

PUBLIC LECTURE EVALUATION

Masaryk University

Faculty

Faculty of Science

Procedure field

Environmental Health Sciences

Applicant

Lisa Emily Melymuk, Ph.D.

Lecture date

6. May 2025 9:00

Lecture topic

Tracking the chemical signal of modernity - linking policy, behaviour and environment to understand human exposure to chemical pollution

Persons present

(number)

42 on site, 46 online

Designated evaluators

(board members)

Prof. RNDr. Luděk Bláha, Ph.D.

Masaryk university, Faculty of Science, RECETOX, CZ

prof. Ing. Jana Pulkrabová, Ph.D.

Institute of Chemical Technology, Prague, CZ

prof. Ing. Vladimír Žlábek, Ph.D.

South Bohemian University, České Budějovice, CZ

Prof. Adrian Covaci

University of Antwerp, Belgium

Prof. Cynthia de Wit

Stockholm university, Sweden

The public scientific lecture of Dr. Lisa Melymuk was a comprehensive and captivating presentation, which clearly demonstrated her complex knowledge within contemporary exposure science, and also broad field of environmental health sciences.

Dr. Melymuk successfully attracted the attention of the audience through a clear presentation of her own scientific achievements built-in within the international state of the art. The presentation was clearly structured in the interconnected sections that addressed (i) how the implementation of policies affects chemical exposures, (ii) how specific environmental situations translate in the exposure patterns and trends, and (iii) how individual behavior and lifestyle is reflected in the exposures.

Dr. Melymuk efficiently used the examples and case studies focusing on flame retardants, PAHs or POP in different geographical areas and periods as well as specific investigation of products (toys), dust and materials. During the concluding part, Dr. Melymuk clearly expressed her vision of future areas of development and commented on available instruments, projects and international initiatives.

Overall, the lecture was well structured and logically organized, clearly defining and subsequently explaining key concepts and challenges in the field of understanding and managing chemical exposures and risks.

During her presentation, Dr. Melymuk also provided responses to specific comments and questions received by the three evaluators of her written habilitation thesis. All three reviews received were overall supportive - appreciating the quality of both content and style of the thesis.

The discussion after the lecture focused on validation and standardization of sampling (PAS) and analytical methods, advancement of sampling tools (e.g. applying textiles or mesh preventing the dust accumulation), holistic exposure characterization including unknown chemicals, translation of exploratory research data to inform policy, variability at different levels (materials, sampling, analysis), recommendations to minimize the exposure levels – including materials use, classification and labelling (e.g. QR codes).

While answering the questions, Dr. Melymuk proved to be strong expert in the field and thus affirmed her qualification for habilitation.

Conclusion

The lecture by Dr. Lisa Melymuk, entitled "Tracking the chemical signal of modernity - linking policy, behaviour and environment to understand human exposure to chemical pollution" and delivered as part of the habilitation procedure, demonstrated sufficient scholarly qualifications and pedagogical capabilities expected of the applicants participating in a habilitation procedure in the field of Environmental Health Sciences.

The lecture took place in a hybrid form on May 6th, 2025, from 9 a.m. CET at the MU Campus Bohunice, lecture room RCX1 with over 80 participants. All members of the board attended the lecture and provided the evaluation. All designated evaluators are familiar with the text of the evaluation and agree with it.

Date: 6.5.2025

Luděk Bláha