Bachelor thesis supervisor’s review

Master thesis: Electronic detection of drugs by nanoparticles covered interdigitated sensors

Author: Rustambek Bekmukhamedov

Thesis supervisor: RNDr. Ilona Ali Bláhová, Ph.D.

Rating (1 – 5)
(1 = best; 5 = worst):

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

verbal: A

Brief summary evaluation of the thesis (compulsory):

The bachelor thesis is a part of the research that is focused to drug detection that is needed for biological and clinical research as well. The electrochemical impedance spectroscopy is one of methods that can be used for the drug detection. Mr. Bekmukhamedov studied the literature first then he started to measure different kinds of IDT sensors that were prepared for impedance spectroscopy measurement. For the increasing of sensors sensitivity different combinations of layers of nanodimonds and gold nanoparticles were prepared. He was able to apply the methodology of sensor preparation very well. The set of O-DND sensors was prepared by him. During the measurements he tried to used two different methods a) the measurement in a chamber and b) the measurement in a HP Test Fixture.
Notes:
1) The total thesis evaluation needn’t be determined by the partial evaluations average.
2) The total evaluation (item 8) should be from the following scale:

<table>
<thead>
<tr>
<th>excellent</th>
<th>very good</th>
<th>good</th>
<th>satisfactory</th>
<th>sufficient</th>
<th>insufficient</th>
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<tr>
<td>A</td>
<td>B</td>
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<td>D</td>
<td>E</td>
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