Jihočeská univerzita v Českých Budějovicích 15 -06- 2010 Č. jednací: 96 /0599

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Počet příloh:

Prčet listů: Review of the bachelor Thesis presented by Šárka Sučková "Occurence of Polybrominated Diphenyl Ethers in the Environment and Thein **Biological Activity"**

The Thesis summarizes the up to day pieces of knowledge of the occurrence of polybromintaed diphenyl ethers (PBDE) in the environment. Generally, the candidate for bachelor degree discusses the modes of transfers of such compounds in the environments, their pathways to the living organisms as well as their dangerous properties. The analytical determination of PBDE is not a trivial procedure-that was perhaps the reason why candidate mentioned some references concerning that problem. Including of the paragraph concerning analytical methods of the determination of PBDE I consider as interesting contribution to this Thesis.

Generally, the topic of the study of such compounds which poses the properties of so cold endocrinic disruptors has been very viable at present, because the biota had been in the every day contact with such compounds. The dangerous impact of PBDE on the population documents among others the increase of the concentration of PBDEs in the mother's milk. Therefore, the topic of this bachelor Thesis can be considered as a very actual theme today. Very interesting information resulting in the Thesis is, among others, the phenomenon that the most abundant concentrations of PBDE which have been accumulated in living organisms hit upon a congeners BDE47 and BDE153, respectively, that means upon such congeners which had the atoms of bromine firmly linked at the positions 2,4 and/or 2', 4', respectively. Accordingly to others studies focused on the modes of degradation of polyhalogenated compounds just that congeners have been very resistant to any chemical changes. Information collected in this Thesis can therefore be considered as a useful source for further studies.

The Thesis is well organized and without any formal insufficiencies.

The candidate evidenced in the Thesis the ability for future research skills.

Summary:

I recommend the presented Thesis to be defended with the classification of "excellent".

Prague, June 8th, 2010.

Prof. František Kaštánek

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