



Review of diploma thesis – supervisor evaluation protocol

Author of the thesis: Milena Maryšková
Title: Enzyme immobilization on microfibrinous or nanofibrous materials and their applications in biotechnology
Name of the supervisor: Nongnut Sasithorn
Affiliation of the supervisor:

A. Abstract, key words quality.	classification ¹ .1
B. Quality of literature overview.	1
C. Theoretical preparedness.	1
D. Appropriateness of methods used.	1
E. Quality of results and discussion.	1
F. Student's own input/effort.	1
G. Formulation of conclusions.	1
H. Fulfillment of the objectives.	1
I. References – accuracy and quality.	1
J. Typography and language quality.	1-
K. Formal precision – structure of the text, chapters, figs and tables.	1
L. Comments to above classification (if any):	
The diploma thesis is written clearly with adequate number of References, Figures and Tables.	
The objectives were fulfilled and unique results were achieved.	

¹ Please use the following classification:

1 Excellent, 1- Excellent minus, 2 Very good, 2- Very good minus, 3 Good, 4 Failed.





M. Overall comments of the diploma thesis:

e.g.: indicate strong/weak points of the work, importance for scientific community, methods used, whether is the research up to date, whether the area is/it is not promising for further study.

Milena fulfilled all the task of the diploma work. She was always enthusiastic even when facing difficulties with finding the right material for enzyme immobilization or the immobilization process itself. Milena was working independently; she was able to study current research articles to get new inspiration for her work. She showed patience during weeks and months spent in laboratory to get the best results. Notably, she asked for consultations of particular problems not only me, but number of colleagues in our research group (e.g. Lenka Martinová, Jana Rotková) and other groups at TUL (e.g. Ivan Stibor, Milan Řezanka, Alena Ševců or Vít Novotný).

Milena learnt quickly enzyme immobilization and several analytical methods. She studied numerous nonwoven and nanofiber materials and many different techniques of enzyme immobilization and its characterization. She had to get acquainted with chromatography, spectrophotometry, electrophoresis and scanning electron microscopy.

In addition, Milena spent three months of hard work at Université Catholique de Louvain in Belgium during her Master degree (September-December 2013). She studied enzyme immobilization and its functionality toward micropollutants in prof. Spiros Agathos research group under kind supervision of dr. Inés Ardao Palacios. Being a member of one of the European leading laboratories in this field, she learnt new laboratory skills, different approach to solve a problem and definitely she came back full of new motivation.

Her active approach was important to get novel data and promising results that have not been published elsewhere. Many of her findings are unique and I would strongly recommend publishing them in some well-known scientific journal.

Last but not least I value her willingness to write the diploma thesis in English language which proves her preparedness for Ph.D. studies.

N. Questions for defense:

1. What step or experience in laboratory was the most important for your research? Can you describe the break through?
2. Could you define ideal product that can be achieved in enzyme immobilization employed in micropollutant degradation?
3. How far you were from this ideal product?

O. Final classification of the diploma thesis: **1**

The author of diploma thesis fulfilled requirements for academic title and I recommend it for defense².

My recommendation for classification is **1**.

² Please select appropriate statement and delete the other.





In

Date 01.06.2015

I hereby declare that I am not in any personal relationship with the author of this diploma thesis.

Nongnut Sasithorn

Nongnut Sasithorn

