



Confidential

Supervisor's Review of USB RIFCH PhD Thesis

Surname of the PhD student: Koba	Name of supervisor: Roman Grbic
Title of PhD thesis: Application of advanced instrumentation for analysis of environmental pollutants	

OVERALL COMMENTARY ON THE PhD THESIS

The backbone of the thesis is created by three already published papers and one submitted manuscript, where Olga Koba is the first author. These articles cover wide spectra of application of HPLC/MS method from fish laboratory exposure experiments to extensive field project in pond system.

The needs for application of advanced techniques are documented in introduction of the thesis. An investigation of metabolism and metabolites of target compounds under realistic scenarios are the main reasons that justifying the use of such expensive and laborious approaches. All thesis aims are supported with relevant and up to date references.

The main body of the work is presented chronologically which documents Olga's development from relatively simple system consisting one pharmaceutical and fish through more complex soil studies to complex pond study. The most important finding are briefly summarized in conclusions. It is clear that this work contributed significantly to recent knowledge in field of pharmaceuticals fate in environment. Besides increasing scientific level of the papers, there is also apparent, that Olga was able (in cooperation with other members of the laboratory) to perform huge number of other analysis. This resulted to long list of articles where Olga participated as coauthor.

In my opinion this thesis illustrates personal scientific development and progress of Olga Koba as well as her broad involvement to fundamental and applied research. I would like to express my feeling that doctor's degree at this level will assure Olga's future employment in high ranked research laboratory across scientific disciplines.

From my point of view Olga Koba work fulfilled all criterions required for PhD thesis.

FINAL RECOMMENDATION

- can be recommended for defence of PhD Thesis
 can be recommended with reservations for defence of PhD Thesis
 can not be recommended for defence of PhD Thesis

7.6.2017 Vodňany
Date and place

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surname and signature