



FACULTY
OF MATHEMATICS
AND PHYSICS
Charles University

Report on defence of dissertation thesis

Academic year: 2023/2024

Student's name and surname: Yadu Ram Panthi
Student's ID: 44549238

Type of the study programme: doctoral
Study programme: Biophysics, Chemical and Macromolecular Physics
Study ID: 559208

Title of the thesis: Transient optical and electrical phenomena in organic semiconductors: Insights into fundamental photophysics, resistive switching, and emulation of synaptic plasticity

Thesis department: (32-UMCHAV)
Language of the thesis: English
Language of defence: English
Supervisor: RNDr. Jiří Pflieger, CSc.
Reviewer(s): Ing. Ognen Pop-Georgievski, Ph.D.
RNDr. Katarína Gmucová, CSc.

Date of defence: 27.09.2024 **Venue of defence:** Praha
Attempt: regular

Course of the examination: The defense was conducted in English. The chairman of the committee welcomed the audience and started the meeting by introducing the candidate and the topic of his dissertation. Then he introduced the members of the dissertation defense committee and also noted that five present members of seven total members are an eligible number to hold the defense. The chairman also informed that all other conditions for holding the defense were fulfilled: the applicant studied in full-time doctoral studies at the MFF, fulfilled all prescribed study obligations according to the individual study plan, the thesis was available for the prescribed time at the study department of the faculty, and no comments were received. The chairman then read the main parts of the candidate's professional CV. Then he called on the supervisor Dr. Pflieger to make his statement about the candidate and the dissertation. The supervisor highlighted the high degree of independence of the doctoral student and his significant contribution to several publications containing the results of the dissertation. The chairman circulated a copy of the dissertation and a list of publications. The applicant then presented the main results of the dissertation. The reviewer, Dr. Pop-Georgievsky, informed the committee and the audience with his evaluation, which positively highlighted the strengths of the dissertation and emphasized that it expands current knowledge. The second reviewer, Dr. Gmucova was not present at the defense, and the chairman read her highly positive evaluation instead. The candidate convincingly responded to all the questions raised by the reviewers. Despite the minor formal shortcomings of the thesis, which were mainly related to typeset errors, both reviewers came to the conclusion that the applicant clearly demonstrated the ability of

independent creative scientific work and thus met the conditions for a successful defense.

A general discussion followed where the candidate answered the questions of the committee members Dr. Kalvoda, Dr. Michl, Dr. Pánek, and prof. Shukurov, showing in his answers deep insight into the problem solved. This was followed by a closed meeting of the committee to which the supervisor was invited. The nonpublic meeting ended with open voting. Scrutineers Dr. Kalvoda and Dr. Pop-Georgievsky confirmed the results of this ballot.

Result of defence:	pass (P)	
Chair of the board:	Shukurov Andrey, prof. Ing., Ph.D.
Committee members:	Kalvoda Ladislav, doc. Ing., CSc.
	Michl Martin, RNDr. Mgr., Ph.D.
	Pánek Jiří, RNDr. Ing., Ph.D.
	Pop-Georgievski Ognen, Ing., Ph.D.