

Bachelor thesis supervisor's review

CZECH TECHNICAL UNIVERSITY IN PRAGUE

Faculty of electrical engineering Department of electrical power engineering Technická 2, 166 27 Prague 6, Czech Republic

Stimulus-frequency otoacoustic emissions measured using synchronized swept sinesAuthor:Yiming PengThesis supervisor:Ing. Václav Vencovský, Ph.D.

	Rating $(1-5)$ (1 = best; 5 = worst):
1. Fulfillment of assignment requirements:	1
2. Self-reliance and initiative during the thesis solution:	2
3. Systematic solutions of individual tasks:	3
4. Ability to apply knowledge and to use literature:	3
5. Collaboration and consultations with the thesis supervisor:	1
6. Thesis formal and language level:	2
7. Thesis readability and structuring:	1
8. Thesis professional level:	3
9. Conclusions and their formulation:	2
10. Final mark evaluation (A, B, C, D, E, F): verbal:	B very good

Brief summary evaluation of the thesis (compulsory):

Yiming Peng in his thesis investigated whether we can use the synchronized swept sine technique to measure otoacoustic emissions evoked with a single tone if a suppressor is used during the measurement. This type of emission can be used to objectively measure frequency selectivity of the hearing system. The issue with this technique is that the components due to suppressor and probe tone may be too close and interfere. Yiming in his thesis calculated theoretical limits for the use of suppressor and experimentally prooved that it is possible to use the technique if the suppressor phase is altered. The phase alteration almost completely cancel the suppressor response out. Yiming



was very initiative during his work. He conducted experiments in several subjects. He would be able to perform more experiments, but those were not possible due to time limits of our laboratory. The reason why my final mark is very good (B) is that he could be more independent in his work. In addition, his writing style sometimes tend to use too many vague phrases, which exagerate the importance. However, this is not to say that the results of the thesis are not important. They provide valuable data, which will be employed in the future.

Date: 26.1.2024

Signature: