

I. IDENTIFICATION DATA

Thesis name:	In-situ polarisation of 3D printed electroactive polymers
Author's name:	Jakub Fink
Type of thesis :	bachelor
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Control Engineering
Thesis supervisor:	Tomas Polcar
Supervisor's department:	Control engineering

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	challenging
<i>Evaluation of thesis difficulty of assignment.</i>	
Please insert your commentary.	

Satisfaction of assignment	fulfilled
<i>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.</i>	
Please insert your commentary.	

Activity and independence when creating final thesis	A - excellent.
<i>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.</i>	
Please insert your commentary.	

Technical level	B - very good.
<i>Assess level of thesis specialty, use of knowledge gained by study and by expert literature, use of sources and data gained by experience.</i>	
Please insert your commentary.	

Formal and language level, scope of thesis	B - very good.
<i>Assess correctness of usage of formal notation. Assess typographical and language arrangement of thesis.</i>	
Please insert your commentary.	

Selection of sources, citation correctness	A - excellent.
<i>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.</i>	
Please insert your commentary.	

Additional commentary and evaluation
<i>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>
See below.

III. OVERALL EVALUATION, QUESTIONS FOR DEFENSE, CLASSIFICATION SUGGESTION

Summarize thesis aspects that swayed your final evaluation.

The thesis's original idea is excellent (in fact, it is part of the GACR project); polymers with bulk polarization produced during the printing represent a radically new concept. The work is experimental and carried out with care; the main part was the fabrication of electrodes and the design of experiments. A small part of the planned experiments could not be carried out due to the malfunction of a very specific equipment, but it does not diminish the high quality of the presented work.

Unfortunately, a significant part of the results (and relevant information about the method) was omitted in the thesis due to a patent application. It is understandable on one hand, but on the other hand, it significantly decreases the quality of the thesis; some parts are now incoherent. For example, there is information about EM field simulation, but no results, which looks a bit strange. The description of the apparatus is now difficult to grasp as well.

I evaluate the thesis with a classification grade **B - very good**.

Date: **10.6.2025**

Signature:



Tomas Polcar