

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	Analytical Chemistry
Applicant	Mgr. Markéta Holá, Ph.D.
Lecture date	26.9.2024
Lecture topic	Laser-Matter Interaction as a Key Process for Sampling by Laser Ablation
Persons present (number)	80 (on-site), 8 (on-line)
Designated evaluators (board members)	prof. RNDr. Přemysl Lubal, Ph.D. (on-site) prof. RNDr. Jiří Barek, CSc. (on-line) prof. Ing. Miloslav Pouzar, Ph.D. (on-line)

The public lecture was given on-site at MU Campus in Bohunice (Building B11/lecture hall 132) and broadcasted via MS Teams simultaneously. The lecture was attended by two reviewers and all members of the Habilitation Board:

- prof. RNDr. Přemysl Lubal, Ph.D. (chairman, on-site)
- prof. RNDr. Jiří Barek, CSc. (external member, on-line)
- prof. Ing. Miloslav Pouzar, Ph.D. (external member, on-line)
- prof. Dr. Carla Vogt (international external member, on-line)
- prof. RNDr. Martin Mihaljevič, CSc. (external member, on-line)
- prof. Dr. hab. Barbara Wagner (international reviewer, on-line)
- doc. Ing. Tomáš Černohorský, CSc. (reviewer, on-line)

Markéta Holá in her 50-min lecture explained the basic principles and main application areas of the ICP-MS method. She also described in the laser ablation process, which fundamentally affects the metrological properties of the method (e.g., sensitivity, reproducibility, spatial resolution, etc.) and discussed in detail the influence of important parameters on the course of interaction of the excitation laser beam with the material of the analysed sample. The structure of the lecture was logical and clear and thus provided an insight into this research field even to a freshman, but on the other hand, it also contained the results of the author's undoubtedly high-quality scientific work and thus had the potential to broaden the horizon for experts in the field. The lecture was presented in dynamic mode and clearly in scholar English to keep the audience's attention and clearly showed that the author is capable to capitalize her rich foreign experience in presentation of her results effectively. Both the preparation and the presentation of this public habilitation lecture clearly confirmed the didactic and pedagogical as well as

professional qualities of the habilitant. The prepared images were easy to read, contained easily assimilated amounts of information, and the accompanying spoken commentary was factual, clearly articulated, well-explained, and of high didactic and professional quality. The variety of questions given by referees, all member of Habilitation board and other visitors were successfully answered during 30-min discussion.

Conclusion

The lecture delivered by Markéta Holá, entitled **"Laser-Matter Interaction as a Key Process for Sampling by Laser Ablation"** and delivered as part of the habilitation procedure, clearly **demonstrated** sufficient scholarly qualifications and pedagogical capabilities expected of applicants participating in a habilitation procedure in the field of Analytical Chemistry. The lecture took place in a hybrid form at 2 p.m. 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: 28.9.2024

Přemysl Lubal