b>	<b>challenging</b>
<i>How demanding was the assigned project?</i>	
The assigned project could be considered as a medium demanding work. Beside understanding of fluids properties, the physical meanings of investigated variables understood, categorized based on different thermodynamic states, the literature review has to be performed as well as the basic understanding of curve fitting process (basic statistical analysis) is necessary to be studied and applied.	

<b>Fulfilment of assignment</b>	<b>fulfilled with major objections</b>
<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>	
Understanding of fluids thermodynamic and transport properties, physical meaning, theory of refrigerant (generally fluid) thermodynamic states and resulting properties, the literature review were performed and partially fulfilled with the certain initial support from the thesis leader. The basic statistical analysis, theory of curve fitting and its application resulting in proper statistical evaluation of investigated mathematical models were not fulfilled. Instead the curves calculated from mathematical models were visually compared with real curves of chosen fluids.	

<b>Activity and independence when creating final thesis</b>	<b>E - sufficient.</b>
<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>	
Scheduled time was rarely met due to the other student's commitments. The student demonstrated pure time management. The statistical theory was not properly studied thus not applied. The work had been finished few days before the mandatory submission – there was not time for proper review by the thesis leader. The student initially demonstrated a small independency – each problem solution was initially left to the thesis leader instead coming with own solution or at least solution proposal. That approach was later corrected and certain independency of thought and decision making were shown.	

<b>Technical level</b>	<b>F - failed.</b>
<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 technical level is poor. The entire work is confusing, statements not clear, the equations nomenclature is missing, required statistical analysis and resulting conclusions are more or less missing.	

<b>Formal level and language level, scope of thesis</b>	<b>E - sufficient.</b>
<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 language expressions used in thesis seems to be suitable considering English is a student's second language used for most of his previous studies. The presentation style seems to be little disorganized in some parts of the work.	

**Selection of sources, citation correctness****E - sufficient.**

*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?*

25 publications were initially found for consideration. 7 were later determined to be useful for thesis and equations in those 7 publications were evaluated. List of references misses publisher.

**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.*

Thesis work was made in too short time. As mentioned above there was not enough time for the proper review performed by the thesis leader prior to the mandatory submission. Author's time management was poor thus the theory of statistical analysis was not properly studied and applied. In spite of that some results were achieved.

The grade that I award for the thesis is **E - sufficient**.

Date: [Click here and enter the date.](#)

Signature: