

OPPONENT'S ASSESSMENT ON DIPLOMA THESIS

Student's name and surname: Menghuot Phan

Name of the diploma thesis: Piezoelectric film sensors for the cavitation impact measurement

Supervisor of the thesis: Ing. Miloš Müller, Ph.D.

Opponent: Ing. Petr Horník, Ph.D.

1. Diploma thesis evaluation

Evaluation	excellent	excellent minus	very good	very good minus	good	failed
Meeting the goal and fulfilling task of the thesis	x					
Quality of conducted survey	x					
Methodology of solutions	x					
Expert level of the thesis		x				
Merit of the thesis and its potential applicability of results	x					
Formal and graphic level of the thesis		x				
Student's personal approach	x					

Mark x in the corresponding box.

Supervisor's final evaluation is based on his/her overall subjective evaluation.

Grading is stated literally in the article no. 5, neither by a number, nor by a letter.

2. Comments and remarks on diploma thesis:

On page 45: Missing units at "Record Length – 20000" – It is probably in samples.

On page 45: Unclear datum at "Delay (s) – 5m" – What does "5m" mean?

On page 50: Incorrect units at "Impact Time Duration (μm)" – "(s)" is correct.

On page 55: Missing legend of curves in graph.

On page 56:

- Author talks about similarity between TUL and MSI sensors. It would be better to show both signals – from TUL sensor and also from MSI sensor.
- Why is the signal (in the graph) described in Volts when the sensors were calibrated for Force (Newtons)?
- I would like to expect more detailed description of bubble collapse signal in the graph.

3. Questions about diploma thesis:

What is the repeatability of sensor production in terms of output signal quality?

What is the cost comparison of TUL PVDF and commercial MSI PVDF sensors?

4. Opponent's statement whether the diploma thesis meets the academic title requirements and whether it is recommended for defense:

The diploma thesis meets the academic title requirements and it is recommended for defense.

5. Opponent's grading:

"Excellent"

Date 17.06.2020, in Liberec



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Opponent's signature