MUNI

Annex No. 11 to the MU Directive on Habilitation Procedures and Professor Appointment Procedures

PUBLIC LECTURE EVALUATION

Masaryk University	
Faculty	Faculty of Science
Procedure field	Environmental Health Sciences
Applicant	doc. Ing. Vladimír Žlábek, Ph.D.
Lecture date	14 November 2023
Lecture topic	**Fate and transformation of emerging pollutants in the aquatic environment**
Persons present (number)	65 total (31 on site + 34 online)
Designated evaluators (board members)	Prof. RNDr. Luděk Bláha, Ph.D. (on site) Prof. MVDr. Zdeňka Svobodová, DrSc. (on site) Prof. Ing. Radka Kodešová, CSc. (online)

The public lecture presented by Vladimír Žlábek was organized as a part of the RECETOX Seminar Series lectures at Faculty of Science, Masaryk University, and the announcement of the lecture has been distributed via multiple channels that reached broad audience in the Czech Republic and internationally (web page, periodic newsletters). The lecture was attended by participants from several institutions - Masaryk University, South Bohemian University, Swedish University of Agricultural Sciences. Czech University of Life Sciences, Eurofins BioPharma and ENANTIS s.r.o.

The lecture and discussion was held in English. In the introductory part, motivation for research and overall relevance of the topic – surface water quality - was described. The following sections discussed (i) importance of environmental monitoring of waters (addressing both traditional and emerging pollutants, discussing chemical safety of edible fish), (ii) controlled laboratory experiments with model aquatic organisms (advantages as well as limitations), (iii) real scenario

case studies from pond experiments (Čežárka pond) & and running waters (Blanice river), and finally (iv) new research directions aiming to understand fate and effect of ionizable compounds.

The lecture highlighted important novel findings such as role of dilution factors affecting final concentrations (and associated risks), persisting relevancy and risks of legacy contamination (mercury, methyl-mercury), chemical-specific and spatio-temporal variability of environmental fate of emerging pollutants and associated ecotoxicological risks, beneficiary effects of natural components that minimize negative impacts of chemical contamination in real-life exposure scenarios.

The messages delivered in the lecture by doc. Žlábek were clearly formulated, the content and format of the presentation were appropriately adjusted to the audience which included senior scientists, post-doctoral researchers as well as doctoral students from broader environmental health science disciplines. The lecture was didactically well prepared, doc. Žlábek attracted attention and demonstrated his good pedagogical skills.

Accompanied PowerPoint presentation slides were carefully assembled, the content of the PowerPoint was well balanced and included blend of text sections, several graphical schemes as well as scientific results illustrated in graphs and tables.

The evaluation committee identified few minor issues that might be improved, namely less efficient time management which resulted in lengthy presentation

During the discussion that followed after the lecture, 7 valid questions have been raised by lecture participants (doc. Hilscherová, prof. Kodešová, dr. Olisah, Dr. Toušová, Dr. Bláhová, Mr. Březina, Ms. Phan) that asked to clarify following issues: (i) current sources of MeHg in water, (ii) concerted effects of multiple pathways and processes in aquatic systems (including role of sediments), (iii) relationships between parameters such as salinity and contamination, (iv) potential normalization of dilution impact by considering flows and volumes, (v) advantages and disadvantages of grab and passive sampling, (vi) impact of non-chemical factors on biodiversity, (vii) effects of EDCs on fish – considering the 2nd generation and offsprings. Doc. Žlábek was able to properly address the questions with sufficient detail and clarity.

Conclusion

The lecture delivered by Vladimír Žlábek, entitled **Fate and transformation of emerging pollutants in the aquatic environment** and delivered as part of the professor appointment procedure, **demonstrated sufficient scholarly qualifications** and pedagogical capabilities expected of applicants participating in a professor appointment procedure in the field of Environmental Health Sciences.

The lecture took place 14th November 2023 in a hybrid form at 10:00 am. The above-mentioned members of the board attended the lecture and provided its evaluation. All designated evaluators are familiar with the text of the evaluation and agree with it.

Date:

Luděk Bláha

Zdeňka Svobodová

Radka Kodešová - participated online -