

SUPERVISOR'S OPINION OF FINAL THESIS

I. IDENTIFICATION DATA

Thesis name: Non-thermal electrical discharges for generation of active species

Author's name: Kirill Chukhlantsev

Type of thesis: bachelor

Faculty/Institute: Faculty of Electrical Engineering (FEE)

Department: Department of Physics

Thesis supervisor: Prof. S. Pekárek

Supervisor's department: Department of Physics

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment challenging

Evaluation of thesis difficulty of assignment.

The non-thermal electrical discharges and namely their application for generation of active species from the air are not a part of a regular study program at the Faculty of Electrical Engineering. From this point of view, the topic of the thesis was for the student new and challenging.

Satisfaction of assignment

fulfilled

Assess that handed thesis meets assignment. Present points of assignment that fell short or were extended. Try to assess importance, impact or cause of each shortcoming.

The thesis meets all the assignments. The student devoted corresponding attention to each of the topics mentioned in the Guidelines so that finally well-balanced thesis is presented.

Activity and independence when creating final thesis

A - excellent.

Assess that student had positive approach, time limits were met, conception was regularly consulted and was well prepared for consultations. Assess student's ability to work independently.

The student was very active, he regularly came to the consultations, and he was well prepared. Except of this, he was interested in the work in the lab, and he performed under my supervision measurement of concentrations of ozone and nitrogen oxides. He also independently developed a technique for measurement of average power to the discharge.

Technical level B - very good.

Assess level of thesis specialty, use of knowledge gained by study and by expert literature, use of sources and data gained by experience.

The thesis allows evaluation of the knowledge gained by the student during its writing. It proves that the student can work independently, he is able to use literature and to analyze data obtained from the experiments

Formal and language level, scope of thesis

B - very good.

Assess correctness of usage of formal notation. Assess typographical and language arrangement of thesis.

The thesis is worked out on the professional level; it has a logical structure. Taking into account that English is not student 's mother language, the English is very good, and the thesis is easy to read.

Selection of sources, citation correctness

B - very good.

Present your opinion to student's activity when obtaining and using study materials for thesis creation. Characterize selection of sources. Assess that student used all relevant sources. Verify that all used elements are correctly distinguished from own results and thoughts. Assess that citation ethics has not been breached and that all bibliographic citations are complete and in accordance with citation convention and standards.

The number of references represents 11 items. Taking into account that 5 sources were in the Guidelines, the student included in the thesis 6 new references, which deal with the topic of the thesis. It could be said, that citation ethics has not been breached.



SUPERVISOR'S OPINION OF FINAL THESIS

Additional commentary and evaluation

Present your opinion to achieved primary goals of thesis, e.g. level of theoretical results, level and functionality of technical or software conception, publication performance, experimental dexterity etc.

I have no additional comments.

III. OVERALL EVALUATION, QUESTIONS FOR DEFENSE, CLASSIFICATION SUGGESTION

Summarize thesis aspects that swayed your final evaluation. Question for defense:

Can you describe environmental and medical applications of ozone?

I evaluate handed thesis with classification grade B - very good.

Date: **14.5.2018** Signature: prof. S. Pekárek